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Impacts of Learning Management System on Learner Autonomy in EFL Learning

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Abstract

The integration of interactive online communication into different educational settings has been widely researched since the emergence of Web 2.0 technology. It has been particularly identified to give EFL students more opportunities to express ideas, enhance their engagement in learning activities and promote their confidence during virtual interactions. These benefits coincide with attributes of a learning environment that can foster learner autonomy. Therefore, this paper reports on an investigation into the impacts of the employment of a web 2.0 Learning Management System (LMS) in an EFL course. Data extracted from individual interviews with four undergraduate students in a Vietnamese university was analyzed to illustrate possible effects of LMS in students' ability to initiate, monitor and evaluate their learning process. The presentation continues with a discussion on the cyclic relationship among these three capabilities. It also addresses the local students' perspective on socializing and academic activities as well as the relationship between them in the socio-cultural context of Vietnam. It then concludes with implications for EFL teaching practices with the adoption of LMS and puts forward suggestions for further research.

Keywords: ICT, LMS, web 2.0, socio-cultural theory, Vietnamese EFL, learner autonomy.

1. Introduction

Apart from non-interactive technology development such as radio, video players, and standalone software packages, interactive communications via web 2.0 have revolutionized human daily communicative habits. Email, instant messenger, discussion board, and social networking have been possibly and potentially seen in many aspects of our life. Taking these into consideration, educators have been paying a lot of attention to investigating possible effects of this emerging technology on young learners to help them learn better in the new dynamic environment. In second language learning, various attempts and initiatives have been developed and documented in different learning settings, especially in developed countries. However, in the context of Vietnam, where internet broadband has only recently become very popular and affordable, the employment of web 2.0 in EFL training has been very limited. Therefore, this paper reports on a study investigating Vietnamese EFL students' reflection on a web 2.0 LMS (Note 1) that they worked with during a course. The main discussion focused on the local students' autonomous learning behaviors in relation to their cultural values in online learning.

2. Literature Review

2.1. Benefits of Online Technology in EFL Education

There have been extensive discussions on the usage of online technology or computer mediated communication (CMC) in language education. Investigations on the latest communication channels such as weblog (e. g., Downes, 2004; Mortensen, 2008), discussion board (e. g., Bhappu, Ebner, Kaufman, & Welsh, 2009), social network (Boyd & Ellison, 2007; Ellison, Steinfield, & Lampe, 2007), and instant messenger (e. g., Jacobs, 2008; Lewis & Fabos, 2005) to name a few have been described. As a result, CMC has been indicated to contribute to students' linguistic development mediation (Darhower, 2002), help students identify language genres (Lam, 2004), increase their success in using the target language (Hanna & de Nooy, 2003), and provide more opportunities for negotiations, collaborations, interactions and communications (Jonassen, 2004; Kitade, 2000, 2006; Leahy, 2008).

As interlocutors involved in both synchronous and asynchronous CMC are bound by their real life identities in certain socio-cultural contexts and virtual characteristics of the online space, research in CMC has recently shifted its focus to the interactions between learners and the technology with an emphasis on socio-cultural aspects, rather than on a purely technological perspective. In other words, various CMC-mediated attributes in relation to learners' contexts have been targeted (Thomas, 2008). Studies such as Darhowsers (2002), Lee (2005), Leahy (2008), and Hull & Saxon (2009) have successfully adopted socio-cultural theory (SCT) to investigate

various learning variables in CMC integrated learning environments. They also argue for further explorations in particular contexts as one method cannot fit all.

2.2. Learner Autonomy in EFL Education

Learner autonomy has been considered as one of the ultimate goals in contemporary EFL education, “an idea that researchers and teachers ignore at their peril” (Benson, 2009, p. 14). Historically, learner autonomy was defined as an “ability to take charge of one’s own learning” (Holec, 1981, p. 3) and manifested by the ability to initiate, monitor, and evaluate learning processes (Little, 2003). Learner autonomy has been perceived by four groups of perspectives, namely *psychological*, *technical*, *socio-cultural*, and *political-critical* (Benson, 1997, 2006; Healy, 2007; Oxford, 2003). The technical perspective values attributes from the learning environment, and the psychological perspective values personal attributes from the learners. Meanwhile, the socio-cultural perspective lays the emphasis on the interactions between learners and their environment, and the political-critical perspective focuses on learners’ access, control, power and ideology in their community.

Given the development history of over four decades and the notoriously complicated nature of this construct (Little, 2003), learner autonomy has been diversely interpreted in different contexts (Dang, 2010). Various versions of learner autonomy such as *personal autonomy* (Young, 1986), *divergence* and *convergence* (Ribe, 2003), *weak* and *strong* (Smith, 2003), and *narrow* and *broad* (Kumaravadivelu, 2003) have been proposed and discussed; however, it has been significantly argued in contemporary literature that this multifaceted capacity needs to be localized and addressed in particular social contexts (Smith & Ushioda, 2009). This social turn is, therefore, allocated appropriately in the notion of SCT and provides important theoretical foundations to research in this area (Toohey, 2007).

2.3. Learner Autonomy and Online Technology in EFL Education

Looking across research in CMC, computer-assisted language learning (CALL), and learner autonomy, one can see a close relationship between them via their contributions to learners’ benefits. Motteram (1997) and Benson (2001) have argued that the association between the two was created by the multiple resources, options, negotiations and interactions produced by educational technology that in turn facilitate learner autonomy. As indicated in Figure 1, appropriate CMC integration in EFL education has been often identified to foster reflective learning (e. g., Chang & Sun, 2009), enhance learning engagement (e. g., Sinclair, 2009), and facilitate interactive collaborations (e. g., Leahy, 2008; Warschauer, Turbee, & Roberts, 1996); and these are prerequisites for the development of learner autonomy.

In addition, the presentation of the theoretical framework employed in many CMC and learner autonomy studies in the previous sections is SCT. As documented by Thorne (2008), Pemberton and his colleagues (Pemberton, Toogood, & Barfield, 2009), this theory of Vigotsky becomes significantly useful for research in these two areas as it helps explain mediated attributes of human activities. Every individual behavior is regulated by an internalization process of what he/she historically knows and can create. Therefore, both students’ CMC activity participation and their construction of learner autonomy capacity can be nurtured and explained with supports from their revolutionary potentials and communal practices (Sawchuk, Duarte, & Elhammoumi, 2006). This linkage and argument have allowed the current study to employ SCT in its investigation and interpretation (c.f., Dang, 2010). The local socio-cultural values were particularly drawn on to understand students’ online behaviors.

3. Study Design (Note 2)

Given significant attention to the socially-situated nature of learner autonomy, the first phase of this project was to investigate the characteristics of learner autonomy that Vietnamese EFL undergraduate students perceive. It employed a Likert scale survey of 62 items and collected quantitative data from 562 undergraduate students in four universities across Vietnam. As a result, the factor analysis and internal consistency tests from this sample generated five dimensions of learner autonomy. One of these was *Using Information and Communication Technology (ICT) in learning processes*. Taking this into account, this study was designed to investigate how students’ use of CMC fostered their learner autonomy capacity. It particularly looked at the extent to which the interactions between Vietnamese EFL undergraduate students and a web 2.0 LMS, an open source Moodle site, during a 16 week course contribute to the manifestations of ability to initiate, monitor, and evaluate learning processes.

Participating in this Listening – Speaking course were over 240 EFL first year students in a Vietnamese university. They ranged from 18 to 24 years of age, and had not worked with LMS prior to this course. These students were divided into five groups, taught by three lecturers. The LMS component accounted for 15% of the

total course evaluation in the first four groups and was totally optional in the fifth group. By the end of the course, twelve students responded to an interview invitation sent by the researcher. None of them was from the fifth group (c.f., Dang & Robertson, 2009). Interview extracts from the first four students alphabetically were selected to report in this paper.

This study employed the retrospective method (Cohen, Manion, & Morrison, 2007), asking each participant to talk about the experience that they had when working with the LMS. The individual semi-structured interview provided questions to elicit students' behaviors that were related to their ability to (i) initiate, (ii) monitor, and (iii) evaluate learning processes. The interview guidelines were principally developed from several previous studies (such as Martinez, 2008; Smith & Erdogan, 2008) with serious considerations paid to the participants' socio-cultural context. It included questions such as (i) *Does any LMS activity give you any opportunity to trigger your learning such as providing you some materials, initiating some communication, or activating your curiosity about a topic? Any example?* (ii) *Does any LMS activity help you monitor your work such as reminding you of some work or changing your learning habits? Any example?* (iii) *Does any LMS activity help you evaluate your learning such as allowing you to review and your friends to evaluate your work, or giving you opportunities to compare your work with others'? Any example?* All interviews were done in Vietnamese and transcribed for analysis.

The LMS was hosted in the city where the university was located to facilitate loading speed. It was password-protected and integrated with different modules and plug-ins necessary for the course such as Voice of America and British Broadcasting Corporation radio channels for listening practice, OU blog and chat room for communication, and voice message posting for speaking practice. The LMS activities started from week three and finished by the end of the course. Each LMS class consisted of six categories, namely *course administration, sharing learning experience, improving listening skills, improving speaking skills, group presentations and short test and quizzes*. Each category included subcategories, depending on the lecturers.

The sections in the LMS were pedagogically designed to create a virtual space for individual reflections and collaborative tasks among students themselves and with the lecturers. They were technically based on three aspects of web 2.0, namely Wiki writing collaboration, synchronous chat and asynchronous discussion board. However, the wiki was not implemented by the lecturers; and the chat system was used very little by the participants. Therefore, only the discussion forum based technology is addressed in this report.

4. Results

4.1. Ability to Initiate Learning Process

The LMS component (Note 3) was reported to support students' initiating their learning, but it did not have the same level of effects on every student. Three of the four interviewees reported that they needed to go to their virtual classes very frequently because they would like to get updates from friends and teachers while one of them indicated that she visited the site only two or three times a week. This difference was due to students' general online habits which did not significantly change during the course, given a small portion of the LMS component in only one course across the whole semester.

However, their level of participation in the LMS activities increased as the course went on. As more communication and information were generated toward the end of the course, students became more engaged in their online activities. As a result, a community was gradually developed (c.f. Jeon-Ellis, Debski, & Wigglesworth, 2005). Student N said:

"At first, I only wanted to see if there was anything new out there. However, I realized that there were so many postings, and that made me log in the class more often."

This was reinforced by student M, who said:

"I often go to my virtual class to see if there was any update [...]. I found out that there were many postings that received many replies. Therefore, I came to them, read them, and posted replies, asking for further details."

The resources and topics posted for discussion in the virtual classes also triggered students' learning processes. Two interview participants agreed that many postings encouraged them to look for more relevant information in other sources. For example, student N said:

"I often went to my friends' postings and the links that my teacher introduced. I also read my friends' blogs and comments. [...] I was particularly interested in blog entries [...] and read them every day."

This was further illustrated by student M's comments:

"My teacher posted a video clip about a disabled man whose name was Nick. After watching it, I went to Youtube to search for more clips about him and downloaded them into my computer."

However, the other two suggested that those online discussion threads did not trigger their learning process much because they did not find any topic which was interesting enough. If they had seen an interesting topic, they would have looked for further details. Student A said:

"That [topics that can trigger further research] has not happened to me yet. However, if there is any topic appealing to me, I'll certainly have more investigations on it."

This is similar to student D's comment: *"...If it were a good song, I would probably study more about it."*

It is important to note that replies to postings could trigger students' various reading directions and communicative engagements. These were clearly indicated in student A's comment as below

"When I got a comment, even negative or positive, I tried to see if I liked the commentator by his/her expressions. If I felt I liked him/her, I'd try to understand more about him/her. I'd try to read all of his responses to other postings elsewhere."

4.2. Ability to Monitor Learning Process

One student reported that the LMS component made her spend more time on the course but three others did not think so. Further analyses indicated that this difference was caused mainly by their interpretation of learning. Student A was very aware of her time in the LMS activities because she considered it part of her learning and accumulative efforts which would be counted for the course evaluation. Therefore, she thought that it took more time from her. She said:

"I saved more time for this course. I thought that my teacher checked students' online records for course evaluation, and I was afraid of that. Thus, I went to the LMS more frequently."

In contrast, the other three students considered visiting LMS as part of their daily routines. Even without the LMS, they went to different websites every day. Therefore, they just included the LMS into their daily internet activities, and did not recognize that they were spending more time on the course. In this case, the LMS was naturally integrated into students' general internet life.

The LMS was also reported to have effects on students' implementing and regulating learning processes. They had opportunities to choose what postings to read, what activities to take part in, and what threads to respond to. Student N was particularly interested in the *Global Blog*; while student D found the *Listening Game* useful but the *Listening Practice*. In addition, they often selected to take part in recent and appealing thread titles with many contributors. If a thread was posted a few days before with a regular title and did not attract any comments, it was not considered to be worth reading by the students. They also asserted that working with the LMS encouraged them to keep track of their online activities and increase their learning engagement. For example, student A said:

"I logged in the site and checked if there were any responses to my postings. If yes, I would read them to see what the responders thought of me. I then compared these responses to those posted by these responders in other postings."

Although these CMC exchanges were not always content-rich ("only one or two lines" – student N), they contributed to the construction and maintenance of students' online conversations and blurred the gap between school and social life. They also increased students' interest in the course (c.f. Fujiike, 2004; Khalsa, Maloney-Krichmar, & Peyton, 2007). Student N said:

"The LMS made the course more interesting. I normally had regular contacts with only some friends and did not talk to many others. However, I could know a lot about them when reading their postings on the LMS. I could know what they often wrote about, what their thoughts were, and how their lives were. These would help me understand them more easily."

The LMS was also reported to help students know more about their friends' personalities and music genre (Student A and Student D respectively). These indicated that LMS was seen as an environment for socializing and understanding others' personal life. The academic and social domains were intertwined in students' behaviors.

4.3. Ability to Evaluate Learning Process

All of the interviewees agreed that the CMC activities gave them opportunities to evaluate the work of themselves and their friends. They also allowed them to understand about their friends' level more accurately

and the general level of the cohort thoroughly. Student M and D reported that they often checked if their peers made any mistakes in their postings and learned from them. Meanwhile, student A always compared her postings with the others'. In contrast, student N said that she never attempted to do such a comparison. She only tried to learn from her peers' writing styles and word usages. Nevertheless, they all acknowledged that there were some students who did not talk much in class but placed a lot of postings in the LMS (c.f. Burgess, 2006), and that gave them a different evaluation on these students.

Students' judgments on postings were often involved in critical negotiations. Although many mistakes in a posting could trigger negative effects on the reader, they were not necessarily used for assessment because the reader may think that it was simply caused by carelessness.

"There were probably mistakes in a posting but it was because they were careless and did not check it properly. However, too many mistakes can make me annoyed."

Student D

This student also indicated that there were those who did not have many postings on the LMS and go online regularly but made good achievements in class. Therefore, using the LMS participation for evaluation purposes was not always accurate. In addition, if there were any evaluative comments on a posting, they needed to be addressed by the posting writer. That would facilitate better understanding and could produce a more precise evaluation.

5. Discussion

The LMS employed in the study was indicated to direct students' attention to a local CMC environment for idea exchanges and negotiations, but it did not probably increase students' online habit as a whole. Those who went to the internet everyday came to the LMS every day, and those who went online less frequently visited the LMS less often. In other words, being accounted for 10% of the course evaluation and used in only an one-semester course in the whole program, LMS activities did not basically modify students' online habits quantitatively. What they could do was to make the LMS become one of students' often-visited sites and/or replacing some of their favorite sites. These showed that local students' online habit was principally shaped by social factors rather than academic factors. Therefore, online interactions are probably associated with purposes other than academic. Further attempts of ICT applications in academic environments may need to address this issue.

The quality of contributed content was reported to be the most important factor that could draw participants' attention and facilitate communication. Although the mandate for LMS participation, course assessment, and individual learning styles and preferences may have triggered certain incentives for LMS engagement, they were not the main factor for maintaining that engagement process. When logged on to a computer, students were often involved in multiple sessions from different applications. Therefore, the ones that were judged to be more interesting and important would receive more attention from students. Student D said that she always worked with different tabs at the same time; therefore, comparative evaluations among these contents automatically came, and that redirected her engagement to the content that she found she was comfortable with.

As the LMS in this study was designed for out-of-class activities only, it challenged the students' ability to personalize their learning activities effectively and lecturers' ability to facilitate appropriate content and conversations. Because the LMS provided students with an always-on communication channel which they could take part in anywhere, they could flexibly choose to integrate it into their daily plan at any comfortable level which may not in turn be optimal for their learning. This led to one of the most important issues of lecturers' role as proposed in previous studies (e.g., Son, 2007; Stepp-Greany, 2002). Therefore, it should be the lecturers' responsibility to provide adequate facilitation for suitable knowledge generation which could keep students stay with the LMS, especially in a highly competitive information environment like internet.

Given the fact that most of the course participants were "digital natives" (Prensky, 2001), they did not attempt to explicitly differentiate between socializing and studying activities in their online world. As illustrated in Figure 2, the relationship between two types of activities was differently perceived in online and offline contexts. Accordingly, on one hand, students could apply the monitoring skills that they already possessed with the social applications to their online academic component when it was introduced by the course. On the other hand, the content and foci of the academic component could spread out and assimilate into the social applications. These processes and skill transference would hopefully enable students to achieve better outcomes.

That different levels of evaluation were reported also contributed to the appropriateness of this technology-based learner autonomy promoting practice. As the function of rating postings was reserved for the lecturers only, students had to leave comments on each thread and that generated a conversation for those active interlocutors

and other lurkers. These negotiations allowed them to evaluate/re-evaluate and reflect/re-reflect on the contents, extended-discussions, and skills of their peers and themselves (c.f., Horváth, 2005). It was necessary to note that these digital natives tended to tolerate e-mistakes well and be aware of other reasons for possible performance inhibition. They valued e-performance but understood that it was not the only environment to demonstrate capabilities. Therefore, judgments which were based solely on virtual space would be superficial.

Similar to the quantitative data collected from the first phase of this project, the processes of initiating, monitoring and evaluating learning activities were reported to be intertwined and cyclic. For example, student A and D replied to (*initiating*) comments to negotiate with their peers about the evaluation of a postings (*evaluating*) and read these peers' comments in other postings for comparison (*monitoring*). These processes then kept happening continuously, even when they were physically away from the LMS. As a result, the execution of these processes was overlapping. When an action was implemented, it may have attributes of two or three processes. In another word, one process can be regulated by the other two capacities. These interwoven connections were diagrammatically illustrated in Figure 3.

Illustrated through students' interactive behaviors with the LMS were the socio-cultural values that the virtual environment added to students' real life. With their participation in the LMS both naturally and mandatorily, students improved their understanding about the others and themselves in others' mind. The online environment was used as a compensation for the offline society where students were under time constraints and movement limitations and could not directly get in touch with all of their friends as they wished to. The LMS also contributed to shape students' social relationship and identity. They started to negotiate some friendship with anyone who appeared to be related to them by reading his/her comments and postings all over the LMS. They tried to see if they liked him/her, what he/she thought about them, and what he/she thought about the others.

It is the scope of the study that limits its investigations in some aspects. First, it was the minority population of males in the EFL program that did not allow any of their voice to be included in the analysis. Second, the interview for data generation was totally voluntary; therefore, it could reflect perspectives of those who would like to express their ideas only. Those who were culturally timid and passive in both learning and social life may have not been confident enough to respond to the email invitation from the researcher. Third, the paper reports on the data generated only from four among twelve interviewees; hence, there probably remain other views which were not included. Nevertheless, the sampling reflects the nature of the research population that can be used to depict the manifestations of learner autonomy in the local context.

6. Conclusion

The paper started with several general benefits that CMC technology potentially contributed to the development of learner autonomy. Reporting on the data collected in the context of EFL training in Vietnamese higher education, it demonstrated the interwoven and cyclical relationships of the three learner autonomy abilities. It also addressed differences in the local students' perspectives on socializing and academic activities in online and offline contexts. In addition, it discussed the influence of social and academic factors on shaping students' e-habits as well as the socio-cultural values that the online learning dimensions contributed to students' offline social life. These have suggested that EFL educators need to take advantage of students' social e-habits for educational purposes and employ effective facilitations to keep them engaged in the course conversations but avoid dominating those contexts. It is also necessary for empirical research to document the development and manifestation of learner autonomy capacity in both socializing and academic activities and the relationship between them in the virtual world.

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Notes

Note 1. The LMS mentioned in this study is the one using web 2.0 technology.

Note 2. As this study is part of a larger research project, it employed a research design similar to the one presented in Dang & Robertson (2009)

Note 3. As all the activities on the LMS in this study are CMC, CMC and LMS activities are used interchangeably in this paper.

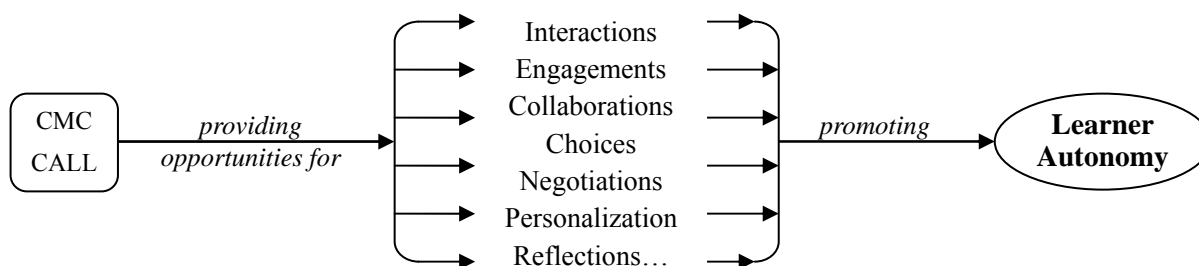


Figure 1. The relationship between CMC and learner autonomy in EFL education

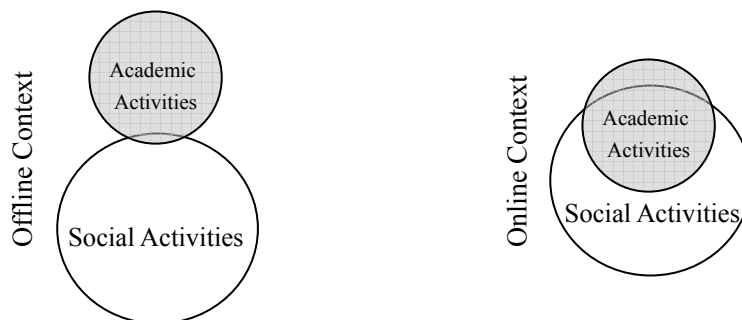


Figure 2. Students' perceived relationship between social and academic activities

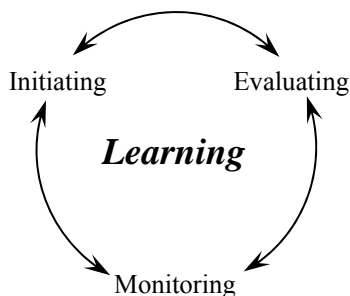


Figure 3. The cyclic relationship of the three intertwined processes of learner autonomy

Group Composition of Cooperative Learning: Does Heterogeneous Grouping Work in Asian Classrooms?

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Abstract

Constructing an appropriate group is important to teamwork success. Although, heterogeneous grouping is widely recommended in Western countries, this method of grouping is questioned in Asian classrooms because Asian and Western students have different cultures of learning. Unfortunately, this issue has not been addressed in any research to date. This study aims to investigate how Vietnamese students should be grouped so that they can maximize their opportunities to learn. The study is in two parts: a pilot study and an intervention. The pilot study included twenty students and was conducted for four weeks. The intervention consisted of one hundred and forty five students and lasted for eight weeks. In both studies, students answered a questionnaire survey and ten students were interviewed. The results of both studies showed that friendship grouping was more preferred. Future researchers should take these findings into consideration so that cooperative learning activities can be designed adaptively in Asian classrooms.

Keywords: Cooperative learning, Grouping, Friendship groups, Mixed-ability groups, Learning cultures

1. Introduction

Cooperative learning has been recognized as one of the most successful learning strategy in educational history (Johnson et al., 1994; Slavin, 1996). Therefore, it has recently become the first choice approach for teaching and learning reforms in many countries, including Vietnam where educators are now calling for changes in traditional learning and teaching approaches to cooperative learning.

However, very few studies on cooperative learning in Asian countries have, so far, been conducted and most of them found that cooperative learning did not really help and was of little interest to local teachers and students (Thanh-Pham, Gillies & Renshaw, 2009). The main reason it was claimed was that there was a disjuncture between many principles of cooperative learning and Asian [Vietnamese] culture. For example, while cooperative learning principles aim to encourage students to open up their own ideas and develop creativeness, Asian/Vietnamese culture does not encourage students to focus on questioning, evaluating, and generating knowledge because as Confucius (1947), who has a strong influence on Vietnamese culture, claims the truth is not found primarily in the self, but in exemplars [teachers]. Additionally, a number of cooperative learning principles such as assessment methods, resource division, group size and group formation have been claimed to be unsuitable to Asian classrooms.

Consequently, many researchers claim that for cooperative learning to work effectively in the Asian/Vietnamese context, researchers need to address these mismatches first. However, so far there has not been any research that was conducted to address this concern. As it would be beyond the scope of this paper to solve all of these issues, the authors only attempted to investigate if mixed-ability group composition, as a dominant principle of cooperative learning, is favored by Vietnamese students and, if so, how do Vietnamese students choose their group members.

This concern has emerged mainly because according to various cooperative learning models, Western researchers mainly use learning ability as a guide to composing cooperative learning groups. Overall, there are two main grouping methods of cooperative learning widely applied in the Western world, namely “heterogeneous” and “tracking”. “Heterogeneous” grouping means students are mixed to make sure that each group has low-medium-high ability members. This method has become very pervasive and is often included in

guidelines for establishing cooperative learning (Watson & Marshall, 1995). A large number of cooperative learning studies have applied this way of grouping. Differently, “tracking” grouping means students are grouped based on similar levels of capacity. There are still arguments about this grouping method; however, according to McEwin et al. (2003) and Phuong-Mai et al. (2008), a majority of American middle schools favor this method.

However, in the context of Asian countries, this grouping method may not work because Asians pay special attention to the importance of personal relationship and consider affection between co-workers as a crucial factor in determining the success of a group. For Asian collectivists, the ideal grouping method would be based on affection and personal relationships. In fact, a number of studies on cooperative learning have found that friendship groups tend to have superior learning outcomes in comparison with random or ability groupings (Chauvet & Blatchford, 1993; Fraysse, 1994; Kutnick et al., 2005; Zajac & Hartup, 1997). However, very few studies have been done to confirm if friendship groups are really preferred and work better in Asian classrooms. To date, this issue has been addressed in two studies by Melles (2004) and Phuong-Mai et al. (2008). In Melles’s study, Asian students at an Australian University reported that they believed that social interaction and personal relationship were important to the operation of their groups while in Phuong-Mai et al.’s study, Vietnamese middle school students also showed a preference toward being grouped with their friends. However, the results of these two studies are not convincing enough to conclude that ability-based groups do not work in Asian countries. This study aims to provide more evidence to clarify this issue. The results of the study will help cooperative learning researchers take a more cautious step in designing cooperative learning groups in Vietnamese classrooms, and in Asian classrooms in general.

2. Method

The research takes the form of design-based research (Gravemeijer & Cobb, 2001; Edelson, 2002). It consists of two main phases: the pilot study and the intervention. The pilot study is a process during which the conceptual ideas for an intervention are formulated while the intervention phase is systematically articulated to test the hypotheses proposed (Bannan-Ritland, 2003).

2.1 Pilot study

2.1.1 Participants

Twenty second-year students from a university in Hochiminh City participated in this study. They included fourteen females and six males at the same age of nineteen years old. The cooperative learning strategies were based on two prominent approaches, namely Johnson and Johnson’s (1999) “Learning Together” and Sharan and Sharan’s (1976) “Group Investigation”. Before the study began, the participant teacher and students were trained in a workshop. The teacher was trained to use cooperative learning principles and the students were asked to practice activities designed to develop and address such skills as listening, sharing information, cooperating, making arguments for and against different points of view. These are the skills that are commonly associated with cooperative learning (Farivar & Webb, 1998).

2.1.2 Design

Before the random selection of the students to groups occurred, the class was divided into three levels of achievement (low, medium, high) according to the students’ achievement scores from the previous year’s assessments. Then, the students were allocated in mixed-ability groups. To create opportunities for the students to work with each other, all 90-minute lessons were designed in the same format: the first section was for the teacher to lecture for 40-50 minutes, and then the second was for the students to work in mixed-ability groups to review the lesson and explore more information.

2.1.3 Data collection methods

Data were collected via a questionnaire survey and interviews.

Questionnaire: The questionnaire aimed to measure perceptions of students about group formation. It consisted of ten items such as “I am satisfied with the learning attitude of my group members”, “I like learning in my group”, “I am satisfied with the composition of my group” and “I want to be grouped in the same group next time”.

Interviews: At the completion of the study, five students of the focus group were interviewed. Each interview lasted for 20-30 minutes. Interview questions were aimed at clarifying any confusion and questions which emerged from the questionnaire survey. The students were asked questions such as “What do you specially like about your group?” “How do you think about the way your group members support each other?” “Do you often share ideas with other members?” and “Do you still want to work in the same group next time?”

2.1.4 Data analysis

Questionnaire: Questionnaire employed in the research was a self-administered questionnaire. Participants were asked to circle their response on a 5-point Likert type scale (1= Strongly Agree; 2 = Agree; 3 = Undecided; 4 = Disagree; 5 = Strongly Disagree). Data collected from questionnaire were quantified and analyzed using SPSS 12.0. Prior to analysis, all variables were examined for accuracy of data entry. Means and standard deviations were, then, examined on all variables.

Interviews: Content analysis procedures were applied (Neuman, 2003). First, data were disentangled into segments (this can be a word, a single sentence or a paragraph) so that annotations and codes could be attached to them. While doing this, the researcher kept asking these kinds of questions: Do I see a segment that has a specific meaning that might be important for my research? Is this segment different in some way from the text coming before and after it? Where does this segment start and end? After codes were developed, codes around phenomena discovered in the data were grouped into categories which were more abstract. Finally, categories were quantified in the form of frequencies or converted into percentages. The excerpts quoted in the paper are referenced with interview numbers and line numbers in the transcripts. For example, I2L15/20 means that the quotation is from line 15 to 20 in the transcripts of interview 2.

2.2 Intervention study

2.2.1 Participants

One hundred forty five second year students from two classes at a university in HoChiMinh, Vietnam volunteered to participate in the study. All students were nineteen years of age. Two classes were taught by the same teacher. The study was conducted for a term. To create opportunities for the students to work with each other, all 90-minute lessons were designed in the same format: the first part of the lesson involved the teacher lecturing for 40-50 minutes while the second part of the lesson enabled the students to work in groups to review the lesson and explore more information.

2.2.2 Design

In Class 1, friendship grouping was applied. The students were free to choose their group members. However, according to Gillies (2007), when friendship groups are formed, there is a common trend that low-status students may not be selected for groups. Therefore, the students were requested that they could work with friends but must also include other members who chose or were assigned to their group. The techniques used to group students included two main steps. First, the students freely chose members to form nine-member groups. Then, if any group did not have enough nine members, they had to accept any member who chose to work in their group.

After the students freely chose their partners, the result was that fifty students were able to choose their friends to form eight groups and twenty two students were not chosen for any group. These remaining twenty two students were asked to choose any group which did not have the required nine members that they may like to work with. Seventeen of them quickly chose their groups and the remaining five students were randomly assigned to groups that did not have nine members. Students remained in their groups for the duration of the study.

In Class 2, the students were assigned to mixed-ability groups based on their academic records from the previous year. All groups had a balance of high-medium-low achievement members.

2.2.3 Data collection methods

Questionnaire: Questionnaire survey aimed to investigate the students' perceptions about responsibilities and task sharing among group members. It included such items as "I am satisfied with the formation of my group" and "I want to be grouped in the same group next time".

Interviews: At the completion of each experiment, ten students in each class were selected randomly to participate in interviews. All interviews were done within one day. Each interview lasted between 15-30 minutes. We utilized a semi-structure interview scheme with a number of guiding questions. Examples are: "What do you think about your group?" "How do your group members share tasks and ideas?"

2.2.4 Data analysis

Questionnaire and interviews were analyzed using the same methods which were applied in the pilot study.

3. Results

3.1 The pilot study

3.1.1 Results

Questionnaire: Questionnaire results are presented in the table below:

Insert Table 1 here

The general finding was that the students were not happy with mixed-ability groups. They tended to prefer to work with their friends.

Interviews: When students were asked if they liked working in their groups, they expressed different ideas. Specifically, 20% of the students expressed the opinion that they ‘like’, 35% ‘normal’ and 45% ‘dislike’. As such, the biggest percentage was ‘Dislike’. Those students who held this point of view pointed out several factors which made them uninterested in their groups as (1) Group members did not share the same workload; (2) It was uncomfortable to work with those they had never ever worked with before; (3) It took time to investigate others’ ability before asking for help; and (4) They could not use language freely and ‘slangs’ like when they worked with close friends. These students indicated that they preferred to work in friendship groups because the bond between them would help to play an important role in binding them together, to motivate and even force them to “fight” for the sake of the group. Also, they indicated that when they worked with friends, they felt confident and correct when they assigned tasks to each group member.

When I worked with those I used to work with, we knew each other’s strengths and weaknesses so it was much easier for us to assign tasks (I3L12/14).

The second largest per cent belonged to those who reported that they did not mind whom they were assigned to work with. In general, these students showed their satisfaction with what they gained during the study.

I did not pay much attention to other partners – I meant to whom I worked with. I paid more attention to what I learned from the text and how to promote each other to do our best. It was interesting to work with friends but it was also beneficial when we tried in the new environment (I5L6/10).

The remaining of 20% were happily engaged in mixed-ability groups. These students disclosed that when they worked with close friends, they must be very self-disciplined; otherwise, it was easier for friends to talk off-task.

I used to work with close friends and I knew what happened. We usually completed the task early and then jumped to other topics (I2L8/11).

The first week was not good for me because I did not know much about my group mates. Therefore, I did not speak what I wanted. Also, I misunderstood their language [students come from different provinces in Vietnam and each province has its own accent]. However, I found it interesting in later weeks. We enjoyed our groups a lot (I4L11/15).

3.1.2 Discussion

Results obtained from this study did not concur with what has been widely found in many other studies which strongly argue that heterogeneous groups (high, medium, and low) have been preferred and are more beneficial to students (Johnson et al., 1984). In the present study, it seemed that students found a common voice so that having close friends as teammates enabled them to communicate in a comfortable manner. This enabled them to cooperate more (they talked and exchanged more with each other). However, we also noticed that there was a small percentage of students who showed a preference for working with new friends. These students perceived that unfamiliar friends gave them more opportunities to concentrate on academic work rather than distract them with other activities in the discussion. Therefore, when students were asked if they were satisfied with their group composition, the score of their responses was *not* too negative ($M=2.85$). It seemed that pro- and con-opinions were not very different.

As such, the results of this pilot study were unclear about students preferred group formation. The difference was not different enough to conclude what type of group formations the students actually preferred. Therefore, to clarify this issue, in the intervention the first author tried another experiment with two different group formations in two classes. Then, a comparison of the results from two classes at the completion of the study would confirm which grouping formation was more appropriate in Vietnamese classes.

3.2. Results of the intervention study

3.2.1 Results

Questionnaire: Questionnaire results are presented in the table below:

Insert Table 2 here

Two independent t-tests were conducted to evaluate the impact of grouping on students' responses to question 1 and question 2. There was a statistically significant difference between the students in the friendship groups and the mixed-ability group in their response to question 1 (Friends, $M = 3.53$, $SD = 1.09$; Mixed-ability, $M = 3.08$,

$SD = 1.17$; $t = 2.40$, $p < 0.05$, $d = 0.40$) but not question 2 (Friends, $M = 3.34$, $SD = 0.69$; Mixed-ability, $M = 3.18$, $SD = 0.74$; $t = 1.36$, $p = 0.18$, $d = 0.23$).

Interviews: To investigate the insight of why they were/were not interested in these two group formations, I chose ten students in each class to interview. The first question was “Did you think your group formation was effective? Why?” Responses of the students were grouped into three groups as “Positive”, “Neutral” and “Negative” and the results are presented in the Table 3.

Insert Table 3 here

Reasons of why the students pointed out for wishing to choose the friendship group were centered on two main themes of “comfortableness” and “responsibility”. Regarding comfortableness reasons, the students claimed that they needed a positive group climate to work together because group harmony affected the nature and types of interaction in group discussion. These findings were not a surprise because generally a number of studies have found that harmony among group members is a decisive factor of a successful group among Asian students (Biggs, 1996; Carson & Nelson, 1996). And the students claimed that close friends gave them harmonious and comfortable atmosphere to work productively. Some comments extracted from the interviews were:

- “Our group worked productively because we all were polite and cooperative. We helped each other to discover new ideas in the text” (I3L1/4).
- “Every member ended with a positive agreement and this was an important factor helping us to win in all arguments” (I2L1/4).
- It was very difficult to work with someone who you did not have idea about his ability, strong points, weak points and characters. Being aware of these points helped the group assign suitable works to each member (I2L1/4).
- I was too embarrassed to discuss with someone whom I did not know. Friends accepted whatever you said, even sometimes you said something silly (I1L11/14).
- It was easier to tell friends when things did not work. They were more understanding of you. It was quite easy for members to misunderstand each other if they did not catch your meaning (I5L8/12).

Regarding responsibility reasons, the students emphasized the issue of sharing group tasks together. In their point of view, group products could only be done effectively if all group members made contributions and they knew what strong and weak points each student had. As a result, if they were allowed to choose group members, they would know how to make use strong points of each member to make the group product the best. The students tended to see themselves as better judges than the teacher of “good” group members since they knew each other outside of class. Some comments of the students about this issue were:

- Usually we shared a number of courses together. So, we knew who was a good-off versus who worked hard (I4L12/14).
- We were adults and mature enough to choose our group members. I was pretty sure that the teacher did not know about each student better than us (I1L2/4).
- What happened if your group did not understand each other? Of course, you had to share responsibility and accepted unsatisfactory results (I4L5/12).

In order to determine whether the students were keen on working with the same group members next time, I asked interviewees to pick names of five students whom they wished to be grouped with in the future. The results showed that in Class 1, six out of ten interviewees picked all five names in their current groups. Only four of them picked some names from their current groups and some others from other groups. In total, the interviewees chose 42/50 names from their current groups. In Class 2, no interviewee picked all five names from their current groups. In total, the students chose 31/50 names from their current groups. This finding showed that more students in Class 1 wanted to be grouped with the same members than those in Class 2.

3.2.2 Discussion

Results from both questionnaire survey and interviews in the intervention study confirmed that the students were more interested in being grouped with their friends. Although the questionnaire results did not show significant difference between two classes, the students in Class 1 reported more positive feedback than in Class 2. Specifically, the scores for the question “I am satisfied with the formation of my group” in Class 1 were significantly higher than those scores in Class 2 ($p < 0.05$). For the question “I want to be grouped in the same

group next time”, scores in Class 1 were also higher than those scores in Class 2 but the difference was not significant.

The reasons of why the students preferred to be grouped with their friends were mainly because they could share “comfortableness” and “responsibilities”. This may be the main difference in perceptions about how to study effectively between Western and Asian students. While Western students consider individual capacity and open discussions as essential factors for group work success, Asians tend to think that they can only work effectively if they feel comfortable in the group and able to share responsibilities with other members.

The results of this study accord with what has been found in previous studies that Asian [Vietnamese] students are more interested in working with their friends. This issue should be taken into account when learning and teaching methodologies are designed for across-culture institutions. It should not be assumed that what works “here” should be workable “there”.

4. Conclusion

There must be different explanations for contradictory findings about why Western students are more likely to favor mixed-ability groups whereas Asian students are more interested in friendship groups. Phuong-Mai et al. (2008), in a study of investigating attitudes of Vietnamese secondary school students about cooperative learning, explained that the participants preferred to be grouped with friends because Confucius students consider “trust” and “identity” as two of the most important factors for a group to work effectively. As only friends are seen as being able to give group members trustful and identical feelings, Asian students prefer to work with close friends.

Differently, in the present study the researchers used the typology of culture values of Schwartz (1994) as a theoretical framework to argue that Western students and Asian students prefer different group formations because they may have different “learning priorities”. According to Schwartz (1994)’s typology to compare cultural values, Western cultures are associated with autonomy (emphasizing independence), egalitarianism (emphasizing equality) and mastery (endorsing power and dominance over others and objects), whereas Asian cultures are associated with conservatism (endorsing being interdependent and mutually obligated others), hierarchy (emphasizing distinctions or status differentials amongst people) and harmony (maintaining good relations and stability among group members).

These cultural characteristics lead to a situation that when working in teams, Western learners endorse independent thought, encourage creativity and distribute equal opportunity to achieve power and influence over others. For them, good group members should be the ones who can enable each other to achieve the highest academic standards (Glazer, 2006). As a result, when choosing group members, they tend to put cognitive ability as the first priority. Personal relationships appear to be neglected in this decision.

On the contrary, since Asian learners are very much interdependent and have strong obligations to each other, they may not consider capacity the foremost priority when choosing their group members. In fact, Glazer (2006) claims that in teamwork, collectivistic people accept that each individual contributes what he or she can do to ensure that the quality of work is acceptable and they are willing to sacrifice their own voice for the sake of group harmony. As a result, Asian students might overweight affective factors more than cognitive factors when choosing their learning partners. For them, good group members should be the ones who could help each other spiritually rather than academically. Therefore, they tend to be grouped with friends who can understand them easily. This explains why in collectivistic cultures, people have such sayings as: “Friendship is valued higher than any other value except freedom” and “Friendship first, competition second”.

This attitude may be the result of Vietnamese cultural characteristics which always emphasize the importance of close relationship. For example, the Vietnamese have such proverbs as “Better one true friend than a hundred relatives”; “It is better to be in chains with friends than to be in a garden with strangers”; “An old friend is much better than two new ones”. Students believe that working with friends develops intimacy and solidarity among group members much better than working with strangers.

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Table 1. Means and standard deviations of students' perceptions of group formation

Perception	n=20	
	M	SD
1. I am satisfied with the learning attitude of my group members	2.20	0.62
2. I like learning in my group	2.75	0.79
3. I am satisfied with the composition of my group	2.85	0.67
4. I want to be grouped in the same group next time	2.70	1.08

Note: 1=Strongly Disagree; 2= Disagree; 3=Undecided; 4=Agree; 5=Strongly Agree

Table 2. Means and standard deviations of students' perceptions of group formation in two classes

Perception	Class 1 (Friendship group) n=73	Class 2 (Mixed-ability group) n=72	t	p	Effect size (d)
	M(SD)	M(SD)			
I am satisfied with the formation of my group	3.53 (1.09)	3.08(1.17)	2.40	.02	.40
I want to be grouped in the same group next time	3.34(0.69)	3.18(0.74)	1.36	.18	.23

Note: Strongly Disagree=1; Disagree=2; Undecided=3; Agree=4; Strongly Agree=5

Table 3. Perceptions of the students about group effectiveness

Perception	Class 1 (Friendship group)			Class 2 (Mixed-ability group)		
	Positive	Neutral	Negative	Positive	Neutral	Negative
Did you think this group formation was effective?	70%	22%	18%	31%	34%	35%

Magnitude of Interaction between Language of Instruction of Prior Education and Learning Traits on Academic Achievement Scores of International Students

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Abstract

This paper investigates the magnitude of difference of academic achievement scores by language of instruction of prior education and the magnitude of interaction between language of instruction of prior education and students' preferred learning trait on academic performance of a group of international students in two teaching and learning practices. The magnitude of difference and magnitude of interaction were determined by using Cohen's *d* with Hedges *g* correction. Coe's spread sheet was used for the analysis. The study showed that the magnitude of difference of academic achievement score was found to be *very small* on Traditional method of Teaching and Learning (TTL) and *small* on Problem-Based method of Learning (PBL). However, the magnitude of interaction between language of instruction of prior education and learning traits varied from *very small* to *large*. It is a challenging task to accommodate international students from different language background and optimize the whole learning process in an English speaking teaching and learning environment.

Keywords: International Students, Learning Traits, Effect Size, Magnitude of Differences, Teaching & Learning Practices.

Introduction

The study investigated the magnitude of difference of academic achievement by language of instruction of prior education and the magnitude of interaction between the language of instruction of prior education and students' learning trait on academic achievement under two methods of teaching and learning practices. The participants of this study were international Biology students in Foundation Studies (FS) at the Royal Melbourne Institute of Technology (RMIT) University, Australia. These students were from different cultural, social, educational and linguistic backgrounds. Researches have supported the fact that students from different cultures tend to exhibit greater diversity in their approaches to learning than students from relatively same or similar cultures (Bennett, 1999). The purpose of this study was two fold. Firstly, to find whether there was any effect of language of instruction of prior education on their academic performance under two different methods of teaching and learning and secondly, what was the magnitude of interaction between language of instruction of prior education and learning traits on academic achievement scores. It is a challenging task to accommodate all individual differences, optimise the learning environment and engage and support students together effectively (Felder, 1993). The two methods used in this study were the Traditional Teaching and Learning (TTL) and Problem-Based learning (PBL). It is well established that students' individual differences influence both their learning and their academic achievement (Riding, 2005). A study conducted at the RMIT University showed that the magnitude of differences in performance by students' approaches to learning in two pedagogical environments varied from small to medium (Varughese & Fehring, 2009). However, no study has measured the magnitude of interaction between language of instruction of prior education and students' learning trait on academic achievement scores under TTL and PBL. It is on this count that this study is unique and differs from other educational research in this field.

Science education is concerned with imparting scientific knowledge and skills to individuals who are not part of the scientific community. These individuals may be school children, college students or adults within the general public. The field of science education comprises science content, some sociology and some teaching pedagogy (Fraser & Tobin, 2001). Research in science education emphasises the metalearning of the learning community. This piece of research throws some light on the metalearning of students with diverse language background. The FS at RMIT is a pathway for international students to their higher education at RMIT or any other higher institution in Australia (RMIT, 2006). The program extends over two semesters and students who are doing biology have various options in their future education include medicine, nursing, physiotherapy, chiropractic, pharmacy, food technology, environmental sciences and biological sciences. Health education in Australian universities is increasingly using the Problem-Based method of teaching and learning. It is in this context that this study seeks to examine whether International students from vastly different educational, cultural and linguistic backgrounds are able to learn successfully under the PBL method. An important feature of PBL is that it is a student-centred approach of learning. In this method students learn to determine what they need to know. PBL is an instructional method that challenges students to learn how to learn, work cooperatively in groups to seek solutions to real world problems (Duch & Norton, 1992). Students in FS are encouraged to develop both a deep and achieving approach in their learning. In order to pursue their further studies in tertiary education, they have to develop deep understanding in their learning areas and at the same time they have to get the required study scores to get admission in their field of interest after FS.

Research Participants

The participants of this research were all international students from FS at RMIT over a period of four academic years. All the participants were offered Biology along with four other courses of which English was compulsory. There were two intakes in each year with an average of 14 Biology students in each intake. The first intake designated as Group 1 runs from January to November consisting of two 18-week semesters with five contact hours per week for Biology. The first semester for this intake runs from February to June and the second semester from July to November each year. The second intake designated as Group 2 runs from June to January and consists of two 14-week semesters with six contact hours per week. The first semester for the second intake runs from June to September and the second semester from October to January of the following year.

Data collection

The data collection commenced after obtaining the ethics approval from Human Research Ethics Sub Committee (HRESC) of RMIT. It was conducted in the second semester for both Groups 1 and 2 of each academic year. Students' name, student number and nationality were collected by using a simple questionnaire. Name and student number were included in the questionnaire to identify each student at any time during the course of the research. The nationality was included to determine students' heterogeneity in terms of their cultural background.

Of the ten topics in semester 2, one topic (Topic 1) was taught under the TTL method and the second topic (Topic 2) was taught under PBL method for the intake one (Group 1) of each year. For the intake two (Group 2) of each year, Topic 1 was taught under PBL method and Topic 2 was taught under TTL method. At the end of each topic a test was conducted to assess students' understanding in these particular areas. The test that was given after TTL method of teaching was named TTL test and the test after the PBL method of teaching was called the PBL test for the analysis purpose. Thus each participant took both TTL and PBL tests. Each test consisted of two sections, Section A and Section B. Section A of each test consisted of 20 multiple-choice questions worth 20 marks. Section B of both tests consisted of four short questions worth 10 marks each. Hence the total mark for each test was 60.

The Paragon Learning Style Inventory (PLSI), was used to assess students' preferred learning traits (Shindler, 2002). The permission for using this inventory was obtained from the director of Paragon Educational Consulting. The PLSI is a self-administered inventory based on the personality test called MBTI, which in turn is based on Jung's theory of personality (Yeung, Read, & Schmid, 2005). It was developed specifically for use in educational settings in determining the learning styles (Yeung & Read, 2006). Most of the FS students have difficulties in the usage of English language. Hence it was decided to use PLSI because of its simple language and structure of questions in determining students learning traits. The PLSI uses Jungian/Myers-Briggs dimensions, *Extroversion/Introversion*, *Sensing/Intuiting*, *Thinking/Feeling* and *Judging/Perceiving*. Sixteen Learning Style categories are formed from these dimensions. However, because of the fewer participants in this research, it may not be possible to derive conclusive results when there are very few students in some of the learning style categories. Hence the learning style category has been considered as the variable defined by the

four dimensions for all analysis purposes. Each dimension has two traits and each student has one or the other as a preferred trait. It provides a much better distribution of the participants over four learning traits, lending greater credibility to any result analysis.

Data Analysis

The analyses were mainly carried out using the statistical package SPSS 13.0 and an Excel spreadsheet. The study investigated the magnitude of difference of academic achievement by the language of instruction of prior education and the magnitude of interaction between language of instruction of prior education and students' learning trait on academic achievement under two methods of teaching and learning practices. A format was set up for data entry and it captured the information such as number of students who had English and languages other than English as the language of instruction for their prior qualifications, TTL test marks, PBL test marks and number of students in each learning trait. Various functions of SPSS and Excel were used to ensure that all data had been correctly entered and then preliminary analysis of data was carried out. Frequency tables for the variables were used to check for any missing values or errors as well as to obtain appropriate frequency distributions of the data. Having completed the preliminary analysis of comparisons the data were then analysed to investigate variations and effects of these variations. This was carried out using effect size analysis. The appropriate statistics for educational research are point estimates of sizes and confidence intervals around these point estimates. Substantive significance is more useful than statistical significance. When a teaching method is compared with another method, the magnitude of the difference between the methods may not be large enough to be worth the expense of changing methods. Effect sizes were calculated by using Cohen's *d* (Cohen, 1988) with Hedges *g* correction (Hedges & Olkin, 1985). Coe's spreadsheet (Coe, 2006) was used for the purpose. Hedges's *g* is an inferential measure and is calculated by using the square root of the mean square error from the analysis of variance testing for differences between the two groups (Hedges & Olkin, 1985). Effect size measures the treatment effect (Glass, McGaw, & Smith, 1981). Descriptors for magnitudes of effect sizes include small, medium, large (Cohen, 1969) and very small (Izard, 2004). An effect size of ≥ 0.8 has been classified as large, any value ≥ 0.5 and < 0.8 as medium, a value ≥ 0.2 and < 0.5 as small, and anything < 0.2 as very small or negligible. In effect this provides an assigned range on either side of the endpoints for decimal rounding. For example any effect size from 0.45 to 0.74 is the assigned range for medium effect size.

Results and Discussion

The total participants were 116 FS Biology students over four academic years. All Foundation students were international students and were from 27 countries. Of the participants, 53 had completed their prior education with English as the language of instruction while the remaining 63 had other languages as the language of instruction. The effect of the language of instruction of prior education on academic achievement scores on TTL and PBL was measured by the effect size calculation. The results are given in Table 1.

Students who had completed their prior education in English seemed to score higher than students who had other languages as the medium of prior education, showing that language difficulties might have affected the academic performance in Biology in both TTL and PBL. The difference in mean scores was greater on PBL than on TTL. The magnitude of difference was *very small* on both TTL (0.10) and *small* on PBL (0.20). This showed that students who had completed their prior education in non English speaking learning environment need more support in PBL. In TTL they might have got more support from the teachers in their learning process.

The magnitude of interaction between language of instruction used of prior education and learning traits was also measured by effect size calculation. The results are given in Table 2.

The magnitude of interaction with the *introvert/extrovert* traits was *small* (0.15) on TTL due to the *very small* (0.05) effect size of the difference in means between *introverts* with English and other languages of instruction and the *small* (0.20) effect size of the *extroverts* with English and other languages of instruction. On PBL there was a *medium* (0.65) interaction between language of instruction and the *introvert/extrovert* learning traits obtained from a *very small* (0.05) but reversed effect size of the difference in means between *introverts* with English and other languages of instruction and a *medium* (0.60) effect size of the corresponding difference among the *extroverts*. Thus the analysis of interaction between language of instruction of prior education and learning traits indicated that the *introvert/extrovert* traits clearly had some interaction with the language of instruction. The difference in performance between the two groups was more pronounced among the *extrovert* students, the *introverts* seeming to cope better.

A *small* (0.38) interaction was observed between language of instruction and *intuitive/sensing* traits on TTL, owing to the *very small* (0.12) but reversed effect size of the difference in means between the *intuitive* students

with English and other languages of instruction compared to the *small* (0.26) effect size of the difference in means between the *sensing* students with English and other languages of instruction. On PBL, the magnitude of interaction was *small* (0.18) obtained from a *very small* (0.09) effect size and a *small* (0.27) effect size of the difference in means between the two groups. Hence in the case of the *intuitive/sensing* traits it was seen that the *intuitive* students with other languages of instruction of their prior education seemed to cope better on TTL where as it was the *sensing* students with English as the language of instruction performed better on PBL. Hence *intuitive/sensing* traits had very clear interaction with language of instruction of prior education.

A *very small* (0.12) interaction was observed between language of instruction and *thinking/feeling* traits on TTL, owing to the *small* (0.16) effect size of the difference in means between the *thinking* students with English and other languages of instruction and the *very small* (0.04) effect size of the difference in means between the *feeling* students with English and other languages of instruction. On PBL, the magnitude of interaction was *very small* (0.07) obtained from a *small* (0.16) effect size and a *small* (0.23) effect size of the difference in means between the two groups. Thus the *thinking/feeling* traits did not seem to interact much with language of instruction. However, the very slight difference was in favour of *thinkers* who appeared better able to overcome any difficulties in language proficiency.

The *perceiving/judging* trait on the other hand had a very definite interaction with language of instruction of prior education. The magnitude of interaction between language of instruction and the *perceiving/judging* traits on TTL was *large* (0.78) owing to the *small* (0.42) but reversed effect size of the difference in means between the *perceiving* students with English and other languages of instruction and the *small* (0.36) effect size of the difference in means between the *judging* students with English and other languages of instruction. On PBL the magnitude of interaction was *large* (1.18) due to the *medium* (0.66) but reversed and the *medium* (0.52) effect sizes of the difference in means between *perceiving* students with English and other languages of instruction and *judging* students with English and other languages of instruction. Thus the general trend was reversed in the case of *perceivers* on both assessments in that among the *perceivers*, students with other languages of instruction scored higher than students with English as language of instruction. On the other hand among *judgers*, the reverse was the case on both assessments. This showed that the *perceivers* seemed to cope better with any language related difficulties.

Summary

This research study investigated international students' magnitude of difference in academic achievement scores and the magnitude of interaction between language of instruction of prior education and learning traits under two different methods of teaching and learning. The effects were measured by effect size calculations. The magnitude of difference in academic achievement scores was found to be *very small* on TTL and *small* PBL. The interaction between language of instruction of prior education and learning traits was found to be varied from *very small* to *large* in two different teaching and learning practices. International students often have languages other than English as language of instruction in their prior education. Comparisons between the performance of students with English as the language of instruction of their prior qualification and their counterparts with other languages of instruction, have shown that the difference in performance between the two groups was greater in PBL, although the difference was *small*. Hence it is recommended that students from other language backgrounds who have completed their education in other languages might need more facilitation to overcome their language difficulties in self-directed, student-centred PBL activities. Further interaction analysis showed that *extroverts* with other languages of instruction need more support under both methods of learning. *Sensing* students with other languages of instruction seemed to need more support on both TTL and PBL. Another interesting observation was that *perceiving* students with other languages of instruction actually scored higher than their counterparts with English as language of instruction reversing the general trend on both assessments. This suggests that *judging* students with other languages of instruction need more support on language issues. Hence it is recommended that teachers should encourage *extrovert*, *intuitive*, *sensing* and *judging* students from other language backgrounds to use support facilities provided by most universities to improve their language, writing, presentation and communication skills.

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Table 1. Magnitude of difference of academic achievement scores under TTL and PBL by the language of instruction of prior education

Teaching & Learning practice	Language of instruction	n	Mean	Diff in Means	Effect size of difference	Magnitude of interaction
TTL	English	53	35.86	1.19	0.10	<i>very small</i>
	Other	63	34.67			
PBL	English	53	36.08	2.55	0.20	<i>small</i>
	Other	63	33.53			

Table 2. Magnitude of interaction between language of instruction of prior education and learning traits on students' academic achievement scores under TTL and PBL

Teaching & Learning	Group 1	Group 2	Effect size	Difference in effect size	Magnitude of interaction
TTL	Eng Intro	Other Intro	0.05	0.15 in favour of Extro	<i>Small</i>
	Eng Extro	Other Extro	0.20		
PBL	Other Intro	Eng Intro	0.05	0.65 by reverse trends	<i>Medium</i>
	Eng Extro	Other Extro	0.60		
TTL	Other Inuit	Eng Intuit	0.12	0.38 by reversed trends	<i>Small</i>
	Eng Sens	Other Sens	0.26		
PBL	Eng Inuit	Other Intuit	0.09	0.18 in favour of Sens	<i>Small</i>
	Eng Sens	Other Sens	0.27		
TTL	Eng Think	Other Think	0.16	0.12 in favour of Think	<i>Very Small</i>
	Eng Feel	Other Feel	0.04		
PBL	Eng Think	Other Think	0.16	0.07 in favour of Feel	<i>Very Small</i>
	Eng Feel	other Feel	0.23		
TTL	Other Perc	Eng Perc	0.42	0.78 by reverse trends	<i>Medium</i>
	Eng Judg	Other Judg	0.36		
PBL	Other Perc	Eng Perc	0.66	1.18 by reverse trends	<i>Large</i>
	Eng Judg	Other Judg	0.52		

Using Business Theory to Motivate Undergraduate Students in Goal Attainment: An Empirical Assessment and Model for High Level Motivation and Goal Attainment

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Abstract

Students at a private university in southern California took part in a study focusing on high level motivation and goal commitment. Using path analysis, this study mapped out two-paths. The first path to motivation and, therefore, goal commitment was through self-efficacy. The second path to goal commitment required a more supportive course. Spiritual, peer, family and leadership support combined to create a more encouraging sequence of action toward motivation and goal dedication.

There are many motivators that lead to goal completion. These motivators are generated from various influences—from peers, from family, from leaders, from faith, and from oneself. The purpose of this research is to look at motivation and goal achievement through the lens of personal motivators. The objective is to take a primarily business theory and apply it to college student marathon training.

Keywords: Education, Experiential, Student Motivation

1. Literature Review

Edwin Locke, American psychologist, was a pioneer in goal-setting theory publishing over 285 articles in various journals on topics such as work motivation and job satisfaction. Locke sought to understand how goals can influence performance. In 1990, Locke published, “A Theory of Goal Setting and Task Performance” with Gary Latham. The two developed what is now known as Goal Setting Theory. In business, Locke and Latham's (1990) goal setting theory has been used to predict job satisfaction. The authors argue that productivity of workers is significantly increased by high goals. Motivation, moreover, is the predecessor to goal accomplishment. Without motivation, goal failure can occur.

According to Locke and Latham's (2002) writings, when a goal is set at a difficult level a person is required to put forth more effort to meet it. This effort is motivation dependent. Goals, therefore, are motivation-based outcomes leading to personal satisfaction.

A key principle is that goals must be set, so that people can be motivated to achieve them. These cannot be easily achieved goals, but they must present a challenge to the person. Easily attained goals tend to correlate more with lower performance than difficult goals do. Also goals must be specific. Vague goals also tend to correlate with lower performance; effective goals tend to be very specific and rather challenging to achieve. Goals need to be able to motivate someone enough to spur them to meet ambitions, thereby helping the person focus on the objective. All efforts will be put towards achieving that objective and ultimately reaching the goal.

By setting an effective goal, individuals have a better chance of achieving their goal. However, many times, individuals set faulty goals. For example, students strive for “good grades,” but they should set more specific goals, such as, striving for all A's and one B. Specific and difficult goals are more likely to yield results than a vague, easy goal. Locke and Latham (2002) found that people are motivated by clear goals and appropriate

feedback. Working towards a goal provides a major source of motivation in actually reach the goal. In turn, this improves performance.

Motivation is achieved in many ways. Some are self-motivated and some are other-motivated. Vallerand (1997) provided a model of motivation which hypothesized about various motivational influences. Psychological needs must be met to create these needs. Vallerand (1997) referred to these motivational influences as “social factors.” Vallerand and Losier (1999) claim these social factors can be applied to sport and physical activity.

There are numerous motivators outside of self. Patrick, et al. (1999) postulated that some of these social factors included peer support. They stated that peers help play a positive role in supporting the sustained participation towards a goal. Leadership also plays a vital role in motivating. The research pointing to leadership as an important factor in motivation is exhaustive. See Bass (1999) for a two decade review of the literature in this area. There is only tangential research in the area of personal faith and its relationship to motivation and goal commitment.

Some people, on the other hand, are self motivated. Bandura (2000), states that “Among the mechanisms of self-influence, none is more focal or pervading than belief of personal efficacy” (p. 2). He goes on to argue that unless people believe desired effects can be produced, they have little motivation to act. Consequently, motivators are rooted in the conviction that self-efficacy influences desired results.

2. Research Question

This research assessed high level goal attainment among business student using marathon training as an experimental variable. In doing so, various constructs were developed to assess participants in the training regimen. These constructs were either related to self-motivation or support-centered motivation. Those that were support-centered included peer, leadership, and spiritual support. Self-efficacy was used to measure self-motivation. Motivation and goal commitment were considered the dependent variables in the research.

2.1 Research Questions

- 1) What, if any, was the path or paths leading to motivation and goal commitment?
- 2) Were there any demographic differences (i.e., gender, ethnicity, etc.) with any of the proposed constructs?

3. Research Design and Methods

3.1 Participants

All research participants were enrolled as undergraduate students during the fall 2009 semester. The student population that participated in this study was enrolled at Azusa Pacific University (APU), located in Southern California. Azusa Pacific University has 4,874 full time undergraduate students (61% female and 39% male). Ethnic minority demographics include 36% (Black, Asian or Pacific Islander, or Hispanic) of the student body profile. Approximately 67% of full time undergraduates receive need-based financial aid from the federal government and/or institution.

Sixty-two participants agreed to take part in the experimental study involving marathon training. Forty two (33.3 % male, 66.7% female) completed the training and ran the marathon. Thirty completed the survey (71.4% response rate). The racial distribution of the students was 76.9% Caucasian and 23.1% minority. The training program was open to all university students, and included students in many academic majors, including Business, Liberal Studies, Nursing, Sociology, Biology, Applied Health, Athletic Training, Psychology, Political Science, Sports Psychology, and Cinema Arts.

3.2 Procedures

Participants were invited to participate in the study but were not required to take part. To reduce potential bias effects, the self-assessment instrument was administered over several days. Confidentiality was guaranteed. Moreover, the participants were informed of the purpose of the study, warned of any risks and inconveniences, explained the benefits of participating, and provided the opportunity to be removed from the study at any time.

3.3 Instrumentation

An instrument was developed covering six constructs: goal commitment, motivation, leadership support, mutual support, spiritual support, and self-efficacy. The original instrument contained 42 questions about the constructs, 6 demographic questions, and 4 open-ended questions. Some questions were omitted following inter-reliability ratings. Alphas indicated marginal to good reliability ($\alpha = .62$ to $.88$) for all construct except one, motivation, which did not meet minimum expectations ($\alpha = .45$).

The six constructs were designed to measure self-perceptions following the marathon training program.

Following is a sample of the questions for each construct:

Goal-Commitment

- The goals I had on this challenge were demanding.
- I understood how my performance was measurable for this challenge.
- I expected positive results.

Self-Confidence

- I truly believed I faced this challenge realistically.
- I clearly understood my limitations throughout this challenge.

Leadership Support

- The coach led by “doing” rather than simply by “telling.”

Mutual Support

- I was encouraged by fellow runners during this challenge.
- I was encouraged by friends and family during this challenge.

Spiritual Support

- I sought God’s guidance throughout this challenge.
- I believe that God was by my side during this experience

Self-Efficacy

- I focused on my strengths not on my weaknesses.
- I had a strong sense of self-worth throughout this challenge.

The data were analyzed using SPSS 15.0 and AMOS 7.0. Analysis was completed using Cronbach’s alpha and structural equation modeling as well as basic descriptive statistics.

3.4 Design and Analysis

Following reliability assessment of the constructs, a model was developed to evaluate the effects of marathon training (self-efficacy, leadership support, mutual support, and spiritual support) and the connection to motivation and goal commitment (see Fig. 1). In order to identify the model, several methods suggested by Joreskog and Sorbom (1986) were utilized: (1) consideration of alternative plausible models, (2) factor analysis, and (3) elimination of constructed variables. A factor analysis using Varimax was done to validate the grouping of the constructs. Overall, the factor analysis was congruent with the questions. In some questions, the factor analysis groupings were different from the grouped survey questions. Independent sample t-tests were accomplished to assess the differences in the various demographics (e.g., ethnicity, gender) on all six constructs.

The model suggests two potential paths to motivation and goal commitment—the “Self-efficacy” approach and “Supportive” approach. The Self-efficacy approach suggests that belief in oneself leads directly to motivation. Motivation then leads to goal commitment. The second path we call the Supportive approach. In the Supportive approach, three areas must work together in order to lead to motivation and eventually to goal commitment—spiritual support, mutual support, and leadership support. In both paths, goal commitment is the final outcome. The ea, eb, and ec are indicators of error effect.

4. Findings

AMOS 7.0 generates a chi-square statistic to determine significance and squared multiple correlation coefficients to determine variance. Because the chi-square test of absolute model fit is sensitive to sample size and non-normality in the underlying distribution of the input variables, various descriptive fit statistics to assess the overall fit of a model are provided. These include the Tucker-Lewis Index (TLI), the Comparative Fit Index (CFI), and the Root Mean Square Error of Approximation (RMSEA). Most commonly reported are the chi-square statistic and the squared multiple correlation coefficients. The null hypothesis under test is that the model fits the data, so one hopes to find a small, non-significant chi-square value for this test. For the model, the chi-square was 4.80, ($p = .68$).

AMOS 7.0 further provides analysis in conjunction with the constructs (see Fig. 2). The covariance between spiritual, mutual, and leadership support ranges from .00 to .12. Too high a variance would indicate a multicollinearity problem. Table 1 indicates the means and standard deviations for each construct. Both

motivation and goal commitment were smaller while self-efficacy, spiritual, mutual, and leadership support ranged from 3.25 to 3.88. The error variance is an estimate in this model and ranges from .06 to .14.

The variance and Maximum Likelihood Estimates are one of the more telling statistics (see Table 2). If there is a direct connection to a construct as is the case from self-efficacy to motivation and motivation to goal commitment, then there is no variance estimate. The variance for the Support approach within the model ranges from .09 to .42. The Maximum Likelihood Estimates indicates that when one area goes up by one standard deviation the effected construct goes up by an estimated amount. For example, Table 2 indicates that when self-efficacy goes up by 1 standard deviation, motivation increased by .17 standard deviations. The Support constructs increased .03 to .17. Goal commitment increased by .29 when motivation goes up by 1 standard deviation.

Further analysis was done to compare ethnicity, academic major, previous running experience, and training preference (running alone or in a group) across the various constructs, using independent samples t-tests. There were no significant results from this analysis.

5. Conclusions

The research indicates a two-path model toward high level motivation and, ultimately, goal commitment. The first is self-efficacy leading to motivation and then to goal commitment. Self-efficacy is defined as one's beliefs about their capabilities to produce designated levels of performance that exercise influence over events that affect their lives. Self-efficacy beliefs determine how people feel, think, motivate themselves and behave. In this case, the self-efficacy group completed a marathon. Those rating themselves high in self-efficacy did not rely on the spiritual, mutual, or leadership support to complete the goal. Interestingly, cross tabulations indicated that self-efficacy was not related to having training previously or training alone.

Bandura (1994) notes that, "a strong sense of efficacy enhances human accomplishment and personal well-being in many ways". People with high assurance in their capabilities approach difficult tasks as challenges to be mastered rather than as threats to be avoided." The training, and subsequent experimental goal accomplishment, suggests the respondents with high self-efficacy was a significant path to motivation, and motivation led to completing the goal.

The second path to goal completion required a more supportive course. In concert, spiritual, mutual, and leadership support worked as a means of sustaining participants toward a goal commitment. This path required more encouragement from others (i.e., peers, family, friends, and leaders) and from faith. Such encouragement leads to motivation and goal commitment. Lastly, we found the model to be statistically valid only if all three components (spiritual, mutual and leadership) were included in the path analysis. In other words, respondents indicated that spiritual, mutual, and leadership support needed to work in conjunction in order to achieve a motivational state and, ultimately, complete the goal of running a marathon.

Results of this study are generally positive and have important implications for goal attainment. Future research in this area would be advantageous, however. For instance, using a control group would solidify the validity of the study. Moreover, redesign on the motivation construct should be considered in order to achieve a Cronbach's Alpha of .70 or higher. Though this study was done using participants in a marathon, it would benefit from replication with another high-level goal attainment task. In addition, the further conceptual ideas could be explored besides self-efficacy, spiritual support, mutual support, and leadership support to determine if other areas lead to goal attainment.

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Table 1. Means and Standard Deviations

	N	Mean	SD
Self-efficacy	26	3.25	.37
Spiritual support	26	3.30	.66
Mutual support	26	3.58	.58
Leadership support	25	3.88	.30
Motivation	26	3.79	.30
Goal commitment	26	3.58	.33

Table 2. Variance and Maximum Likelihood Estimates

	Variance	MLI
Self-efficacy to Motivation	n.a.	.17
Spiritual support to Motivation	.42	.17
Mutual support to Motivation	.32	.12
Leadership support to Motivation	.09	.03
Motivation to Goal commitment	n.a.	.29

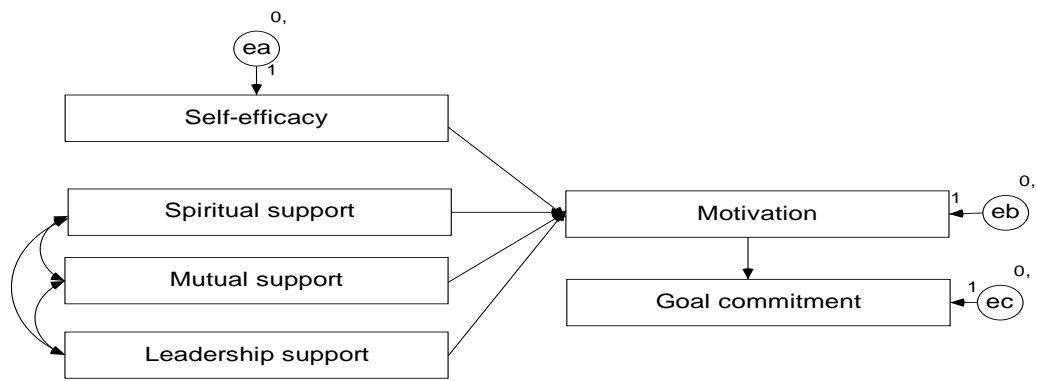


Figure 1. Effective Motivation and Goal Commitment Model

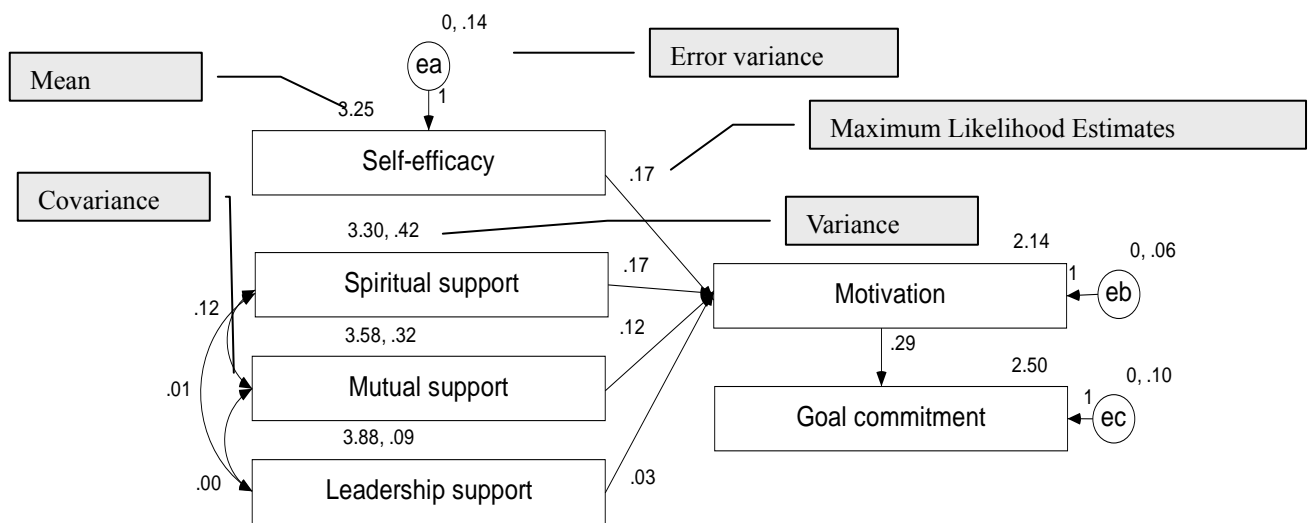


Figure 2. Effective Motivation and Goal Commitment Model with Analysis

Humble Opinions on Inclusive Educational Idea

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Abstract

Inclusive education refers to including all the people to realize the democracy, justice and diversity of education. Inclusive educational idea means to make all the students have equal opportunities in enjoying high-quality education and make every student have all-round development, reflecting the yearning for the education without exclusion and discrimination of people from different countries, nationalities and beliefs. Inclusive educational idea should be spread widely and put into effect.

Keywords: Inclusive educational idea, Challenge, Countermeasure

1. Introduction

Inclusive education means to include all the people to realize the democracy, justice and diversity of education. As a new educational idea, it aims at realizing the justice of education, and embodies the idea of “education without distinction”. Yuan Yimin, who worked in UNESCO, pointed out, “Inclusive education does not refer to a certain kind of students, children of immigrants, poor people or other disadvantaged groups. It refers to all the people. Everyone has the chance to acquire high-quality education. The different needs of different people should be fully considered.” Inclusive educational idea means to make all the students have equal opportunities in enjoying high-quality education and make every student have all-round development on the basis of admitting the differences in individual characters. Carrying out this idea is the inevitable trend of the development of international society, and it is also the only way for China to build a nation of powerful education. Carrying out this idea challenges the traditional educational idea in China. We should consider all these things.

2. Putting forward inclusive educational idea

The original intention of putting forward inclusive educational idea began from changing the traditional segregating education. In the 1960s, traditional special education was to arrange disabled students to study in schools set for them specially to show the society’s care for them. Because the disabled students stayed together and were separated from the society, such kind of special education became an obstacle for the disabled students to return to the society. Because of the introspection on binary system and the inspiration of human rights, some northern European countries tried to accept all students, including disabled students, to study in common school. This measurement bred a new educational idea, inclusive educational idea.

In 1975, the U.S. issued *Education for All Handicapped Children Act*, putting forward the idea of “returning to the mainstream” for disabled students. According to the Act, disabled students are placed in common school to be educated. They will study and live together with physically-sound students. Later, UK and Australia issued similar laws and regulations, supporting disabled students to be educated with physically-sound students. This revolution in special education laid the foundation for putting forward inclusive educational idea.

In 1990, The World Conference on Education for All passed *The Declaration of World Education for All: Meeting Basic Needs of Learning*. The Declaration pointed out that special attention should be paid to the learning needs of disabled people. Steps should be taken to provide equal opportunities of education for different kinds of people, and this kind of education should become a constituent part of the educational system. This thought is the embryonic form of inclusive educational idea.

In 1994, The World Conference on Special Needs Education was held in Salamanca, Spain. The conference passed *Salamanca Declaration --- The Principle, Method and Practice of Education of Special Needs*. The conference put forward inclusive educational idea for the first time, and it clearly expressed 5 principles: Every student has the basic right of receiving education; Every student has his/her individual character, interest, ability and learning need; The students’ differences in characters and other aspects should be considered in education;

Students with special requirements should have the opportunities to study in ordinary school; Inclusive school is the most effective way of fighting against discrimination, establishing inclusive community where everybody is welcome and realizing overall education. From then on, after less than 20 years, the scope of inclusive education has surpassed the students who are physically disabled. It also includes the students who have obstacles in their mind, or who have defects in their morality, or who have difficulties in their learning. As a new educational idea, inclusive educational idea is accepted by each nation.

In 2005, UNESCO issued *Guide to Inclusive Education: Access to Ensuring Education for All People*, defining inclusive education: Inclusive education is to reduce the exclusion inside and outside educational system by increasing learning, culture and community participation. Facing the diverse needs of all learners, inclusive education is the process of reacting to the needs. According to this definition, inclusive education tries to make all the people receive the same good quality education, especially to help those students who might be marginalized or discriminated because of their physical, mental, economic and environmental conditions to receive the same good-quality education.

In 2008, UNESCO held the 48th International Conference on Education in Geneva. The theme of this conference is “inclusive education: the only way”. The purpose of this conference is to promote the development of inclusive education in worldwide scope from the trans-regional perspective. State councilor Liu Yandong attended the conference and made an important speech. She pointed out, “Putting forward inclusive education reflects the respect to everybody and the protection to human rights. It conforms to the requirements of the times and the trend of future. It will have an important effect on establishing harmonious world.” Liu Yandong expressed that inclusive education should be brought into China’s medium-and-long-term educational planning to propel fair education which covers all the people, develop high-quality education which shares resources, and construct life-long education.

3. The connotation of inclusive educational idea

Salamanca Declaration, which was passed in the World Conference on Education for Special Needs in 1994, has specified five principles. The principles encompass the views of human rights, equality, democracy and values of inclusive education. These four kinds of views are discussed as follows.

3.1 View of human rights

Human rights are personal rights and democratic rights, which can be divided into three dimensions: survival rights, educational rights, and personal rights. The survival rights mean that every being has the basic substantial rights and should be respected, even for the students with special needs. The educational rights, which are basic human rights, advocate that everybody has the rights to be educated. The students with special needs also have the rights to acquire equal education to motivate the development of their mind and body and the exertion of potential. The personal rights emphasize that the students with special needs should not only be given the opportunities of receiving education, but also be respected in their human dignity and be given the chances to participate all kinds of activities. These three dimensions mainly emphasize the educational rights. The principal content of inclusive education is that all the schools should admit all the students, oppose discrimination and exclusion, attach importance to collective cooperation, meet different needs and realize inclusive education.

3.2 View of equality

Inclusive education advocates that everybody has the rights to receive education equally. The equality does not mean absolute equality. It attaches importance to the development of every student. Inclusive educational idea demonstrates that every student is unique and has his/her own characters, interests, abilities and learning needs. These differences should not be the reason of discrimination but the foundation to care for them and provide appropriate learning conditions. However, in current higher education, there still exists the phenomenon of judging success and failure according to marks. This is one of the problems to be solved.

3.3 View of democracy

Equal education involves the construction of democracy. Without fair education there is no democratic society. People’s rights of educational equality can be secured forcefully in a society with strong democratic ideas. On the contrary, in a society which lacks democratic ideas, people lack the knowledge of democratic ideas and the pursuit of equal rights. This makes it difficult to ensure justice and equality in the field of education. This also makes the appearance of exclusion of the disadvantaged groups and abates their consciousness of active participation, which can reflect the democratic view of inclusive educational idea and requires every person who receives education to take part in the social decision-making in order to reconstruct the society.

3.4 View of values

Viewing from the value orientation of inclusive educational idea, the governing values are advocating teamwork.

It is a general trend for the development of education to emphasize collective and cooperation. This is also an objective requirement for the development of international community. Inclusive educational idea, which is different from traditional educational idea, sets foot on collective to solve problem by cooperation. Its aim on cultivating people is collective and cooperation, for the jobs in the future society require people to be cooperative, especially for the people with different interests, abilities, personalities and cultural backgrounds. Inclusive educational idea advocates that common schools admit all the students. Because of the students' different needs, the role of teamwork becomes very important. A cooperative relation needs to be established between teachers, between teachers and students, between teachers and parents, and between parents. An inclusive atmosphere needs to be constructed together.

4. The challenge from inclusive educational idea

Inclusive educational idea advocates including all the students, opposing exclusion and discrimination, and meeting the different needs of different students. It emphasizes participation and teamwork, which is against the traditional educational idea. Consequently, the implementing of inclusive educational idea will bring about new challenge.

4.1 Challenge to traditional educational idea

Guided by traditional educational idea, higher education has entered the period of mass education in our country, but it still has not broken away from the shadow of superior education. Even though special education is introduced to some colleges and universities, it is still set in some separate departments and specialties, and does not break away from "dual-oriented education." Different degrees of explicit or implicit discrimination still exist in introduction to specialties, teaching activities or in the students' management. Such discrimination will make some students' mind warp, even serious psychological block. Education is the cornerstone of human civilization. Educational rights are basic human rights. Equal excess to education is the origin of social equality. Therefore, we should carry out inclusive educational idea, treat every student fairly, and avoid discrimination or exclusion.

4.2 Challenge to educational system

Compared with inclusive educational system, traditional educational system is a binary system which set colleges separately or set separate departments and specialties in a college. There will be great challenge to the construction of unified system, for constructing unified system is a systematic engineering, and it will cause the change of system. After that, specialty establishment, course structure, course option, practical process, etc. should be adjusted. The establishment of the differentiation examination system becomes particularly important. Constructing the unified system is the precondition of implementing inclusive educational idea, and the differentiation examination system is the necessary condition of the normal operation of unified educational system. Just like Aristotle said, "To different people with the same treatment is unfair as well as to the same people with different treatment".

4.3 Challenge to the ranks of teachers

Enforcing inclusive educational idea requires not only admitting all the students and opposing discrimination, but also meeting different needs of them and emphasizing participation and teamwork. This requirement is beyond expectation for most of the teachers. The traditional teaching methods, classroom management and examination system should be substituted by diverse teaching approaches, new classroom management varying from person to person and differentiation examination system. The students' study, life and development can never be affected by any divergence on their body, intelligence, emotion, language, culture and nationality.

5. Countermeasure to the challenge of inclusive educational idea

Today, implementing inclusive educational idea has become an upsurge of educational reformation in the developed countries and districts. However, it has a long way to go in China, for China is a multinational country and a populous nation with great number of disabled people. The problems of education for the children of the migrant workers and the hometown-remaining children in rural areas need to be put on the agenda. Here are some suggestions.

5.1 Establishing inclusive educational system

Establishing inclusive educational system is a systematic project. It is an efficient path for the security of human rights and for the realization of educational fairness. It is also an important measure to improve the quality of the people and to achieve a powerful nation of education. Establishing inclusive educational system needs great support and participation of the whole society, and the whole society's inclusive consciousness and regulation of conduct should be cultivated. *Program of Action for Special Needs Education*, published by UNESCO, points out that the decisive factor for implementing inclusive education is the support, participation and good wishes from the whole members of the society. The inclusive educational system includes the guidance from

government, the support from finance, the action of schools and the admission of enterprises and community. Indeed, to common schools oriented by inclusive ideas, fighting against discrimination is the most effective path for the realization of education for all people, but we should realized that without the guidance of the government, the support from finance, and the participation of the whole society, we cannot carry out this great project. So, the whole society should realize clearly that after higher education enters the mass stage, the next aim is inclusive education. Enough preparation is required.

5.2 Constructing inclusive educational atmosphere

Among the three factors for talent cultivation, environment is one of them. To carry out inclusive education is to reconstruct the school's function and culture and reform the educational environment, which should be learner-centered in order to provide an educational environment that can embody fair participation, equal personality, mutual respect and understanding. Such educational atmosphere can help to insure the enforcement of inclusive education. Humanity environment is very important in the process of constructing inclusive educational environment. For one thing, students should be directed to care for and help each other, to recognize their identity of collaborators in the collective, to develop everyone's potential and to deal with everybody's problems with the power of the collective. For the other thing, the staff members should be equipped with inclusive educational idea, establishing the idea of respecting the students' principal status, caring about every student, and guiding the staff members to establish equal, democratic and comfortable relationship with the students.

5.3 Enacting and improving relative rules, regulations and policies

Enacting and improving relative rules, regulations and policies is the fundamental guarantee of carrying out inclusive educational idea. Inclusive education is a new project in the higher education of our nation, and there are no well-defined rules and regulations to insure it. The current rules, regulations and policies are inconsistent with inclusive educational idea in many aspects, resulting in the unfairness in education. Take higher education as an example. On the one hand, charges result in unequal chances of admission. The very high charges reduce the opportunities of admission for the students from low-income families, and make such students be in more disadvantageous position in the distribution of educational resources. On the other hand, there exists the problem of entrance marks. The entrance rate and entrance marks are completely different in different places in our country. Because of different birth places, there exist unfair phenomena of admitting opportunities. Such problems result in the discrimination and prejudice towards the students who are from low-income families and from the poverty-stricken areas, and need to be concentrated on.

5.4 Cultivating proper ranks of teachers to adapt to inclusive education

Cultivating proper ranks of teachers is the key-line to put inclusive education into practice. For quite a long time, the segregation between general education and special education makes teachers unaware of how to cope with the challenge of inclusive education. The only way is to strengthen in-service training, make them know the features of different kinds of students, respect the differences of each kind of students, concern about their needs, formulate personalized teaching plans and use diverse teaching methods to teach students in accordance with their aptitude, meet the special requirements of students with different learning backgrounds, experiences and abilities. Meanwhile, every student should be guided to set the aim of autonomous development reasonably and make it become the drive of autonomous learning and development according to social and economic development. In the long run, both normal education and qualified teacher training should increase the content of inclusive education so that teachers could master the corresponding knowledge and skills, and the problem of cultivating inclusive ranks of teachers can be solved from root causes.

6. Conclusion

All in all, our ideal is to make every child have fair rights and chances to get education, to make them better by using knowledge, to create beautiful life, and to make the human civilization light the future of all the people.

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An Analysis of Student Self-Assessment of Online, Blended, and Face-to-Face Learning Environments: Implications for Sustainable Education Delivery

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Abstract

Online delivery has the potential to offer significant benefits in achieving multiple goals related to sustainable education. For example, students from a variety of backgrounds can access educational opportunity, allowing for vast dissemination of education. In addition, the methods employed in online learning are generally much lower in carbon intensity, providing an added operational benefit to online education. Beyond these stated benefits, we must also identify what components of online education are deemed effective from the student's perspective. This article summarizes a recent study conducted by the authors on overall student self-assessment of learning at a major online university, and compares these results with general pedagogical assumptions regarding the perceived benefits of online learning. The goal is to highlight what factors students find important in ensuring quality learning outcomes in the online learning environment. The extension of this work is to link successful components of online delivery to the general achievement of sustainability in education delivery methods.

Keywords: Online, Education, Sustainability

1. Introduction

The use of online learning is increasing in higher education. There are a number of reasons why this is occurring, including its potential to provide flexible access to content and instruction at any time, from any place and cost-effectiveness for institutions of higher education. Online learning can increase the availability of learning experiences for learners who cannot, or who choose not to, attend traditional face-to-face (onsite) offerings, it offers an opportunity to disseminate course content more cost-efficiently, and also enables higher student to faculty ratios while maintaining a level of outcome quality equivalent to face-to-face instruction.

It has also been suggested that online learning can enhance the quality of learning experiences and outcomes by allowing for a complex and varied community of learners (Bransford, Brown, & Cocking 1999; Riel & Polin 2004; Schwen & Hara 2004; Vrasidas & Glass 2004). In addition, other research has indicated the merits of online learning by focusing on the benefits of asynchronous discourse, suggesting such discourse is inherently self-reflective and therefore more conducive to deep learning than the synchronous-type discourse one would expect in a fully face-to-face setting (Harlen & Doubler 2004; Hiltz & Goldman 2005; Jaffee, Moir, Swanson, & Wheeler 2006).

If the preceding premises hold true, then one would expect to find student self-assessment of learning to generally reflect the conjectures identified above. For example, students who have engaged in "deep learning" would more readily identify a greater satisfaction in self-learning. These results suggest, at a minimum, that online learning can be an effective tool in achieving sustainability outcomes in various measures. For instance, based on what has been presented, online education can provide a sustainable vehicle for the delivery of education, while also ensuring a high degree of student satisfaction, both in terms of actual and perceived learning outcomes.

To test these premises, the authors conducted a statistical analysis on a significant data set of student self-evaluation, attempting to discern the relationship between student self-assessment of learning and the teaching modality employed (onsite, online, hybrid, etc.). The results of this analysis suggest student

self-evaluation of learning was highest amongst onsite course offerings, followed by hybrid and then online offerings. While there may be many potential explanations for this trend, the trend itself suggests the conjectures identified above, even if true, do not necessarily correspond with student self-assessment of learning. This is an important trend to consider, especially where the future success of online courses is likely dependent and driven by student demand. While we offer potential reasons for the trends identified, further research is needed to more comprehensively identify the pedagogical connections between learning satisfaction and the different course delivery modalities current employed.

2. Methodology

The sample for the study consisted of 4,038 course assessment summaries over fiscal year 2009 – 2010 year-to-date. Individual courses average 25-30 students per course. Single courses, such as independent studies, were excluded from the study.

The responses taken for statistical analysis were derived from a thirty-question student assessment employed by the university, which contains a five point Likert scale. The thirty questions were clustered into four categories: student self-assessment of learning; assessment of teaching; assessment of course content; and assessment of web-based technology. This study focused on the results for the category of student self-assessment of learning, which was derived from seven of the thirty-question student assessment. An example of this category is provided in Table 1. For the analysis, a focus was placed on Question 4 identified in Table 1: “I gained significant knowledge about this subject.” The purpose was to minimize the clustering effect that potentially weighted certain questions to favor onsite or hybrid learning, for example, Question 2 in Table 1: “My oral communication skills have improved.” Oral communication skills are admittedly diminished in the traditional online learning environment, especially where the majority of the course activities rely on asynchronous communications.

Course summary data of student self-assessment was sorted by academic level (undergraduate and graduate), and finally by course delivery modalities of Online, Hybrid, and Onsite. Each of the three major course delivery modalities were modified in some instances to include online supplements for onsite courses, online courses with synchronous audio/visual components and these represented the final fourth-level of sorting. Descriptive statistics were used to determine trends in both undergraduate and graduate courses across the three major course delivery modalities across the 2009-2010 fiscal year-to-date. Next, data was subjected to ANOVA statistical analysis and then, if statistically significant differences were found, to post-hoc Scheffe analysis to determine where those differences occurred. The data was then analyzed for trends between the different teaching modalities, comparing these modalities to student self-assessment of learning.

3. Results

The results for both undergraduate and graduate self-assessment of learning by teaching modality employed are shown in Figure 1.

Figure 1 represents the variety of teaching modalities employed by National University during the 2009-2010 academic year. The main categories of consideration are the onsite, online, and hybrid delivery methods. However, other teaching modalities, such as the onsite with online supplement (“Onsite/Online Sup”) are provided to help potentially explain how various combinations of teaching modalities may combine to aid in a more higher student self-assessment of learning.

The primary results indicate that both undergraduate and graduate students across various disciplines generally prefer onsite learning to either online or hybrid teaching modalities. However, the data shows that undergraduate students tend to prefer hybrid to online teaching, while graduate students generally prefer online to hybrid teaching. In addition, there is a general trend in the data results indicating both undergraduate and graduate students generally score onsite forms of education delivery the highest, but also score hybrid and online modalities high where they are part of specialized course instruction, for example where independent studies use online components but still meet face-to-face, or where online courses are supplemented with synchronous technologies, such as ClassLive Pro (CLP).

The differences in undergraduate student self-assessments of learning, as measured by question 4, between the seven different course delivery modalities is statistically significant at the .001 level. The two areas of statistically significant differences that are found are between “traditional” onsite v. “traditional” online modalities (.001 level) and between “traditional” onsite v. online courses with a synchronous communication component (.001 level). These online courses utilized a CLP component for supplementary instructor-student interactions. While not statistically significant, it is interesting to note that undergraduate students reported the

highest self-assessment of learning (question 4) for onsite courses that incorporate an online resource component.

The differences in graduate student self-assessments of learning, as measured by question 4, between the ten different course delivery modalities is statistically significant at the .001 level. “Traditional” onsite courses are statistically significantly different from hybrid courses, “traditional” online courses, online courses with a synchronous communication component, and online practicum/project/thesis courses all at the .001 level. It is interesting to note that online courses taught exclusively with synchronous communication technology reported the highest level of student assessment of learning (question 4).

4. Discussion

The results obtained in the sampling data suggest student self-assessment of learning (a measure of overall satisfaction) is dependent on factors beyond the simple delivery of online course content. When measured against other modalities, online delivery of education ranks below more traditional methods of instruction, particularly onsite instruction. However, online courses that employ technologies that more closely mimic onsite, face-to-face interactions (for example, synchronous interactions via live video and audio feeds) tend to show higher levels of student satisfaction than entirely asynchronous online delivery. The implication for using online course delivery to maximize sustainable outcomes is clear; online courses should employ a mix of synchronous interaction opportunities to maximize student satisfaction opportunities. However, the authors recommend this use of increasing technology be approached with some caution.

One of the biggest assumptions commonly made in the development of e-learning programs is that the more visually appealing a program, the more learning that will occur; therefore, it is easy to assume that the way to create a premier e-learning course is to simply add more media (such as animation, video and illustration). This is not necessarily true since the purpose of media elements should be to deliver the content and instructional methods, not to make a program merely look appealing. Visual appeal therefore is simply a byproduct of good instructional design. A truly premier e-learning course is one that will look attractive, feel vibrant, encourage participation, and incorporate activities that support the learning objectives and various learning styles of its participants. In addition, it will combine elements of synchronous and asynchronous learning in a way that maximizes student engagement while maintaining the core course objectives and goals.

Online course delivery can be an effective way of obtaining multiple goals in sustainable education. It offers the benefits of educational access to a wide array of potential students, while also limiting the carbon intensity of course delivery. However, the benefits suggested in the literature, including the notion of “deep learning” through reflective asynchronous delivery methods, are not clearly reflected in this study of student self-assessment of learning. Rather, students seem to desire a mixed balance of synchronous and asynchronous delivery methods when engaging in the online environment. This is an important factor to consider when thinking about the overall benefits to online education in meeting sustainability goals.

One variable that was not controlled for in this study is the impact of the particular instructor on student self-assessment of learning. The instructor-student relationship is an important factor in student learning, and can likely impact student self-assessment of learning regardless of quality of the online course design. However, we can assume instruction will vary equally in both online and onsite course delivery modes such that this factor would weigh equally in both categories of assessment. Still, further research may be appropriate to better understand if there are statistically significant differences between the general quality between onsite and online instruction.

5. Conclusion

Student learning is the result of the interaction of three distinct components that differ in importance in different course delivery modalities. The most important component across all course delivery modalities is course content; outstanding advanced technology and instructor competence and the ability to “connect” with students have little impact if course content material does not facilitate and reinforce the learning experience. The positive impact of efforts to constantly upgrade course content material, especially with respect to online instruction, is clearly seen in student assessments. Once course content has been addressed, then instructor teaching skills and the ability to connect with students and motivate them is likely an important component. This connecting between student and instruction may be seen in the data where onsite courses, or courses that emulate the onsite experience, reported the highest levels of student self-assessment of learning.

The third component related to successfully student learning are the different course delivery modalities themselves. The data clearly show that given course content and instructor competence, modalities that afford

the greatest degree of instructor-student interaction provide the highest levels of student self-assessment of learning. Advanced technology including components such as synchronous audio/video communication may enhance the learning experience but are likely of lesser importance than course content and instructor competence.

Course assessment instruments need to be carefully reviewed and more consideration given to how component questions are clustered and reported. Further research needs to focus on how student and instructor interaction with course content elements impacts upon the student learning experience. The trend toward online v. onsite instruction is remarkable and has quickly impacted higher education. The online learning environment requires new teaching skills and an awareness of how to use emerging technology but, unfortunately, many current faculty members are ill prepared to successfully operate in the online environment. Schools of higher education must balance their efforts to develop premier e-learning courses with a corresponding reeducation program for current faculty to prepare them to operate in the new emerging educational paradigm. This is likely a necessary prerequisite to obtaining sustainable education delivery outcomes using the online environment.

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Table 1. Example of student self-assessment of learning cluster, combining seven different assessment questions together to achieve a mean score of student's self-assessment of learning.

Ques	Student Self-Assessment of Learning	Score
1	My writing skills have improved.	3.83
2	My oral communication skills have improved.	3.85
3	My computer skills have improved.	3.85
4	I gained significant knowledge about this subject.	4.85
5	My ability to do research has improved.	3.85
6	My ability to think critically about topics in this class has improved.	4.42
7	I can apply what I learned in this course beyond the classroom.	4.71
	Cluster Average:	4.19

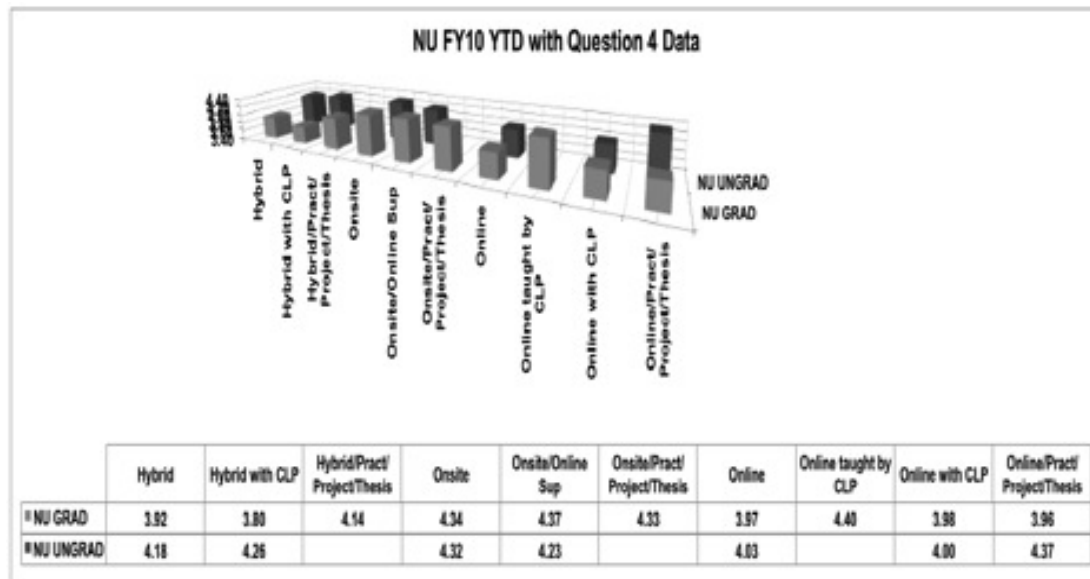


Figure 1. Trends of Self-Assessment of Learning by Teaching Modality

Undergraduate and Graduate trends in self-assessment of learning by teaching modality for courses taught between July 2009 and January 2010. It is clear onsite yields the highest average self-assessment of learning in both the undergraduate and graduate courses examined. However, undergraduate students seem to identify better learning outcomes with hybrid than fully online formats, while graduate students seem to identify higher learning outcomes with online than hybrid teaching formats.

A Psychological Profile of Acculturation, Ethnic Identity and Teaching Efficacy among Latino In-service Teachers

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Abstract

This study examined psychological constructs of acculturation, ethnic identity, and teaching efficacy among 89 Latino in-service teachers serving minority students. Results showed significant differences in these constructs in relation to certification, program taught, and years of teaching. First, bilingual teachers were less likely to be assimilated to White-American culture compared to traditionally/alternatively prepared ESL teachers. Second, traditionally certified ESL teachers were more efficacious in controlling disruptive behavior than alternatively prepared ESL teachers. Finally, higher acculturated teachers were associated with university route and ESL program while low acculturation individuals were more likely to hold alternative certification and teach in bilingual program. Educational implications were discussed.

Keywords: Acculturation, Ethnic identity, Teaching efficacy, Bilingual/ESL, Latino in-service teachers, Route to certification, Teacher characteristics

1. Introduction

The dramatic increase of English language learners (ELLs, or used interchangeably with the term of language minority students) in the U.S. public schools presents a challenge to prepare an effective and competent teacher force to accommodate the cultural, linguistic, and academic needs of these students (August & Shanahan, 2006). This challenge becomes even more pressing with the push for educational reform, as reflected in No Child Left Behind (NCLB, 2002) mandating that each bilingual or English-as-Second-Language (ESL) classroom serving ELLs must be equipped with a highly qualified teacher, who is credentialed and holds a degree or significant expertise in the area s/he teaches. However, studies revealed that a significant portion of teachers did not feel well trained for the complexities of teaching ELLs (Karabenick & Clemens Noda, 2004), and were inclined to leave their profession (Friedman & Farber, 1992; Monsivais, 1990). Such sense of incapability, according to Karabenick and Clemens Noda, results from limited knowledge of students' culture, as well as unfamiliarity with the role that first language plays during second language acquisition. Further, the ever-changing demographics of teachers nationwide have not paralleled those of the minority students. For example, according to the School and Staffing Survey (National Center for Education Statistics [NCES], 2008), in school year of 2003-2004, nearly 40% of the student population in elementary and secondary schools was composed of ethnic minorities with 17.7% identified as Latino, as compared to 16.9% of the public teacher force being minority with 6.2% Latino. The disparity between students' and teachers' ethnic background was evident. Consequently, researchers are concerned with this mismatch, which is likely to lead to teacher bias (Sheets, 1996), lack of ability to motivate students (Galgura, 1998), and cultural discontinuity between students' communities and schools (Ogbu, 1995). Perceivably, to increase the diversity of the teacher force and recruit teachers with shared ethnic and linguistic background of ELLs, to some extent, may remedy such problems, and thus, bring an advantage into the classroom (Flores, Strecker, & Perez, 2002). Finally, a growing bilingual/English-as-second-language (ESL) staff vacancy underscores the importance of training veteran teachers to work effectively with new populations of

ELL immigrants (NCES, 2008). Nevertheless, very few studies have elicited the voices of ELL teachers placed in English learning programs (i.e., bilingual or ESL); and even less has been ascertained among those teachers, who themselves are, ethnic minorities.

1.1 Rationale of this Study

Existing literature has provided evidence that teachers' belief in the ability to teach directly influences their instructional behavior, which in turn, promotes students' outcomes and success (de Mesquita & Drake, 1994; Goddard, Tschannen-Moran, & Hoy, 2001). It has also been reported that minority pre-service teachers' self-concept including ethnic identity positively affected their teaching efficacy (Flores & Clark, 2004). Therefore, it is crucial to develop an understanding of the psychological constructs of teaching efficacy, acculturation and ethnic identity of minority teachers who are serving ELL students, and to examine differences in these aspects as a result of teaching experience, route to certification, and program taught. In this exploratory study, the following questions are to be addressed:

- 1) What is Latino in-service teachers' acculturation configuration, and are there differences by teaching experience, route to certification, and program taught?
- 2) What is Latino in-service teachers' ethnic identity configuration and are there differences by teaching experience, route to certification, and program taught?
- 3) What is Latino in-service teachers' sense of teaching efficacy, and do they differ by teaching experience, route to certification, and program taught?
- 4) What is the relationship between level of acculturation and ethnic identification with Latino in-service teachers' teaching experience, route to certification, and program taught?

2. Theoretical Framework

2.1 Acculturation

Scholars have noted that psychocultural factors such as acculturation and ethnic identity influence how teachers interact with students (Flores & Clark, 2004). For Latinos teachers who are often the first in their family to go to college, acculturation and ethnic identity issues are often challenged during their college years (Castillo et al., 2006a; Castillo, Conoley, & Brossart, 2004). Latinos who desire to enter the teaching profession must succeed in schools and college. However, in order to be successful, they must go through an acculturation process in which they acquire language, behaviors, and values associated with school culture (Castillo, et al., 2006a, Wren, 1999).

Acculturation is a process of cultural and psychological changes that follows intercultural contact (Berry, 2003). Acculturation involves two major processes: (a) adapting to the norms of dominant group culture and (b) maintenance of heritage culture group norms. Because the U.S. educational system and schools reflect White American values and beliefs (Castillo et al., 2004; Flores, Ojeda, Huang, Gee, & Lee, 2006), a Latino college student is dealing with two different cultural groups: Latino and the school culture (Castillo et al., 2004). School culture has been defined as the social and cultural conditions, which include practices, policies, and behaviors that constitute the working and learning environment (Castillo et al., 2006b). For many predominately White schools in the U.S., the school culture is composed of the values, beliefs, and behaviors of White American culture (Castillo et al., 2006b; Wren, 1999).

Aguilar, MacGillivray, and Walker (2009) described the acculturation process that many Latino teachers experienced. They purported that Latina teachers engaged in a process of incorporating and blending two types of discourse: school culture (which includes being a teacher) and home culture (i.e., heritage culture norms). Discourse is defined as "a socially acceptable way of using language that can identify oneself as a member of a social meaningful group" (p. 131). Aguilar et al. contended that for Latina teachers the successful acquisition of becoming a teacher required development and integration of a new identity (teacher identity) while at the same time maintaining their home culture. However, when values of school culture and home culture conflicted, painful tensions could result that can influence an individual's cultural identity. As noted in this qualitative study (Aguilar et al., 2009), many bilingual Latina teachers experienced a homogenization during their training where they were expected to "shed" their heritage cultural norms and become assimilated to White American culture in order to be successful. However, as noted by the participants in the study, they were assumed and expected to "instinctively teach in culturally appropriate ways" once they began teaching (p. 99). This conflict between the school discourse where the expectation is to assimilate to White American culture can potentially conflict with the development and maintenance of ethnic identity to one's heritage culture.

To explore the complexity of the acculturation process within the Latino groups, Flores, Clark, Guerra, and

Sánchez (2008) compared three groups of prospective bilingual teachers, i.e., first-generation college students seeking an initial degree with bilingual education certification; paraprofessionals who were part-time college students seeking an initial degree with bilingual education teaching certification; and normalistas (foreign-trained teachers with certification from Mexico) seeking bilingual education teaching certification. It was found that acculturation process was dependent upon age and generation because the first-generation group demonstrated greater disagreement with Mexican family values and acculturative shift to the mainstream society. The authors recommended that teacher preparation program attended to acculturation issues of Latino teacher candidates so as to help them better understand themselves and their prospective students.

2.2 Ethnic Identity

Acculturation theorists have noted that the acculturation process can also elicit changes in the affective level of functioning also known as ethnic identity (Cuellar, Arnold, & Maldonado, 1995). Ethnic identity is defined as one's self-identification as part of an ethnic group, or subgroup claiming common ancestry and sharing a variety of cultural elements (Phinney, 2003). As Latinos undergo an acculturation process during their college preparation program, the socialization into the teaching profession also has an influence on their ethnic identity (Flores & Clark, 2004). Scholars have noted the importance of ethnic identity for teachers (Flores & Clark, 2004; Flores, 2001; Villegas & Lucas, 2002). For instance, Flores (2001) suggested that teacher candidates should have an ethnic consciousness and become connected with ethnic membership issues. This is particularly important as studies have shown ethnic identity to be related to self-efficacy (Flores & Clark, 2004), self-esteem (Phinney, Chavira, & Tate, 1993), self-concept and teacher identity (Clark & Flores, 2001), and cultural competence (Castillo et al., 2006a).

Individuals with high ethnic identity are more likely to participate in their ethnic group's cultural practices and incorporate their culture's values and beliefs (Phinney, 1996). The development and maintenance of one's ethnic identity is important for teachers because studies have shown that teachers having a similar cultural framework as their students are more likely to be attuned to their students' needs (Peña, 1997). Furthermore, studies have shown that students are more likely to prefer teachers with similar cultural characteristics and ethnic match has been related to academic achievement (Galguera, 1998; Meier, Wrinkle, & Polinard, 1999; Zirkel, 2002).

2.3 Teaching Efficacy

Since its inception, the psychological construct of teacher efficacy has been examined by a handful studies with the effort mainly devoted to mainstream White American in-service or pre-service teachers (Ashton & Webb, 1986; Dellinger, Bobbett, Olivier & Ellett, 2008; Gibson & Dembo, 1984; Jerald, 2007; Tschannen-Moran & Hoy, 2001). Teacher efficacy is defined as the belief that one has capabilities in the areas of student engagement, instructional strategies, and classroom management that can be used to bring about a desired outcome in student commitment and learning (Tschannen-Moran & Woolfolk-Hoy, 2001). Many studies on teacher efficacy suggest that those who are more confident in their teaching tend to exhibit more positive (e.g., praising, smiling) and less negative (e.g., criticizing, punishing) behaviors while interacting with their students, adapt innovation and change (Ghaith & Yaghi, 1997), and remain longer in their teaching profession (Ware & Kitsantas, 2007). Consequently, students' academic success can never be separated from teacher effectiveness.

Unfortunately, research addressing issues of teaching efficacy have focused on mainstream populations, making the study of teaching efficacy among ESL and bilingual teachers very limited in number and scope. One of the few studies to examine teacher efficacy with bilingual teachers was conducted by Flores and Clark (2004) who sampled 44 foreign-born (*normalistas*) pre-service teachers on their teaching efficacy and self-concept. These pre-service teachers held foreign teaching certifications and participated in a traditional teacher preparation program in the United States. Results from the study revealed that on average these teachers possessed a positive sense of their ability in teaching. Yet, results also showed that approximately 20% of the sample believed that their students' success in school was determined by external factors beyond the teachers' control.

In a related vein, Flores (2001) explored in-service bilingual teachers' beliefs about the nature of knowledge and found that teachers with alternative certification had a sense of powerlessness to change the status quo within the school system and felt inadequately prepared to work with students. The author therefore underscored the importance of teacher preparation on teaching practice, and suggested that valid theory and practice should be bridged in professional teacher training.

Besides Flores' (2001) study, other researchers have also found that route to certification influenced teaching efficacy. For example, Flores, Desjean-Perrotta, and Steinmetz (2004) reported that teachers who went through a traditional route (i.e., university-based program) held higher sense of efficacy as compared to teachers with alternative certification. This finding was further confirmed by Tong (2009) who sampled 133 bilingual and ESL

teachers in an urban school district and compared these teachers' efficacy by route to certification. Her study revealed comparatively low general teaching efficacy among alternatively certified teachers. These teachers were less confident in the notion that the limitations of students' family environment can be overcome by education in the school. In addition to route to certification, teacher's age, years of teaching, and program taught have also found to be related to teaching efficacy. For example, teachers at upper age level were more self-reliant and tended to easily overcome the obstacles of their students' education (Celep, 2000). Ghaith and Yaghi (1997) concluded that more experienced secondary teachers tended to believe that their ability to perform actions leading to student success is limited by factors beyond school control. Conversely, a survey conducted among 162 White American in-service teachers revealed that teachers with over three years of teaching experiences showed a higher level of confidence in their teaching competence (Flores et al., 2004). Finally, bilingual teachers were more likely to have strong belief in control of learning within their classroom than special education or reading teachers (Flores et al., 2004).

3. Method

3.1 Participants

This study derived from a larger project with a convenience sample of bilingual/ESL teachers in a large urban school district in southeast Texas where there was historically high concentration of ethnic minority students primarily with Latino background. In the 2007-2008 school year, 29.7% of the student body was identified as ELLs, and a majority of students (79.5%) qualified for free or reduced lunch. Both of the numbers are higher than that of the state level. Approximately 28% of the students in this district were placed in bilingual/ESL programs with 245 teachers (TEA, 2008). The survey was distributed at the district's bilingual/ESL teacher conference during the spring 2008. Participation was completely voluntary and anonymous. Neither the names of the teachers nor the schools were included in any part of the survey. For the purpose of this study, only those who identified themselves as Latino were included in the final sample, totaling 89 teachers, with 63 female and 25 male. One respondent did not provide his/her gender. Sixty-five percent ($n = 58$) of the participants reported Spanish as their native language, 12% ($n = 11$) reported English as their native language, and 21% ($n = 19$) reported being bilinguals in English and Spanish. One respondent did not provide her native language. Ninety-three percent ($n = 83$) of the participants reported being elementary school teachers teaching up to six grade. In addition, 44% ($n=39$) of the respondents received their certification at an institution of higher education with 16.8% of them reporting advance/ graduate level degrees. Fifty-four percent ($n= 48$) received their certification through alternative programs. One participant did not provide her route for certification. Sixteen percent ($n=14$) of the sample reported between 1 to less than 5 years of teaching experience, 39% ($n=35$) reported between 5 to 10 years of experience, 35% ($n=31$) reported between 11 to 20 years of experiences, and 8% ($n=7$) had over 21 years of experience. Two respondents did not report their number of years of experience. Thirteen percent of teachers ($n = 12$) held ESL certification and 85% ($n =76$) held bilingual certification. Details are provided in Table 1 with the breakdowns of demographic background by programs served, years of experience, route to certification, and degrees held.

3.2 Survey Instrument

The survey for this study contains three scales as well as three demographic questions. The three scales measured Latino teachers' sense of teaching efficacy, ethnic identity, and acculturation. The demographic items asked for years of teaching, program taught, and route to certification.

3.2.1 Acculturation

Acculturation was assessed using the Acculturation Rating Scale for Mexican Americans II (ARSMA-II; Cuéllar, Arnold & Maldonado, 1995). Although originally created for Mexican American adults, the ARSMA II has been validated and used widely in studies of Latino adults. The ARSMA-II contains a Mexican (Latino) Orientation score and an Anglo (White American) Orientation score which are reported to have internal reliability with Chronbach's alphas of .86 and .88, respectively (Cuéllar et al., 1995). Scores of the subscales are calculated by summing the responses within each subscale and dividing by the number of items. Higher scores indicate high levels of acculturation. In addition, scores can be used to classify participants into five types of acculturation, namely, 'Very Mexican/Latino Oriented', 'Mexican/Latino Oriented to approximately balanced bicultural', 'Slightly Anglo/White American oriented bicultural', 'Strongly Anglo/White American oriented', and 'Very assimilated, Anglicized'. The internal consistency of the current sample had a Cronbach's alpha of .85.

3.2.2 Ethnic Identity

Ethnic identity was assessed using the Multigroup Ethnic Identity Measure - Revised (MEIM-R; Phinney & Ong,

2007). The MEIM-R is a shorter version of the original MEIM (Phinney, 1992). A series of exploratory and confirmatory factor analyses converged to two independent dimensions of ethnic identity- commitment and exploration, with Chronbach's alphas of .76 and .78, respectively. Both dimensions can be assessed separately as well as a single measure, and the internal consistency of the entire scale was reported to have a Cronbach's alpha of .81. The *commitment* dimension of the MEIM-R was conceptualized as a sense of belonging, whereas the *exploration* dimension was presented as an individual's active seeking of activities that are relevant to his/her ethnic group. Response to each of the six items is along a five-point Likert scale, from 1 for "strongly disagree" to 5 for "strongly agree". Scores are calculated for each dimension by averaging the items within that dimension. In addition, a total score is calculated with the average of all items for the subsequent analysis (with a possible maximum of 5). The internal consistency of the current sample had a Cronbach's alpha of .94.

3.2.3 Teaching Efficacy

The dimensions of efficacy were assessed using a version of the long form of the Ohio State Teacher Efficacy Scale (OSTES; Tschannen-Moran & Hoy, 2001). During the development of the OSTES, a series of factor analyses revealed three factors for in-service teachers. These were *efficacy for instructional strategies*, *efficacy for classroom management* and *efficacy for student engagement*. Response to each item is along a nine-point Likert scale, from 1 for "Nothing" to 9 for "A great deal". For all three dimensions, a higher score corresponds to higher efficacy for a teacher. In assessing the scale's construct validity, the OSTES developers correlated it with other measures of teaching efficacy such as the Teacher Efficacy Scale (Hoy & Woolfolk, 1993) and reported that the OSTES and alternate measures were positively correlated, suggesting reasonable validity and reliability. Internal consistency of the current sample had a Cronbach's alpha of .93. Dependent variable was calculated as the average of items within each factor, and of all items, with a possible maximum of 9.

3.3 Data Analysis

To answer first three questions, three-way (i.e., years of teaching, route to certification, and program taught) univariate analysis (with teaching efficacy, acculturation and ethnic identity being dependent variables respectively) will be used and interaction term among the three factors will be included as well. In case when significant result is present, effect size will also be reported as symbolized by partial eta square. To address the last question, correlational analysis will be conducted.

4. Results

4.1 Acculturation

The average acculturation score of the current sample was -.135 with a standard deviation of .684. The three-way univariate analysis yielded significant main effect of program, $F(1, 82) = 9.890, p = .002$, partial eta square = .122, suggesting that bilingual and ESL teachers differed in the acculturation score. An examination of the results found that ESL teachers obtained a higher estimated marginal mean ($M = .501$) than did the bilingual teachers ($M = -.227$). Such difference was further reflected by a significant interaction effect between route and program, $F(1, 82) = 5.153, p = .026$, partial eta square = .068, suggesting that ESL teachers who were alternatively-certified had the highest estimated marginal mean ($M = 1.335, SE = .449$), followed by ESL teachers who were traditionally-certified ($M = .292, SE = .263$), as compared to bilingual teachers who were alternatively-certified ($M = -.371, SE = .101$) (see Figure 1).

4.2 Ethnic Identity

The average total score of ethnic identity scale of the entire sample was 3.87 ($SD = 1.03$). There were six cases that scored two SD s below the mean. A significant main effect of program was revealed, $F(1, 78) = 4.031, p = .049, \eta_p^2 = .057$, with ESL teachers having a higher marginal mean ($M = 4.62, SE = .37$) than bilingual teachers ($M = 3.68, SE = .14$). In addition to the main effect, a significant interaction effect between route and years of teaching, $F(2, 78) = 3.144, p = .031$, partial eta square = .098, suggesting a higher marginal mean score for traditionally-trained teachers with 11-20 years of teaching ($M = 4.51, SE = .39$) than those alternatively-trained teachers ($M = 3.58, SE = .26$) with same amount of teaching experience (see Figure 2). When analyses were conducted on individual factors, results followed similar pattern with significant main and interaction effects obtained in *exploration*, $F_s > 3.01, p_s < .05$, partial eta squares $> .07$; and significant interaction effect obtained in *commitment*, $F = 3.93, p = .02$, partial eta square = .10.

4.3 Teaching Efficacy

The average composite efficacy score of the entire sample was 8.163 ($SD = .708$). Three-way univariate analysis did not yield significant main, with a marginally significant interaction effect between program and route, $F(2, 80) = 3.759, p = .059$, partial eta square = .062. When the three factors were analyzed separately, same results

were obtained for efficacy in classroom management in which interaction effect of route and program was detected, $F(2, 80) = 6.534$, $p = .013$, partial eta square = .104. In addition, significant main effect of route was also evident, $F(1, 80) = 4.744$, $p = .034$, partial eta square = .078, suggesting that traditionally-prepared ESL teachers had a higher marginal mean score ($M = 8.59$, $SE = .31$) than alternatively-prepared ESL teachers ($M = 7.5$, $SE = .59$) (see Figure 3).

4.4 Relationships among Level of Acculturation, Ethnic Identity, Route to Certification, Years of Teaching, And Program Taught

To understand the nature of the relationships of the study variables, participants were divided into high and low acculturation and ethnic identity levels. For the acculturation variable, high-low groups were calculated by using the cutoff score of $-.07$ with scores greater than $-.07$ classified as the high acculturation group and lower scores in the low acculturation group (Cuéllar et al., 1995). For the ethnic identity variable, high-low groups were calculated by using the cutoff score of 3 with greater scores being classified to the high ethnic identity group and lower scores in the low ethnic identity group (Phinney & Ong, 2007). The correlational analysis yielded a statistically significant relationship between level of acculturation and (a) program, $r = -.354$, $p = .001$, and (b) route, $r = -.211$, $p = .05$. No significant relationship was identified between level of ethnic identity and program or route. Finally, program and route to certification were found to be significantly correlated with each other, $r = .241$, $p = .026$.

5. Discussion

The average acculturation level of Latino teachers in this study was “*Mexican oriented to approximately balanced bicultural*.” It is important, and probably beneficial, for ethnic minorities to develop a bicultural perspective so as not to be isolated from either the minority or the majority group (Bautista de Domanico, Crawford, & de Wolfe, 1994). However, acculturation levels differed by the type of program the participants taught (ESL or bilingual) and route to certification. Results indicated that the acculturation level was “*strongly Anglo oriented*” for alternatively-certified ESL teachers, “*slightly Anglo oriented bicultural*” for traditionally-certified ESL teachers, and “*Mexican oriented to approximately balanced bicultural*” for bilingual teachers. This classification highlighted an interesting finding that although all teachers participating in this study were Latino, their acculturation levels varied as a result of program type and route to certification. Teachers in programs where native language is part of the curriculum (i.e., bilingual programs) were less acculturated to the White American culture and more retained to their heritage culture. In contrast, teachers in programs where English is the sole language of instruction (i.e., ESL) were more likely to be assimilated to White American culture, especially when they went through an alternative certification program. It is possible that ESL programs, which focus on assimilation to the English language (Genesee, 1999; Menken, 2008), attract individuals who are more acculturated. Since bilingual programs emphasize both adoption of English and retention of the heritage culture language (Cummins, 2000), participants who are desire to retain their heritage culture may be more attracted to bilingual programs rather than ESL programs. Furthermore, in bilingual programs, teacher candidates are usually expected to respect their language minority students’ culture (Cabello & Burstein, 1995), function successfully in cross-cultural setting (Giles, Coupland, Williams, & Leets, 1991), and understand the relationship between culture and language (Chisholm, 1994) so as to provide quality education to ELLs.

The majority of the teacher participants in our study held a moderate level of ethnic identity; however, some exhibited a minimal interest in exploring their own ethnicity and community, and a lack of sense of belonging. Such finding is not surprising because ethnic identity is proposed to be negatively associated with the need for survival in new/mainstream sociopolitical context (i.e., U.S. in this current study) (Trueba, 2002). Therefore, recent immigrants do not experience internal conflict to maintain their ethnic identity while learning a new culture and a new language; and have been reported to have a closely-rooted Mexican identity among pre-service bilingual teachers (Flores & Clark, 2004). In Flores and Clark’s study, for example, Mexican teachers were assessed how they identified themselves ethnically before entering a bilingual teacher preparation program in the U.S. These teachers did not struggle in the notion of ethnic identity because “they come from a country where their identity is continually affirmed” (p. 242). Flores and Clark further suggested that these foreign-trained teachers had not developed sociopolitical awareness of what it means to identify ethnically. On the contrary, nearly 86% of the teachers in our study had at least 6 years of teaching in the U.S, in addition to the amount of time it took for them to be fully certified; therefore, they cannot be considered recent immigrants, which may explain their lack of sense of belonging. An interesting finding is that although ESL teachers were more acculturated, they had higher ethnic identity score than bilingual teachers. This is contrary to previous research that has found acculturation to be negatively correlated to ethnic identity (Cuéllar, Nyberg, Maldonado, &

Roberts, 1998). A possible explanation is that nearly 70% of ESL teachers in our study tended to choose the university route for certification. Conceivably, these universities certification programs may have more opportunities for individuals to participate and develop ethnic identity (e.g., Latino student organizations), which also help explain our finding that as Latino teachers stayed longer in their profession, their sense of ethnic-self increased among traditionally certified teachers, while decreasing among alternatively certified teachers.

Using the *Teachers' Sense of Efficacy Scale*, we were able to capture what Tschannen-Moran and Woolfolk-Hoy (2001) termed as "an elusive construct" of teaching efficacy. In general, teachers in this study demonstrated a strong sense of efficacy and they believed in their capacities of dealing with disruptive behaviors, implementing a variety of strategies and motivating the least-interested students. Similar to other studies with pre-service or in-service teachers (Flores, Desjean-Perrotta, & Steinmetz, 2004; Tong, 2009), our study revealed that traditionally-prepared teachers held a higher level of confidence in teaching as compared to alternatively-prepared teachers. Such difference was more evident among ESL teachers. Specifically, in our study, ESL teachers with a traditional route to certification were more efficacious in their ability to control disruptive behavior. Students' disruptive behaviors have implications beyond the learning environment; they can inhibit how and what teachers feel they can teach. Researchers have agreed that classroom management is one among those critical elements that influence school learning (Marzano, Marzano, & Pickering, 2003; Wang, Haertel, & Walberg, 1993; Wayman, Foster, Mantle-Bromley, & Wilson, 2003), and should be incorporated into teacher preparation programs. Therefore, the finding of this study implies a strong likelihood that traditional teacher preparation programs stress on the importance, as well as the skills of dealing with disruption during instruction.

Further, the finding of this study is contrary to studies involving mainstream samples (Houston, Marshall, & McDavid, 1993; Tournaki, Lyublinskaya, & Carolan, 2009) that there was no difference between traditionally-prepared and alternatively-certified teachers regarding their confidence level of teaching. These mixed findings on teacher efficacy might result from (a) the operational definition, and therefore, the related variety of instruments implemented in each study, measuring general and personal teaching efficacy (e.g., Flores et al., 2004, Tournaki et al., 2009), content-specific efficacy in instruction, management and involvement (e.g., the current study), or perceived problems by open-ended questionnaire (e.g., Houston et al., 1993); and (b) the ethnicity of teacher participants; for example, in Flores et al.'s (2004) and current study, participants were mostly ethnic minorities while in Houston et al. and Tournaki et al. participants were Whites. Hence, the question as whether teachers from traditional and alternative preparation programs differ in their efficacy deserves future research with other ethnic groups using reliable and valid instruments.

Finally, the correlational analysis confirmed the findings derived from research question one in that bilingual teachers and teachers with alternative certification were less assimilated to the Anglo culture as compared to ESL teachers and teachers with traditional certification. In addition, the fact that higher acculturated individuals were associated with a university certification and an ESL program while low acculturation individuals were more likely to hold an alternative certification and teach in a bilingual program brings information on the type of characteristics that attract individuals to certain routes and programs for recruitment.

6. Conclusions and Implications

This study has several implications for practice. First, it calls for thoroughly-designed efficacy-building professional development for in-service teachers to maintain, and more importantly, enhance the level of belief in one's capabilities in teaching ELLs regardless of their background, because as Goddard, Hoy, and Hoy (2000) reminded us, "It is not enough to hire and retain the brightest teachers—they must also believe they can successfully meet the challenges of the task at hand" (p. 503).

Second, this study provides a psychological profile of Latino teachers' acculturation configuration and their ethnic identification. The fact that higher acculturated individuals tend to take a university route and ESL program while low acculturation individuals who take more of an alternative route and a bilingual program presents educators and administrators with valuable information on the type of characteristics that attract individuals to certain routes and programs. It is also important to implement research-based quality teacher training programs embedded within a social-cultural framework for Latino teachers, or minority teachers in general, to feel proud of who they are, to embrace the mainstream culture, and to maintain their own identity, which can be then translated into a role model for their minority students.

It is also worth noting that the psychological constructs examined in this study are dynamic process in continual change. For example, we did not know whether these teachers' acculturation level influenced their choice of certification route and/or type, or whether their acculturation increased or decreased as a result of certification route and/or type. Therefore, future studies are highly needed to address the change, with preferably a pre-post

design, and to identify factors that cause such change.

In conclusion, in Latino culture, there is a prevalence of teacher authority (Espinosa, 1995). Taking this into consideration, it is critical to represent a more comprehensive psychological profile of teachers working with Latino ELLs. This study, to some degree, provides a step toward a better understanding of this profile so as to facilitate future research exploring causal effect of teacher quality and students' learning outcome.

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Table 1. Breakdowns of teacher demographic background by type of program served

		Overall	ESL (n=12)		Bilingual (n=76)	
		n	n	%	n	%
Years of Teaching	1-less than 5 years	14	1	8	13	17
	5-10 years	35	7	58	28	37
	11-20 years	31	4	33	26	34
	>21 years	8			7	9
Route to Certification	University-based	41	8	67	21	28
	Alternative	48	4	33	54	71
	Bachelor	74	10	83	63	83
Degree Held	Master	14	2	17	11	14
	Doctorate	2			2	3

Notes. One respondent did not provide information on program served; two did not provide information on years of teaching; one did not provide information on route to certification.

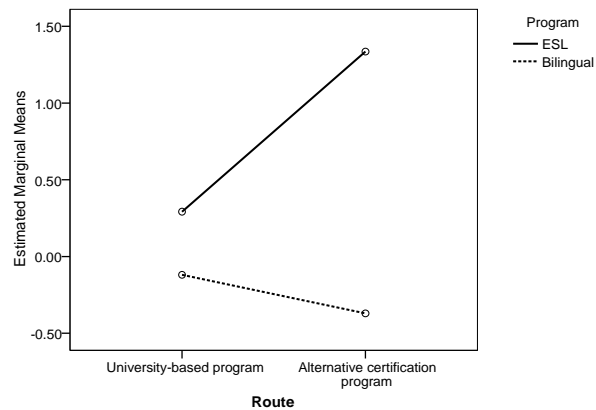


Figure 1. Acculturation by Route to Certification and Program

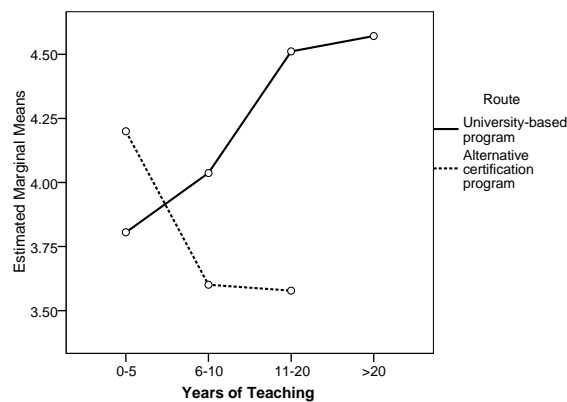


Figure 2. Ethnic Identity by Years of Teaching and Route to Certification

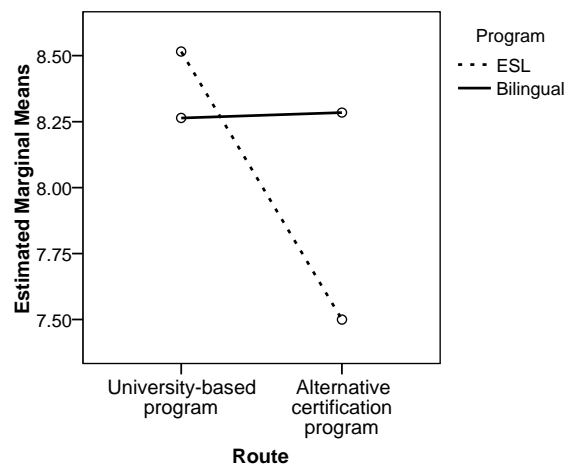


Figure 3. Efficacy on Classroom Management by Program and Route to Certification

Effects of Modality and Redundancy Principles on the Learning and Attitude of a Computer-Based Music Theory Lesson among Jordanian Primary Pupils

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Abstract

The purpose of this study was to investigate the effects of modality and redundancy principles on the attitude and learning of music theory among primary pupils of different aptitudes in Jordan. The lesson of music theory was developed in three different modes, audio and image (AI), text with image (TI) and audio with image and text (AIT). The study sample consisted of 405 third-grade pupils. Analyses of covariance (ANCOVA) and Post hoc were carried out to examine the main effects as well as the interaction effects of the independent variables on the dependent variables. The findings of this study showed that pupils using the AI mode performed significantly better than those in the TI mode. Pupils using the TI mode did not perform significantly better than those in the AIT mode. There were no significant differences in the preference or dislikes towards the three modes of courseware. Overall, the modality and redundancy principles need to be considered in the design and development of music theory learning so as to promote better learning.

Keywords: Modality and redundancy principles, Music theory, Cognitive theory of multimedia learning, Cognitive load theory

1. Introduction

Music theory is the field of study that deals with how music works. It basically addresses the language and notation of music in which music can be read and written. It helps to identify the different patterns and structures revealed in the techniques of composers, across or within genres, styles, or historical periods (Nosir, 1980). Music theory can be considered as a universal language as it has a universal context and notations (Chew, 2005).

Since music theory concentrates on how music notation is written (i.e. the elements of the notation) it provides a form of communication for musicians to express their musical concepts (Aldalalah, 2003). However, music theory also includes underlying concepts of music such as the structure, the organization and the history (Smith, 2009). These underlying concepts contribute towards building the basic knowledge in music notation and understanding the evolving stages in music as well as the way the notation is used in different circumstances. Accordingly, the theory of music includes the following basics:

- The elements of standard music notation such as Staves, Clefs, note lengths, note pitches, key signatures, time signatures, beats and bars (i.e. measures).
- Underlying concepts such as scales, keys, intervals and rhythm.
- Advanced elements such as dynamics and phrasing (notated with slurs).
- Advanced concepts such as the history of notation and the form of music theory.

The studies conducted by Wilson (2005) Mcvay (2004) and Guderian (2008) have found that many students encounter difficulty in reading music theory and, hence, have difficulty in learning music. Many Arab countries are reviewing their music curriculum to enhance music theory in music education. Jordan is one of the countries that is currently undergoing a review of the music education curriculum (Yagmour, 2007). Alwan (2008) reported that music theory is being taught in Jordanian schools using only traditional methods and not supported by

computer-based tools. Ramzy & Alabdaly (2005) found that most pupils indicated that these conventional teaching methods were not helpful in the learning process and they could not remember or understand music theory in depth. In addition, the students could not apply music theory correctly. From a preliminary survey conducted by the researchers (as a member of the national team to develop music curriculum at the Ministry of Education in Jordan) among 53 primary school music teachers in Irbid Governorate (Jordan), it was found that 81% of the teachers indicated that they faced problems in the teaching and learning of music theory effectively.

Obeidat (2008) reported that even though highly competent music teachers in the classroom use audio, image and text in teaching and learning of music theory, the students performance was still very low. To deal with the problem of weaknesses in understanding music theory, Aldalalah (2003) and Yagmor, & Aldalalah (2007) suggested approaching the problem through designing a computer based learning program. The results showed a marked improvement in the students' level of understanding. In this regard, Obeidat (2003) and Dyabat (2007) conducted a study to investigate the effects of using computerized instructional programs in learning music theory. The results showed that computer-based learning significantly assisted the students in learning music theory. Thus it is apparent from the review of these studies that the traditional way of learning music theory audio, image and text may not enhance or facilitate the learning process. According to Clark & Mayer (2008), redundant onscreen text in a multimedia presentation may overload the visual channel. This is because the image comes into the pupils' cognitive system through the eyes in order to be processed in the visual channel. The printed text too enters through the eyes and must be processed in the visual channel. Due to the limited cognitive resources in the visual channel that have to be utilized to process both the image and the text, an overload in the visual channel may occur.

The researchers contend that the appropriate application of modality and redundancy of instructional design principles in computer-based learning could effectively enhance the learning of music theory. In this respect, the modality and redundancy principles offer a feasible approach if they are integrated into computer-based learning as the instructional design. According to Sweller, (1999) and Mayer's theory of multimedia learning (Mayer, 2001), replacing visual text with spoken text (the modality effect) may increase the effectiveness of instructional multimedia. Images are transported along the visual channel while the narration text is transported along the auditory channel resulting in an increase in the working capacity of the memory resulting in greater ease of learning (Seufert, Schu & Nken, 2009). Furthermore, onscreen text accompanied with images in a multimedia presentation may overload the visual channel. In addition, using image, onscreen text and audio narration in which the audio repeats the text will also cause an overload due to the redundancy in the presented material. This extra effort or attention needed by the students to handle such information streams is considered as a disadvantage for the acquisition of both the words and pictures (Clark & Mayer, 2008).

2. Modality principle

Moreno & Mayer (1999) suggested that pictures should go together with a synchronized auditory explanatory recitation rather than a synchronized explanatory text, (see Figure 1). Mayer & Mereno (1998) and Alherish, Alababneh & Aldalalah (2005) found that the learner's understanding when watching animated images on a certain phenomenon (the lightning phenomenon) accompanied with an auditory explanation is much better than the learner's understanding when watching animated images on the same phenomenon while verbally reading an onscreen-text explanation. At the same time, this principle is in tandem with the cognitive learning theory using multimedia techniques. The cognitive learning theory suggests that reading an onscreen-text along with animated pictures will result in interference in the rendered information especially when this information is to be processed verbally (Mayer, 2010). However, this will add more load on the visual working memory because both are addressed in the form of verbal memory and in visual approach while the auditory text is processed in the verbal model and audio working memory (Harskamp, Mayer & Suhre, 2007; Aldalalah & Fong, 2008). Furthermore, animated images are processed in the visual model, thus, providing an auditory text along with watching an explanatory film that does not overlap (Wouters, Paas, Jeroen & Merrienboer, 2009). Therefore, this also fits the modality principle by combining the visual channel for graphical material and the verbal channel for the explanation of this material to increase the working memory capacity effectiveness and facilitate learning (Moreno, 2006).

3. Redundancy Principle

There is now much evidence to suggest that redundant material imposes a significant extraneous cognitive load that has negative outcomes for learning and understanding (Sweller 1999). Redundant material interferes with learning rather than proving to be advantageous or even neutral when acquiring new information. By eliminating redundant information the load on working memory is considerably reduced, thus facilitating better learning.

The Redundancy Effect occurs when learners are required to attend to or engage in activities that are irrelevant to the task at hand (Sweller, 2005). The effect has been shown to interfere with the core material to be learned due to the extraneous load imposed on working memory (Chandler & Sweller, 1991). Increasing working memory load by simultaneously processing redundant information with essential information that needs to be learned, results in the transfer of information into long-term memory becoming problematic. The Redundancy Effect is associated with materials or information that can be understood in isolation of each other (Sweller & Chandler 1994). Information presented in multiple forms, or information that is unnecessarily elaborated is representative of redundancy (Sweller, Paas & Renkl, 2003).

Kalyuga, Chandler & Sweller (2004) again demonstrated the redundancy effect in a task involving listening and reading identical text in a series of experiments involving training materials for technical apprentices. The redundancy effect has been described in the past as counter-intuitive (Sweller, 2006) as it is often assumed that an abundance of information is advantageous to the learner. Cognitive load theory states otherwise asserting that an overload on working memory inhibits learning. Pictures are an additional and unnecessary load for the working memory to process when learning to read, and therefore redundant. Pictures are very likely to distract the child from the text thereby drawing on working memory resources that could be otherwise used for the processing and storing of core information associated with the decoding process (Diao & Sweller, 2007).

The Redundancy Principle suggests improving multimedia presentation by presenting animation along with concurrent recitation and on-screen text (Moreno, R. & Mayer, 2002). To allow the students to choose the format that goes well with their learning style, the above principle suggests presenting the same words in two formats (Kalyuga, Chandler, & Sweller, 1999; Mayer, 2005). Therefore, the students can pay more attention to the auditory words if their learning is better compared to other learning methods. Adding on-screen text to a recited animation can be justified by better containing individual learning styles. However, the cognitive theory of multimedia learning as discussed previously, suggested that the added on-screen text will interfere with the animation of cognitive resources in the visual-pictorial channel as illustrated in creating what Sweller (1999) calls a split-attention effect. Students will have to put more effort and pay more attention visually to both the printed words and the animated pictures as illustrated in Figure 2.

Multimedia learning incorporates the presentation of visual materials (such as animations, video, or graphics) along with a synchronized text and audio (Moreno & Mayer, 2000). However, the redundancy principle indicates that learning and its achievements of the student using animation and recitation is much better compared to the learning and its achievements of the student using animation, recitation, and text, especially if the visual information is presented concurrently with the vocal information (Mayer & Moreno, 1997). At the same time, simultaneous presentations of printed text explanations and auditory recitation of the same information would be inappropriate as they exhaust the student's cognitive abilities of the working memory and upset learning (Clark & Mayer, 2003) because the printed text representation will trouble the visual channel. This visual channel will instead have to manipulate the textual and graphical information, especially, when the text is redundant and auditory narrations are duplicated (Muthukumar, 2005).

The redundancy effect will occur if the information that can be completely understood in isolation (as either visual or auditory information) is presented to both channels and is the same information. However, incorporating the redundant information in both working memories can eventually increase the cognitive load. This results in a split-attention dilemma. This dilemma varies depending on the learner's experience. However, a diagram with text may be favorable for beginners because they need to incorporate the text to the diagram to make more sense for them. At the same time, the same strategy might become redundant for a more experienced learner and the diagram alone makes more sense for them (ie. computer manuals that have minimal text and plenty of diagrams). In summary, the redundancy effect is that "less is often more" in learning and that cognitive capacity is over excited (Sorden, 2005).

4. Attitudes toward Computer in Education

Computers are all the time more general, influencing many aspects of our social and work lives, as well as several of our free time activities (Al-Mallah, 2005). As more responsibilities engage human computer interaction, computer skills and information have grown to be more positively related with both occupational and personal achievement (Silku, 2009). Consideration of user attitude is an integral part of educational computing research. It is seen not only initial acceptance of IT but also future behavior regarding computers (Selwyn, 1999). Students' attitudes towards computers form a fundamental basis for both participation and subsequent achievement in information technology activities (Jones & Clarke 1994). Students' proclivity to use the technology has long been

regarded as an significant part of educational computing and an awareness of attitudes towards computers (Kilic, 2001).

5. Research Questions

The research questions that drive this study are as follows:-

- 1) Will pupils using the Audio, Images (AI) mode attain significantly higher post test score (PTS) than pupils using the Text, Images (TI) mode?
- 2) Will pupils using the Text, Images (TI) mode attain significantly higher post test score (PTS) than pupils using the Audio, Images, Text (AIT) mode?
- 3) Will pupils using the Audio, Images (AI) mode attain significantly higher attitude scores (AS) than pupils using the Text, Images (TI) mode?
- 4) Will pupils using the Text, Images (TI) mode attain significantly higher attitude scores (AS) than pupils using the Audio, Images, Text (AIT) mode?

6. Methods

6.1. Population Sample

The population of this study comprised all third grade primary pupils (2263) enrolled in the ALKORAH educational directorate in Irbid Governorate (Jordan) in the second semester for the 2008/2009 academic year. The sample consisted of 405 pupils who studied in third-grade classes and were randomly selected from six different primary co-educational schools. According to Gay and Airasian (2003) "all the individuals in the defined population have equal and independent chance of being selected". The six schools were also randomly selected from the primary schools where music was taught in heterogeneous classes with no grouping or ability tracking.

6.2 Experimental Condition

The pupils' distribution within the treatment groups was conducted randomly. Then the treatment groups were exposed to the treatment consecutively. The three treatment groups are as follows:

- First treatment group: computer-based learning presented in audio and text (AI)
- Second treatment group: computer-based learning presented in text and image (TI)
- Third treatment group: computer-based learning presented in audio, image and text (AIT)

6.3. Instruments

The music achievement test that was administered on the participants of the three groups in this study is adapted from the music theory competency test developed by the researcher. The music theory competency test consisted of 15 recall (remembering) and 15 understanding items

6.3.1. Music achievement test Reliability:

To ensure the reliability of the music achievement test, the researchers checked the reliability of the instrument with a Test-Retest (Tuckman, 1999) where it was applied on the pilot study samples. The 30 items were divided into two parts; the reliability of the test questions was calculated using the Cronbach Alpha procedure to calculate the internal consistency. The Cronbach Alpha of the first and second parts was 0.81 and 0.82 respectively. The Cronbach Alpha of the test was 0.80. All of them were found to be reliable. The internal consistency of the first part was 0.86 and that of the second part was 0.88. Overall, internal consistency of the parts was 0.93.

6.3.2. Difficulty and Discrimination Coefficients

Difficulty values ranged from 0.31–0.66, and discrimination coefficients ranged from 0.45–0.98; both were found to be acceptable for the purposes of this study

6.3.3. Attitude Questionnaire

Based on the literature review on the trends in using computer in teaching pupils, the researchers adopted and adapted the attitude test from (Al Dalalah, 2003) (Refer to appendix Ca). The survey was confirmed and brought to the attention of experts in educational technology, curricula, evaluation and assessment and primary education in Jordan. The researchers adopted and adapted the attitude test from (Al Dalalah, 2003) The researchers has modified this survey to meet the needs of this study where it has been reduced to 20 items. Each item is followed by a set of three possible answers, that is, Agree, Neither, and Disagree. This is in line with the opinions of experts who have taken into consideration the suitability of the pupils (sample study).

6.3.4. Attitude Questionnaire Reliability

The pilot study consisted of 212 participants. The researchers used Test-Retest to check the reliability of the instrument. The reliability coefficient of this instrument (The Arabic version) was computed by the

implementation of Cronbach Alpha whereby it was 0.79 for the whole scale. The internal consistency in this instrument (Arabic version) was 0.83.

6.3.5. Instruments Validity

Validity of the instruments are important aspects that should be taken into account when conducting a research. Validity consists of two different aspects that is face and content validity. According to Gay and Airasian (2000) face validity relates to ‘‘ the degree to which a test appears to measure what it claims to measure’’. Face validity was judged by a panel of experts in the field of education and music. Content validity refers to the ‘‘degree to which a test measures an intended content area ‘‘ (Gay and Airasian, 2000). Content validity of the instruments in this research was justified by the panel. The panel of experts comprised 2 specialists in the field of educational technology; 1 specialist in curricula and teaching methods, 2 specialists in music education, a supervisor of music activity in the ALKORAH education directorate; 2 members of the National Team For The Development of Music Curriculum, 2 specialists in Psychology, 2 specialists in primary education, 1 specialist in computer science, 1 specialist in measurement and evaluation, and 2 music teachers who have Masters degrees and a remarkable teaching experience in Jordan, each teacher has a minimum of four years of teaching experience in the Jordanian Ministry of Education. The instruments were evaluated during and after the development of the research study. The feedback and comments received from the panel of experts were employed to establish the necessary clarifications, changes, and modifications before and after piloting the study.

6.4. Study Design

The research design of this study is based on the concept of the cognitive theory (Mayer, 2001). This study followed the quasi experimental method to measure the impact of different multimedia programs on the total achievement of the third grade pupils in the music classes according to the modality and redundancy principles of cognitive theory.

6.5. Research Variables

The present research contains three types of variables (independent, dependent and moderating variables) that are presented as follows:

6.5.1. Independent Variables

The independent variables in this study were the three modes of presentation:

- Multimedia computer-based learning courseware with music theory presented in audio and text (AI)
- Multimedia computer-based learning courseware with music theory presented in text and image (TI)
- Multimedia computer-based learning courseware with music theory presented in audio, image and text (AIT)

6.5.2. Dependent Variables

- Post Test Scores (learning)
- Attitude

7. Results

The analyses of the collected data were carried out through various statistical techniques such as the *t-test*, *ANCOVA*, *ANOVA*, simple and multiple regressions. The data were compiled and analyzed using the Statistical Package for the Social Science (SPSS 16) for Windows computer software.

7.1. Measure of Relationship between Pre-test Scores and Post-test Scores

Table 1 shows the degree of relationship between the pretest score and post-test score. A correlation coefficient of $R = 0.627^{**}$ indicates a high positive relationship between the two variables.

7.2. Testing the three groups' equivalence

The purpose of the pre-experimental study was to test the assumption that the participants across the three groups were equivalent in their remembering and understanding of the music theory unit for third grade primary pupils. To achieve this purpose, a pre-test that measures pre-music theory was conducted before the beginning of the study. To examine the equality of treatment mode on the pre-scores, the ANOVA procedure was used (Table 2). Table 2 presents the results of the ANOVA test. The values $F(2,402) = 2.349$, Mean Square = 13.519, and $p = .097$ showed that there is no significant difference in the pre- test scores in the various treatment groups. This means that the three groups have the same level of prior knowledge of the unit on music theory for third grade primary pupils.

7.3. Testing Homogeneity of Variances for the Variables in the Pre-test

The results from Levene's Test for homogeneity of variance by comparing the dependent variables across the four groups for Treatments indicated that homogeneity of variance was met by all the dependent variables. As $p > 0.05$ for all variables, the results show that the groups were homogenous as shown in Table 3.

7.4. Testing of Normality of Distributed Pre-test

A skewness range from 0.039 to 0.866 was well below the suggested level of the absolute value of 3.0. In addition, a kurtosis range from 0.257 to 0.857 revealed that the variables are not overly peaked and well below the absolute value of 10.0 as suggested by Chan (2003). Thus, the presented values reveal that the variables are normally distributed and have met the criteria for further analysis as shown in Table 4.

7.5. Testing Homogeneity of Variances for the Variables in the Post-test

The results from Levene's Test for homogeneity of variance by comparing the dependent variables across the four groups for each variable indicated that homogeneity of variance was met by all the dependent variables. As $p > 0.05$ for all the variables, the results show that the groups were homogenous as shown in Table 5.

7.6. Testing of Normality of Distributed Post-test

A skewness range from -0.193 to 0.906 was well below the suggested level of the absolute value of 3.0. In addition, a kurtosis range from -1.044 to 1.137 revealed that the variables are not overly peaked and well below the absolute value of 10.0 as suggested by Chan (2003). Thus the presented values reveal that the variables are normally distributed and have met the criteria for further analysis as shown in Table 6.

7.7. Description of the Post-test Scores of Pupils in Various Treatment Groups

Comparison was made between group AI and TI, and between group TI and AIT based upon the mean of the post-test scores (Table 7). It showed a difference between the means of the post-test scores for groups using the AI mode and TI mode. The mean of post test scores for groups using the AI mode (25.17) was higher than the mean of post-test scores for the group using the TI mode (16.82). Moreover, it showed a difference between the means of the post-test scores for the groups using the TI and AIT modes. The mean of the post-test scores for the group using the TI mode (16.82) was higher than the mean of the post-test scores for the group using the AIT mode (16.63).

7.8. ANCOVA of Post-test Scores of Pupils in Various Treatment Groups

In order to reduce the statistical error, the pre-test scores were used as the covariate variable and a comparison was made among the three groups (AI, TI & AIT) using the ANCOVA procedure (Table 8). Table 8 indicated the results of ANCOVA test of statistical significance on the differences observed in the mean score of the post-test for the various treatment groups with $F(2,401) = 472.989$, Mean Square = 2600.673 and $p = 0.000$. Therefore, these differences in the post-test scores among the three groups were significant.

The ANCOVA results of comparing pupils across the three groups (AI, TI & AIT) on the dependent variables indicated that there were statistically significant differences among pupils in the groups on the dependent variable. Therefore, the researchers further investigated the univariate statistics results (analysis of covariance ANCOVA) by performing a post hoc pairwise comparison using the LSD command for dependent variable in order to identify significantly where the differences in the means resided. Table 9 is a summary of the post hoc pairwise comparisons between pupils' learning across the three groups. Table 8 and Table 9 show that there are statistical differences among the pupils' post-test scores in the three groups. There are statistical differences between the pupils' post-test scores in the AI and TI groups in music theory learning. Finally, there are no statistical differences between pupils' learning in the TI and AIT groups' post-test scores. The differences are presented below.

The AI (Mean = 25.17, SD = 3.35,) pupils' learning significantly outperformed the TI (Mean = 16.82, SD = 3.77) and the AIT (Mean = 16.63, SD = 4.33). There were significant differences between pupils' learning in AI group and pupils' learning in TI group ($p = 0.000$), and there were significant differences between pupils' learning in AI group and pupils' learning in AIT group ($p = 0.000$). Finally there were no significant differences between pupils' learning in TI group and pupils' learning in AIT group ($p = .994$).

7.9. t-test of Attitude Score of Pupils in Various Treatment Groups

Table 10 shows the results comparing the different attitude scores of the pupils between group AI and TI. There is a difference between the means of post-test scores for group with AI and group with TI. The mean of post-test scores for group with TI (38.0567) was higher than the mean of post-test scores for group with AI (37.7891), and $p = 0.270$. This shows that there is no significant difference. Moreover, it showed a difference between the means of

post-test scores for group with TI and group with AIT. The mean of post-test scores for group with AIT (38.5294) was higher than the mean of post-test scores for group with TI (38.0567), and $p = 0.655$. This indicates that the difference is not significant.

8. Discussion

8.1. Modality principle and Music Theory learning

This study found that pupils using AI mode learn better compared to pupils using the TI mode. There are several possible reasons for this result. Firstly, a possible reason for the significantly positive effect of modality principle on pupils' learning can be explained by Mayer's (2001) cognitive theory of multimedia learning. The cognitive theory of multimedia learning proposed that the human information processing system comprises dual channels, that is, one for visual processing and the other for auditory processing. When information is presented to the eye (image and text), learners begin by processing that information in the visual channel; when information is presented to the ears (audio), learners begin by processing that information in the auditory channel. According to Mayer (2001) learners have a limited capacity in the amount of information that can be processed in each channel at any one time. In this way the information processed through the two channels are balanced, that is, neither one of the channel is cognitive overloaded. The picture enters through the eyes (and is processed in the visual / pictorial channel) while the spoken word enters through the ears (processed in the auditory / verbal channel).

Secondly, it may result from the modality effect on pupils' music theory learning. The modality principle is that pupils learn more deeply from AI than from TI. According to the modality principle, pupils using the AI mode are expected to learn better than pupils using the TI mode. According to the cognitive theory of multimedia learning, the processes required for learning cannot be fully achieved when the visual channel is overloaded, that is, when pupils using the TI mode do not learn better compared to pupils using the AI mode

Thirdly, it could be that the image and text (TI) compete for limited cognitive resources in the visual channel because both enter the information processing channel through the eyes. In such a condition, visual image together with the printed written text may result in an overload in the visual channel while the auditory channel remained unused. This will affect the processing of information. Moreover, pupils using the TI mode (printed text and image) had to split their attention between the two information sources (Mayer, 2008). They had to switch their attention back and forth between the printed text and image which occupied much cognitive load to process the switching.

Fourthly, the working memory refers to an information processing system that provides temporary storage and manipulation of the information necessary for complex cognitive tasks in music theory learning. The working memory has been found to require simultaneous storage and processing of information and is therefore very important for processing musical theory by the pupils. This directly affects cognitive processing which in turn is associated with information processing system, and at the same time is affected by the pupils' processing level so that processing produces a cognitive structure with unstable knowledge that may be lost or forgotten. A pupil with a poor working memory capacity may have delayed learning of music theory. Further the AI mode processes and realigns information better and that helps maintain information retention and storage in the long-term memory.

The results from this study concur with the results reported by many studies which confirmed the effectiveness of the modality principle in learning, for example, Hamtini (2002) emphasized the use of audio facilities in instructional programs; Hirsh, Ababneh & Aldalalah (2005) found the active roles of animation and audio in teaching third grade science; and Aldalalah & Fong (2008) showed that the effectiveness of the working memory in learning science in Jordan depends on the modality principle. However, Wouters, Paas, Jeroen & Merrienboer (2008); Seufert, Tze & Nken, (2009); found that combining sounds with image reduces visual channel overload.

8.2. Redundancy Principle and Music Theory learning

This study found that pupils using TI mode did not learn better compared to pupils using the AIT mode. A possible reason for this result can be explained by the phenomena of cognitive overload and split attention.

Pupils using the TI mode did not significantly have better post-test scores compared to pupils using the AIT mode. According to Clark & Mayer (2008), loading redundant onscreen text to a multimedia presentation could overload the visual channel because the image enters the pupils' cognitive system through the eyes and is processed in the visual channel, whereas the audio enters the pupils' cognitive system through the ears and is processed in the auditory channel. Since the printed text enters through the eyes and must be processed in the visual channel, and since the limited cognitive resources in the visual channel must be shared in processing both the image and the text, an overload occurs.

According to the cognitive theory of multimedia learning, learners have limited cognitive capacity in the visual and auditory channels. Pupils may pay so much attention to the printed text that they pay less attention to the

image. When their eyes are on the printed text, the pupils cannot be looking at the image at the same time. In addition, the pupils may try to compare and reconcile the printed text with the narration text, which requires extraneous cognitive processing to learning the content. This will result in cognitive overload.

Split-attention effect holds that the use of materials that require pupils to split their attention between two sources of information causes a higher cognitive load on working memory and therefore impedes the learning process (Mayer & Moreno, 2003).

In the TI and AIT mode Mayer & Moreno (1998) states that a split-attention effect is induced if two or more sources are carried in the same channel.

Attending to multiple sources in the same channel requires more mental effort than attending to two channels, resulting in a reduced portion of the working memory available for the process of learning. Toh (2005) concluded that presenting different sources of information in the TI (for example, only visually) will result in a split-attention effect which leads to poor learning performance.

As Sweller (2005) pointed out, there is a link between cognitive load and the redundancy principle because when additional information is presented, there can be a learning decrement because of the redundancy effect. The results of this study show that when information is presented in multiple forms such as was the case in this study (AIT mode), the information may interfere with learning rather than facilitate it. Moreover, Mayer (2001) observed that if additional information is used to enhance or elaborate, and that information is fundamentally redundant, then learning can be enhanced by the exclusion of that additional information.

8.3. Attitudes

The results of this study indicated that primary third grade pupils possess positive attitudes with regards to all the treatment modes. Further, there were no significant differences in attitudes regarding the three treatments. The latter is attributed to the very nature of music theory, and to the interactivity allowed by computers in which the content was delivered. As experienced in everyday life, music would pass unnoticed by pupils. The three treatments in this study stimulated the pupils' attention, provided new ways of delivering the lesson, and used new stimuli and strategies based on the cognitive theory of multimedia that assimilates the human brain in dealing with data processing (Xuanxi, Fong & Samsuddin, 2008). In light of the pupils' need, the treatments in the current study provided learners with rich, vigorous, and exciting experiences that contributed to their positive attitudes, and because the treatments are somewhat modern teaching methods, they motivated and enhanced the pupils' interests in specific fields. This makes certain cognitive activities most desirable for the pupils. Taking into account the powerful role of computers in contemporary life, the importance of learning about software packages and Information Technology advancements also boosted their positive attitudes towards the three treatments. The easy-to-use program with the excitement involved, also contributed, to the positive attitudes of the pupils. Similar results were reported by Silku (2009) who found positive attitudes towards using computers in education. Another support to this result was reported by Dhyabat (2007); Al-Dala'ah, (2003); Al-Mallah (2005); found positive attitudes to computer-based instruction.

9. Conclusions

This study found that the use of AI treatment mode helped pupils perform significantly better in learning music theory. It gives support to the effect of modality principle on the learning of music theory. In other words the AI treatment mode showed a significant effect on the conceptual understanding and remembering of music theory. In short, the study strongly indicated that a modality principle was effective in promoting better learning of music theory. It is suggested that modality principle be integrated into all courseware on the learning of music theory. This study found no statistical difference in the performance between pupils using TI treatment mode and pupils using AIT treatment mode. It supports the effects of redundancy principle on learning music theory. According to Mayer and Moreno (2008) redundant printed text in a multimedia presentation could overload the visual channel. The image enters the pupils' cognitive system through the eyes and is processed in the visual channel; similarly, the printed text enters through the eyes and is also processed in the visual channel. The cognitive resource in the visual channel is limited and must be shared in processing both the image and the text. This sharing results in a cognitive overload in the visual channel of the working memory. Moreover, Sweller (2005) and Moreno & Mayer (2003) found that two sources of redundant information will result in a split-attention. This will also result in a higher cognitive load on the working memory and, therefore, impedes the learning process. Apparently, the addition of redundant audio did not improve the capacity of the working memory. Audio, text and images are important and powerful multimedia components for music theory learning. Instructional designers and music teachers need to consider and decide when and how to use these components in accordance to the modality and redundancy principles. The modality principle should be considered by the instructional designer when preparing

multimedia music theory learning courseware for the “disadvantaged-aptitude” pupils, that is, those external locus of control, high anxiety and low music intelligence pupils. There were no significant differences in the preference or dislikes towards the three modes of courseware. Generally, all the pupils responded favorably to learning music theory using computer-based multimedia courseware.

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Table 1. Correlation between Pre-test Scores and Post-test Scores

		Pre-test	Post-test
Pre-test	Pearson Correlation	1	0.627**
	Sig. (2-tailed)		0.000
	N	405	405
Post-test	Pearson Correlation	0.627**	1
	Sig. (2-tailed)	0.000	
	N	405	405

**. Correlation is significant at the 0.01 level (2-tailed).

Table 2. ANOVA of the Pre-test Scores to Measure the Equality of Groups

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	27.038	2	13.519	2.349	.097
Within Groups	2313.975	402	5.756		
Total	2341.012	404			

Table 3. Test of Homogeneity of Variances for the Variables in the Pre-test

Variables	F	df1	df2	Sig.
Treatments	.334	2	402	.716

Table 4. Testing of Normality of Distributed Pre-test

Group	Skewness	Kurtosis
Audio and Image	.039	.257
Text and Image	.866	.598
Audio, Image and Text	.666	.857

Table 5. Test of Homogeneity of Variances for the Variables in the Post-test

Variables	F	df1	df2	Sig.
Treatments	.620	2	402	.303

Table 6. Testing of Normality of Distributed Post-test

Group	Skewness	Kurtosis
Audio and Image	-.193-	-1.044-
Text and Image	.906	.991
Audio, Image and Text	.906	1.137

Table 7. Post-test Scores of Pupils in Various Treatment Groups

Groups	Mean	Std. Deviation	N
AI	25.1719	3.35817	128
TI	16.8227	3.77072	141
AIT	16.6397	4.33534	136
Total	19.4000	5.49464	405

Table 8. ANCOVA of the Post-test Scores of Pupils in Various Treatment Groups

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	9992.351 ^a	3	3330.784	605.776	.000
Intercept	1037.321	1	1037.321	188.659	.000
pre-test	3755.283	1	3755.283	682.980	.000
Groups	5201.347	2	2600.673	472.989	.000
Error	2204.849	401	5.498		
Total	164623.000	405			
Corrected Total	12197.200	404			

a. R Squared = .819 (Adjusted R Squared = .818)

Table 9. Summary of Post Hoc Pairwise Comparisons

(I) Group	(J) Group	Mean Difference (I-J)	Std. Error	Sig. ^a
AI	TI	7.751*	.287	.000
	AIT	7.749*	.290	.000
TI	AI	-7.751*	.287	.000
	AIT	-.002-	.282	.994
AIT	AI	-7.749*	.290	.000
	TI	.002	.282	.994

Table 10. t-test of Attitude Scores of Pupils in Various Treatment Groups

Dependent Variable	Group	N	Mean	Std. Deviation	t	df	Sig. (2-tailed)
Attitudes towards Musical Instructional Program	AI	128	37.7891	7.10623	-.324-	267	0.270
	TI	141	38.0567	6.46173			
	TI	141	38.0567	6.46173	-.613-	275	0.655
	AIT	136	38.5294	6.36418			

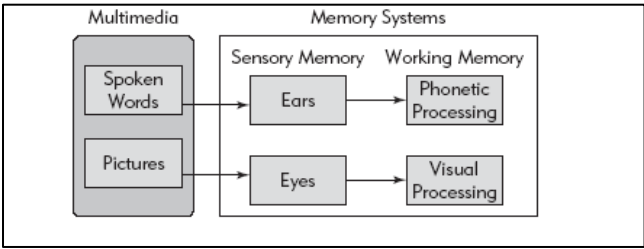


Figure 1. Modality Principle (Mayer & Moreno, 1998)

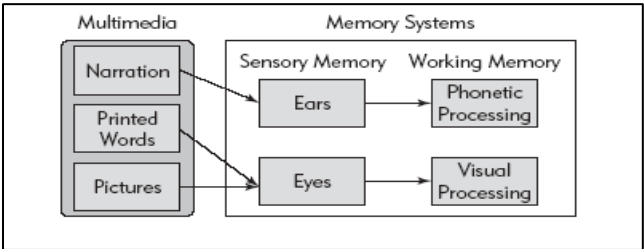


Figure 2. Redundancy Principles (Mayer, 2001)

The Social Supervision and Its Role in Developing of the School Social Service in Libyan Arab Jamahiriya

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Abstract

The new direction of the social control over the Libyan Arab Jamahiriya is a phase that began in Tripoli city in 1990. After opening of the Office of Education ministry, education and health as a result of the efforts made by the Department of Education, which affected the evolution of modern educational thought, which emphasizes the process of educational guidance and establish social participation among the specialist-oriented towards social and professional growth and improve performance for both sides to improve the educational process. The importance of this study indeed arose from the fact that the field of education is in need of social supervision. This is based on the diagnosis and school social realities of service and identified obstacles and professional problems and work out successful solutions in order to assist managers to develop this field, as well as the profession of social supervision network.

Keywords: Social control, School of Social Work, The Specialist in the field of school social, Libyan Arab Jamahiriya.

1. Introduction

The development of peoples depends on the efficiency and effectiveness of the educational organizations and systems because the educational process is considered an investment of human resources which achieves the comprehensive objectives of development for country. Educational institution needs more than other institutions and organizations and systems to keep pace with new changes in its field, as the educational institution seeks to transfer knowledge and develop and prepare trainees for life in society, so supervisory process is one of the most important things to evaluate and develop the effectiveness of the educational institution abreast of up-to-date education at all levels, such as knowledge, prescribed text books, methods, approaches and evaluation and measurement. As social service is not confined its work to help individuals and groups, but it also aims at the same to achieve renaissance for all mankind.

The process of social supervision over specialists for monitoring and evaluating their work has began in AL-Jamahiriya since 1979 with a small number of inspectors in Tripoli city only, and they visited schools once a year, and this process was known as inspection process, and it depended on terror, fear, strict discipline, accurate accountancy and fault-finding insomuch that Specialists did not speak frankly to the inspector about the problems they faced in order not to be punished. The philosophy of inspection process and its style did not help developing the specialists or even the educational process because the inspection system did not allow the specialist to develop his job and did not even make any clear developments for the social specialists.

After that, the social supervision in Libyan Arab Jamahiriya had a new guidance stage which began in Tripoli in 1990 by opening the Office of Social Education, and health care as a result of the efforts made by the secretariat of Education which was affected by the evolution of modern educational thought which emphasizes that the process of educational and social guidance must be based on contribution between social specialist and instructor to improve the professional growth and performance for both sides, thus to improve the educational process, but change and development was not easy because the practices of supervisors occurring now have still affected by the concepts and ways which were dominated in the early stage of supervision.

Social supervision seeks to achieve professional development for the school social specialist, which includes a variety of activities and educational experiences and aims to increase the knowledge of professionals, deepen their attitudes, increase the professional skills and their abilities to work and help people (Alzarif, 1995).

The supervision is a humanitarian operation aiming above all to recognize the value of social specialist as a human being, so that the supervisor can build of a mutual trust between himself and social specialist and to be

able to know potentials of each individual he deals with.

As stated in Article (3) to modify the list of education inspection in Libya “inspection (supervision) aims to study and assess the feasibility of the pedagogic practices of educational institutions and direct research and study and analysis to find alternatives and develop them for creating a pedagogic and educational atmosphere abreast of humanitarian and professional ties based on participation and cooperation” (Educational Inspection Regulations, 2006).

1.1 Problem of Research

Research problem consists in this question:

What is social supervision? and what is its role for developing of professional performance for school social specialist in Libyan Arab Jamahiriya?

1.2 The important of Research

As researcher works as a social supervisor, he feels like a study of social supervision and the importance of this study consists in the urgent need for social supervision which is required by the field of education. Social supervision makes diagnosis for school social service and identifies obstacles and professional problems and works out successful solutions in order to assist managers in developing this aspect, in addition it identify the profession of social supervision.

1.3 Research objectives

- 1) Identify the role of social supervision in developing professional performance of the social specialist in the school field.
- 2) To assure that success of social specialist depends on the success of social inspector in his role.

1.4 Research Questions

- 1) What is the role of social supervision in developing the professional performance of the social specialist in the field of school in Libya?
- 2) How does the role of social inspector give rise to the success of social specialist in school?

1.5 Research Methodology

Documentary descriptive approach (inductive) is used in this research to follow the process of social supervision historically and monitoring its role developing the professional performance of social specialist in school field.

1.6 Search terms

1.6.1 Social supervision

Supervision is a humanitarian process: First of all, it aims to recognize the value of individual as a human being, so that the supervisor can build of a mutual trust between himself and social specialist and to be able to know potentials of each individual he deals with.

Educational encyclopedia summarized the concept of social and educational supervision as “It is program to improve education” and the educational dictionary defined social supervision wider as all organized efforts made by responsible people to take over leadership by the other specialists and workers in the educational field in regard with improving educational professionally including stimulating the professional growth, developing social specialists, testing and re-forming of the educational objectives, educational methods and study approaches and evaluating the educational process. The term of social supervision, social guidance and educational supervision is used for the same meaning.

1.6.2 School social service.

School social service is a novel idea in Libya and it is a part coming out of co-operation with purpose of understanding school programs and helping students who find difficulties to get benefits of their school resources and potential. The purpose is to help the student who has constantly difficulties and prevent them from being aggravated in future.

Social service in the field of school "means the professional practice of social service at the school level, furthermore at supervisory, professional and administrative levels and others which have an influence on school, and represent the group of efforts, services and programs that foster social growth of student for the sake of creating suitable conditions for students educational progress (Sediki, 2002).

1.6.3 Social specialist in the field of school.

A Social specialist is defined in the field of school as "a technical and professional person who practices in the

field of school under the concept of social service and depending on this service philosophy he is committed to the principles and ethical standards of this service, aiming to help students who stumble in their education, and help the school to achieve the educational objectives for the preparation of their children for the future (Hasanin, 1989), and he (Social specialist) is "the person who exercises the role of professional social service inside school the school and he has been prepared for this purpose through the study in specialized institutes and colleges of social service and obtained field training, and he is committed to the principles of the social work profession, and works to achieve its goals (Altkali, 2008)..

1.6.4 Libyan Arab Jamahiriya

It is an abbreviation for the name of the Great Socialist People's Libyan Arab Jamahiriya to save time and effort.

1.7 Previous studies

1.7.1 Study of Abdul Hakim Ahmed Mohamed Abdel-Hadi in 2005

Entitled: The relationship between the role of social supervision and developing the knowledge performance for social specialist in school. The aim of the study was to identify the relationship between the role of social supervision and developing cognitive and skill performance and vocational, social specialist and school performance. The results of this study pointed out that there is a relational and a statistical relationship between the role of social supervision and the development of social cognitive specialist school performance. It is also pointed out that there is not a statistical and relational relationship between the role of social supervision and the development of skill performance or development of school, social, specialist, professional performance. The majority of were convinced of the importance of the role of social supervision in developing their professional performance. And the significance of social supervision in developing professional, social, specialist performance stands for transferring experience from supervision to social specialist. Most researchers are not convinced about the performance of social supervision, and this is due to the monotonous routine and lack of experience for some social supervisors, in additional to lack of possibilities which help supervisor to do his role.

The nature of the relationship between social supervision and social specialist in school is featured with a mutual respect and ruled by strict laws and controlled by a mutual experience as well. The majority of social specialists are dissatisfied about the performance of social supervision because of the monotonous routine and supervisor does not contribute to understand obstacles and difficulties faced by the social specialist, the study emphasized that help specialist to identify what's new is the most important roles played by social supervision and it's necessary to find new supervisory methods which develop school, social, specialist, professional performance (Abd al-Hadi, 2005).

1.7.2 Study Of Sadeeq Yosuf Khoja And Ibrahim Yusuf Aqsam And Mari Bin Ali Al Garni In 2006

Entitled: Supervision is inevitable for the field of education. The aim of this study was to establish a theoretical framework of the concepts of educational supervision and its functions and responsibilities and emphasize the necessity of Supervision for Education and identify the following: Firstly, the nature of the relationship between the educational supervision and the teacher. Secondly, the nature of the relationship between the educational supervision and student. Thirdly, the nature of the relationship between the educational supervision and curriculum and finally with school administration. The study has stated that social supervision is inevitable for the following: Education – teacher- curriculum –student- school management. (Khoja, 2006).

1.7.3 Study of Hesham Mohamed Abdel-Aziz 1996

This study is about the difficulties faced by the school social specialist and how to get benefit from the instructive social supervision. The result of this study revealed that there are difficulties deterring the social specialist from getting benefits from supervision including the official state that exists in supervision, the sudden coming that made by inspector, difficulty of contacting with inspectors when they out of work or in off-duty and difficulty of understanding some inspectors' instruction. (Abdul Aziz, 1996).

1.7.4 Study of Ahmad Husni Ibrahim 2001

It is about the role of social guidance in achieving professional development for school social specialist aiming at evaluating the role of social guidance in achieving professional development for social specialist under new changes which their findings pointed out the social guidance has weakness in regard to increase the knowledge of these social specialists working in school, and the social guidance has also a weak role in regard to achieve professional development for these specialists concerning with dealing with the individual and group problems and the social guidance uses traditional techniques to achieve professional development (Ibrahim 2001).

1.8 Comment on the previous studies

First of all, I would like to point out that there are no previous studies is quite similar to this issue in Libya, in addition to presence of many studies that dealt with the issue of educational and technical supervision because of the novelty of social supervision in Al-Jamahiriya. Several studies from Egypt and Saudi Arabia have been exploited well and our present study has agreed with previous studies emphasizing the importance and inevitability of social supervision and its methods in regard to take care human relations in the supervisory process and stress its active role in developing the professional performance for social specialist, hence the developing school social service.

1.9 Social supervision

That social supervision is "an organized, cooperative, democratic, leading process dealing with didactic and learning position of all elements, such curriculum, learning methods, activities, styles, teacher and student aiming to study the factors that have influence on that situation and evaluate these factors to improve them. (Aldweik 1988).

The social supervision is defined as "a humanitarian and interactive process aiming at improving the work of social specialist and his performance helping him to develop himself and solve his problems. The concept of social supervision and its philosophy and its styles has developed a lot and clearly in recent years due to the various efforts that have been made to develop the educational system and raise its efficiency that it will improve the quality of education and raise its level. As a result of the evolution of educational thought in regard to the educational philosophy of and its aims and stages of growth, principles and theories of learning, rules which encourage human relations, group dynamics, and to all other methods of communication and other such topics and issues of pedagogy, psychology and social and behavioral sciences, there has been a new change in regard to the concept of social supervision.

Social supervision and its goals and methods has developed to be known as a process of human interaction aiming at improving the work and performance of the social specialist and help him to develop himself and solve the his problems. This concept emphasizes cooperation between the social supervisor and social specialist in a framework of respect and good human relations with the continued evolution of modern educational thought. The concept of social supervision in the educational community is developing to take a wider and broader meaning in order to meet the needs of a comprehensive view of the components of the educational process and social supervision moved from a position of taking care social specialist or improving his performance or changing his professional behavior moved on looking after all didactic and learning process and bringing about a desired positive change with various components " teacher, social specialist, learner, curriculum, environment and school facilities.

Social supervision in Libya is defined as the following (Altkali, 2008) :

- 1) Social supervision is a technical service based on a proper planning aiming at improving the educational process.
- 2) social supervision is a technical and cooperative service targeting to study the conditions which affect the education and learning processes, and work out to improve these conditions to ensure that every student grows constantly abreast of the education objectives.
- 3) It works to promote both teaching and learning processes.
- 4) It is a goal of communication and interaction process among the different parties of educational process and its components.
- 5) It achieves an appropriate learning opportunities for students and growth opportunities for other parties.
- 6) Supervision is a process of guidance and amending of the educational process in order to provide students with better services.
- 7) It is a technical process aiming at improving and developing the educational process in all its axes.

Thus, the duties of social supervisor focus on professional practice in the educational process according to its wide concept and its implementation framework with its different components physical and human, therefore the social supervisor took out the psychological barrier between him and the social specialist so, this definition has considered them two parties in one process taking part to achieve their goals according to humanitarian relations ,however, the purpose of social supervisor is to develop the educational process and this does not suggest that social specialist is weak or deficient compared with social supervisor.

1.10 The importance of social supervision

The function of the school social specialist is the one of social functions that deals with human who has different inclinations, abilities and wishes, in addition to the work he does is in constant change and driven by his difficult mission to get help of those who are more experienced in the field to guide and supervise him to enhance his experience in his career, and this is the task of social supervision.

We also find specialist social suffers from a lack of capabilities and tools resulting in a lot of problems that require more supervision to help treat these problems, no doubt, supervision and leadership is essential and necessary for developing activity and improve the relationship between school and community and everything helps grow and develop this relationship through achievement its objectives.

1.11 The objectives of social supervision in Libyan Jamahiriya

In general, social supervision aims to improve teaching and learning processes and improve their environment, through the upgrading all the factors affecting them, mending all problems and developing school activities according to the objectives included in the education policy. Social supervision will not be effective and will not be able to achieve its goals unless there is human positive relations between the supervisor and the social specialist, this type of relations encourage social specialist to do more of constant effort and do a lot of attempts in order to create suitable conditions that help to develop professional performance for specialist social and thus achieve the goals of social supervision.

1.12 Characteristics of social supervision in Libyan Jamahiriya (Abu Mallouh net)

The social supervision is characterized by the following characteristics:

- 1) It is a leading process which has components of strong personality that can make influence on the social specialists in school, students and others who are involved with the educational process. On the other hand, it coordinates their efforts, in order to improve the process and achieve its objectives.
- 2) It is an interactive process which depends on the situation that it deals with and monitoring what is new in the field of intellect and scientific progress.
- 3) It is a cooperative, administrative process in all its different phases (planning, coordination, implementation and evaluation and follow-up). It welcomes different points of view which lead to eliminate the negative relationship between the supervisor and social specialist, and organize the relationship between them to face educational problems to find appropriate solutions.
- 4) It is a process dealing with developing human relations and emotional participation in the field of education, so as to achieve an active incarnation of principles of consultation, loyalty, affection and guidance at work, seriousness in giving fruitful results, and staying away from using authority, giving many penalties and fault-finding. Etc.
- 5) It is a process to encourage research, experimentation, creativity, and employ its results to improve education, and it aims at achieving clear, measurable and noticeable objectives.
- 6) It is a flexible advanced process which is released from routine encouraging positive initiatives, and aiming to disseminating good and successful experiences, in additional to flexibility and variety of methods.
- 7) It is an ongoing process on its way towards the better. It does not start at supervisor visit and ends at the end of that visit, but the next supervisor completes the former supervisor's work.
- 8) It is a process that respects the individual differences between social specialists and appreciates them, that it accepts the weak or whiner specialist, and accepts the creative specialist as well.
- 9) It is a preventive and curable process aiming at enlightening the social specialist to be stayed away from mistakes as he practices his educational mission and it helps him enough to overcome the obstacles that may face him through his work.
- 10) It is a process aiming at building self-supervision for social Specialists.
- 11) It is a comprehensive process taking care of all factors affecting improvement educational process and developing it through the overall framework of the objectives of school social service.
- 12) It is an important means to achieve all the objectives of educational policy and the objectives of school social service in particular.

1.13 School social service in Libyan Jamahiriya.

Social service in school is a educational process that completes the mission of school to prepare students to face

their working lives, “which is a part of a joint cooperation in order to understand school programs and provide assistance to students who face difficulties concerning getting benefit of resources and potential of school efficiently, The purpose of the service is to provide assistance to a student who continuously faces difficulties to prevent them from risk of developing these difficulties until they become impossible to treat” (Altkali, 2008).

“Social service is a collection of efforts, services and programs offered by the social specialists for children and school students at different levels, with a purpose of achieving the goals of modern education, to put it another way, it develops students’ personalities as much as they could to help them benefit from the opportunities and experiences of school as much as they could according to their faculties, therefore this service is considered as a tool to achieve the goals of modern education” (Abdel Almoheey, 1997).

“School social service is supplementary to school in socialization process and this service must participate with other school services to achieve the desired results as social specialist takes care helping students, parents and teachers regarding to issues which are under school responsibility and solve the problems of poor adaptation, introduce the service through groups and contact the school community. The social specialist looks after shyness, introversion, over sensitivity, unsociable behavior, fear and delay in study... etc, so the work of social specialist includes all study, psychological and social problems and others” (Fahmi, & Ahmed, 1989).

School social service in Arab Jamahiriya is needed by education institute to achieve its social function especially with changes that Jamahiriya community acquire and affect everyone life who lives under these changes.

1.14 Targets of school social service in Libyan Jamahiriya

The school social service has goals that are consistent with the nature of the educational process and we can explain some of them as following:

- 1) Making social adaptation of students for new changes occurring in community which is featured ongoing changes.
- 2) Social coherence, and help students and their families to know what types of human relationships with a significant value in the community.
- 3) Developing Personality through developing and modifying experiences, and changing the behavior of the student, making him a good citizen of the society in which he lives.

1.14.1 The social Specialist in the field of school

Social specialist is “a technical and professional person who practices in school under the concept of social service and according to this service philosophy, he commits to its principles and manners standards aiming to help students who stumble in their education and help school to achieve its educational goals to prepare its children for the future” (Hasanin, 1989).

School social service depends on social specialists in schools who do many roles inside school and outside and they have a lot of characteristics and professional roles to do inside school.

1.14.2 Characterization of the role of the social specialist in the field of school (Altkali, 2008)

- 1) Social specialist works in school according to a time work plan which is drawn up at the beginning of the school year, and must be consistent with the plans of the administrative work.
- 2) The role of the social specialist is a professional role inside school and in order to carry out his job, he Should not be detailed to do irrelevant work and devote himself to professional work related to him.
- 3) Social specialist deals with a difficult segment of people, such as sensitive children and teenagers who are more sensitive, so it should be a limited number of students per social specialist.
- 4) Social specialist works in top secret applying to the principle of confidentiality, so there should be an office reserved for Social Service in each school.
- 5) Social specialist works with students through faculty members, so there should be a cooperative relationship between teachers and social specialist in order to help him doing his educational task and actual participating to solve the problems of the management.
- 6) Social specialist needs to contact with some people or parties to carry out various activities as well as when he tries to find solutions for individual cases, so management school should help him to take procedure.
- 7) Social specialist should join the different training programs, conferences and symposia which are related to his major in order to develop him and to make his social role social important.

1.14.3 The role of the social specialist in the field of school in Libyan Jamahiriya (Altkali, 2008)

The social specialist has a number of duties and responsibilities whether in basic education or intermediate education. Her they are:

- 1) Discuss the problems of social, psychological, behavioral, ethical, educational and health... etc. from which might students suffer, and draw up a plan of treatment and follow it after studying and making an accurate diagnosis.
- 2) Providing direction and guidance in the rapid individual positions that he receives.
- 3) Refer the cases that are impossible to solve to the Social Education Department of Education secretariat.
- 4) Encourage students to join activity groups and incite them to join willingly and participate in supervision on some of these groups by attending their meetings and support them to achieve their goals.
- 5) Arrange programs to enroll new students, and prepare them to adapt to the new school atmosphere.
- 6) Supply the teachers who are assigned by school to be responsible for their classes and groups supervisors, with technical and professional consultation, furthermore, provide them with data and instructions that help them to deal with the students, and the information that is important to be attached to social student certificate.
- 7) Make practical and actual visits to social institutions and make an effective contribution in their work, and doing exploratory visits to factories and agricultural projects and achievements occur in the country.
- 8) Strengthen ties by all means between school and parents of students to find a mutual cooperation among them.
- 9) Contact the institutions and organizations that exist in the Al-jamahiriya area to ensure their cooperation with the school and serve students, and provide services to the residents of this area.
- 10) Cooperate with parents and teachers and what follows from that such as, arrange, organize and register meetings sessions and follow the decisions that resulted from that meetings and work on carrying out them.
- 11) Arrange the records of social education.

1.15 *The relationship between the supervisor and the social specialist.*

Social supervisor can leave an impact in his work especially among the people working in the same occupation. When the supervisor and social specialist have a mutual, affectionate and respectable relationship, they will have fruitful results by increasing participation in their work because of the well-treatment of the supervisor. No doubt that social supervision is a tool to improve the professional, specialist and social performance, in additional to the didactic and learning process. Social supervision has affected all the factors which have influence on learning process. The success of the social specialist in his mission depends on the success of the social supervision in duties that related to it. The educational and social work will develop practically by the completion between the supervisor and the social specialist, so we will achieve an excellent education. As long as there is a strong cohesion between the supervisor and the social specialist, the excellence will increase and enhance as educational results.

Social supervision is an educational service because the social supervisor aims at helping the specialist and guiding him to educate students. As this service includes developing of the social supervisor personality, so it includes increase of professional work so that the specialist gets more and more experience in his work. Social supervision is also a cooperative service because the supervisors ,the specialists, head teachers, workers in the school and the students take part in this service under an atmosphere of cooperation, compassion and mutual trust, consequently the relation between the specialist and the student allow them to conduct and devise freely in order to achieve the wanted benefit of the supervision process. Cooperation is very necessary to improve the educational process and achieve the positive and wanted completion, so the supervisor should harness his abilities to help the specialist and guide him scientifically and professionally and work on solving his private and professional problems and let him participate in educational meetings whether they are inside or outside the school by which he will know the new methods and directions in his occupation and help him make educational planning, in addition to measure and set straight his social service occupation and how to treat kindly with students and excite their motives and take allowances for individual differences among them. Social supervisor also discovers the abilities and talents of social specialists trying to develop these abilities and talents and infuse confidence into them and make them take pride their work, furthermore, the supervisor should value and encourage all fruitful efforts and he should incite the social specialist to take care of the new educational researches and experiments and encourage them to read specialist books and magazines by which their influence will reflect upon work and students indirectly.

Specialists support that the social supervision aims at developing and improving performance in order to create generations who are qualified mentally, morally, physically and behaviourally by guide the social specialists in school to do the idealist way in their professional work and guide them how to treat politely to be an example for others. From all above, the social supervision is necessary and the supervisor is extremely important for the specialist as he is his fellow and supervision is an urgent claim for educational process.

1.16 Results of the study

To answer questions of research, the study concluded the following:

- 1) That social supervision in Libyan Jamahiriya is a humanitarian process aiming at developing school social service by helping social specialist in the field of school.
- 2) Social supervisor uses his skill and experience to help social specialist in the field of school to develop his capabilities and professional performance during the supervisory process through direction and guidance.
- 3) Social supervision helps social specialist to be successful in his professional role in the field school through guide him to exploit available capabilities and to have knowledge about the scientific theories which help him do his professional role successfully.
- 4) Social specialist play an effective role in school and face a lot of problems that may need help to study and how to amend them .The social supervisor interfere to help the social specialist through the best professional methods to study problems and find appropriate solutions .

1.17 Recommendation

Researcher recommends the following:

- 1) It is necessary to focus on social supervision and assign a certain department for it because the school social service has a privacy which makes it different from other subjects and because of its importance in helping students solve their problems.
- 2) Interest of preparing training courses and workshops for social supervisors to keep up with the rapid development of the social work profession.
- 3) Social supervisors should study human relations and use the positive human relations during supervisory process as their importance for social specialist to take advantage from supervisor.
- 4) Interest of preparing researches and studies in the field of social supervision and school social service to take advantage of these studies and researches for developing the programs of social supervision and school social service in Libyan society.

Conclusion

From Through the above view, we note that the role of social supervisor Gzmy important role in the success of the social specialist in the field of school social control as a tool to improve the professional performance of specialist in the educational process.

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Correcting the Errors in the Writing of University Students' in the Comfortable Atmosphere

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Abstract

This paper analyzed the common errors in university students' writing. At the same time, it showed some methods based on activities designed to give students practice in these problem areas. The activities are meant to be carried out in a comfortable, non-threatening atmosphere in which students can make positive steps toward reducing their errors and increasing their motivation to write in English.

Keywords: Common Errors, Error Analysis, Correction

1. Introduction

Teachers of composition or writing classes in Chinese universities are generally faced with students who have acquired a certain amount of English vocabulary and grammar, but have rarely put that knowledge to practical use (Wachs, 1993). In many cases, the major portion of these students' English education has been filled with translating words, phrases, and sentences from Chinese to English with often very strange results.

The challenge for the composition teacher is to use error analysis to find ways to activate in a meaningful way the passive knowledge the students possess, as well as to help the students become more proficient while working to eliminate some of their more common errors.

2. Error and Error Analysis

2.1 What is "error"?

The term "error" is used to refer to a form of structure that a native speaker deems unacceptable because of its inappropriate use (Klassen, 1991) or the use of a linguistic item in a way in which a fluent or native speaker of the language regards as showing faulty or incomplete learning (Richards, 1985). Different persons have different ideals on it. Anyway, people's attitudes towards it have changed as time goes on.

2.2 A Historical Perspective

Over the past 40 years, there has been a shift in pedagogical focus from preventing errors to learning from errors. During the era of audiolingualism in the 1950s and 60s, language learners had to repeat pattern drills and grammatical structures in a mechanistic fashion. By memorizing the "correct model", it was hoped that error could be avoided because errors were considered signs of failure in the learning process.

In the late 1960s, however, language teaching became more humanistic when studies of cognitive psychology influenced the theory of language acquisition. Language learning was finally acknowledged to be based on active mental involvement and not mere habit formation. Students were then encouraged to learn by communicating in the target language and not by merely repeating grammatical items.

Subsequently, a more positive attitude towards errors has also emerged. Now, errors are viewed as a natural and important part of learning because they can yield information about a student's progress in learning a language. This positive attitude towards errors is especially important in the wake of the Communicative Approach to language learning and teaching in the 1990s.

Language teaching in China is currently focusing on the teaching and learning of the four language skills of listening, speaking, reading and writing. Since grammar is seen only as a means to an end, some learners tend to de-emphasize its importance and in the process, make many more errors. Thus, rekindling interest in the area of learner errors in the 1990s can be considered a timely move. Teachers who can analyze and treat errors effectively are better equipped to help their students become more aware of their errors. Ultimately, the use of error analysis and appropriate corrective techniques can aid effective learning and teaching of the English Language.

2.3 What is the "error analysis"?

As is shown that teachers and linguists become more and more positive towards errors. So it is necessary to make an analysis of errors in order to correct them.

Error analysis (henceforth, EA) is the identification, description and explanation of errors either in its spoken or written form. Five stages are involved in EA. First, one has to identify the errors. To do this, one has to differentiate lapses from genuine errors of competence. Second, an initial analysis and description of the errors is made based on a grammatical model. Third, the errors are classified according to categories or sub-categories like the following: Substance-errors, Text-level errors, Discourse level errors. Fourthly, an explanation may be provided as to why the errors have been made. Lastly, the errors are evaluated to determine how much they deviate from the target language norm, to what extent they affect communication and which method of correction can be most effectively meted out. With the treatment of errors in the written form, however, accuracy should be a strict criterion to adhere to due to the demands of written examinations.

3. The Reasons of Errors.

The sources of errors are too many, but I think the most important and obvious are the following:

Transfer of Native language. Native language transfer is an unavoidable factor in writing. There is overwhelming evidence that “language transfer” is indeed a real and central phenomenon that must be considered in any full account of the second language acquisition process”(Gass and Selinker,1992,7). When Chinese college students learn English, especially in their English writing, transfer is manifested at various levels, such as lexis, syntax, and discourse. Chinese students always use the rules, the thinking way of Chinese in their English writing. For example:

Pro-drop: Lagguage may differ as to whether or not they require an overt pronoun in certain environments. One of the most striking differences between English and Chinese is that English necessitates an overt subject in sentences except imperatives. By contrast, if the referent can be grammatically and pragmatically retrieved,Chinese allows omission of subject pronouns in a sentence(Xu,1992). This”pro-drop”phenomenon, common in written Chinese,differs from English which regards subject less clauses as ungrammatical .Therefore, pro-drop sentences in English writings by Chinese writers can be constructed as L1 transfer, and it can be extended to the subject in a sentence as well.

Example: If have no money, you can do nothing.

I tried hard to listen, but I just can not hear.

Overgeneralization. When students apply a grammatical rule across all members of a grammatical class (e.g. verbs) without making the appropriate exceptions. For example, goed (meaning went), a form they are unlikely to have heard, suggesting that they have intuited or deduced complex grammatical rules (here, how to conjugate regular verbs) and failed only to learn exceptions that cannot be predicted from a knowledge of the grammar alone. In their writing works, many of the errors are caused because of overgeneralization.

Fossilization. At a certain stage students cease to learn new aspects of the TL. Although perhaps capable to express themselves in a grammatically correct way, students here do not proceed to explore the great reservoir of language any further in order to express themselves in a more refined and sophisticated manner. It causes many unstandard way of expressing in their writing.

Simplification. Simplification is a result of an attempt to adjust the language behavior to the interests of communicative effectiveness.

In order to avoid redundancy, students always use simplification. For instance, they use comed , goed instead of came and went. So they often make errors.

4. The Correction of Errors

With the above reasons in mind, I think it is necessary to find stragies to correct errors according to their different types.

4.1 The Already Existed Methods of Error Correction

There is no single method of dealing with the errors made by students. Among some of the conventional practices of teachers are to mark every error, provide the correct answer for errors made, mark the first and only draft or work written by students, make general comments, make students re-write the corrected version several times over and view errors as signs of failure. In contrast, recent literature contains several suggestions for correcting written errors effectively in answer to the question of “to red-pen or not to red-pen” (Josephson, 1990). Some of the methods of EC advocated are the use of peer marking/editing, selective marking, code correction, correction based on the process approach to writing, effective and specific comments, a checklist of limited common errors, different colored inks, discussion of errors on tape and direct versus discovery-type of marking.

Underlining errors is a common way of handling errors. However, Lim (1991) proposes that students be allowed to work at these errors themselves with the help of their peers. Peer-marking/editing is especially useful in the

first draft of the written work. Here, students are given the responsibility to edit each other's work individually or in a group before handing in the final draft to the teacher. Besides being fun for students to be allowed to correct and learn from errors other than their own, it also reduces the need for too many red markings from the teacher. Here, students must be briefed on how to edit the work of their peers. A mini lesson lasting only five minutes of class time may be presented at the beginning of the class on a regular basis. For example, the teacher could write several erroneous sentences on the board which is to be analyzed by the students themselves. This is a way of making more economical use of time where errors can form the basis for teaching.

Parents should not be too concerned or alarmed if every error in their children's written work is not corrected by the teacher. Teachers also should not mark every error just because it is expected of them or because they believe it is an indication of dedication (Singh, 1991). This is because over-correction can be a very tedious experience for the teacher (resulting in a demoralizing experience for the student).

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4.2 The use of the easy way to correct

With the above problem areas in mind, I think activities that give the students practice in correct usage within a meaningful context should be used. Creating a comfortable classroom atmosphere is extremely important if the students are to gain anything from the selected activities and retain what they are learning. The importance of the social climate of the classroom and the teacher's role in fostering it has been well-documented.

In research conducted at UCLA the ESL (English as a Second Language) faculty chose social climate as the most important among 11 factors relating to language teaching (Bailey, 1976). Hunter (1974) has suggested that the teacher is the most important variable in the classroom. In reviewing literature on teacher effectiveness, Brophy and Good (1974) found that teacher warmth and enthusiasm consistently show a positive correlation with student achievement. Bailey and Celce-Murcia (1979: 316) maintain that "what the teacher says and does is so significant in establishing classroom atmosphere that it can outweigh the effects of materials, methods, and educational facilities."

What does creating an atmosphere where affective filters³ are lowered and meaningful learning can take place have to do with setting up activities designed to help eliminate some of the problem areas listed previously? It means the teacher should use activities that include him in the community of the classroom, and that he should take an active role in the interaction of the community members. The activities should involve exchanges of information concerning the members' own lives, feelings, hopes, dreams, and opinions, as well as frequent usage of the patterns the students have problems with.

So here I will show some methods that I have been taught in my writing. I find they are very useful and extremely helpful.

4.2.1 Substance-errors.

These kinds of errors are mainly caused by students' incorrect memory. So the most important thing is to make students recite these correctly. I intend to group students into two teams. One is A and the other is B. Letting them exchange their writings and correct errors of opponents'. Students must find their opponents' errors as many as possible and give the right ones. If not, teacher will give some punishments to them. During this process, teacher should shoot students acts and let them watch. In this method, students may recognize their errors when they recall their stupid actions. Teachers may let students watch their own film in order to make them find out their errors. This method may let students have a deep memory of their errors.

4.2.2 Text-level

Error lists form the central component of the writing program. Their use is designed to facilitate students' grammar consciousness-raising by the use of extended descriptions.

The system for using the error lists is simple. Concentrating on the types of common errors outlined earlier, the teacher takes about 20 examples of these errors from the student papers, makes a list, and hands out copies of the list. In order to retain the anonymity of the writers and avoid singling anyone out, changes in verbs and nouns can easily be made. During the first half of the class the students work in small groups discussing and trying to correct the errors. During the second half of the class the teacher gives a lecture on the errors.

The lecture is intended to be filled with as much humor as possible. This humor is derived from what a native speaker's reactions might be to some of the error-ridden sentences on the list. Below are some typical errors

taken from student papers and examples of how a teacher might present them.

1). "My family is four": The teacher demonstrates a native speaker's reaction: "That's interesting. What an unusual family you have. Let's see. Your father is four years old. Your mother is four years old. Your brother is four years old. Everyone is four years old! How did you get to be 18 years old?" The teacher then explains the error and writes the correct sentence on the board (e.g., "There are four people in my family.").

2). "Son is elementary school": The teacher draws a woman, two little girls, and a building on the board, then writes a name by each figure. He acts out a conversation with an imaginary stranger: "Hello, Mr. Smith. I'd like you to meet my family. This is my wife Sally (pointing to the woman figure). These are my two daughters Betty and Sue (pointing to the girl figures). And this is my son John (pointing to the building figure). He is an elementary school!" The teacher then explains the error and writes the correct sentence on the board (e.g., "My son is an elementary school student.").

3). "He was died his wife": The teacher writes these sentences on the board: "He was killed by his wife." "His wife was killed by him." "He killed his wife." "His wife killed him." "He was dead, but now he is alive." "His wife was dead, but now she is alive." "He died." "His wife died." The teacher acts out an exchange between person A, who says, "He was died his wife" and person B, who goes through all the possible interpretations, becomes increasingly frustrated, and finally begins jumping up and down shouting, "Who died?" The teacher falls to the ground with a fake heart attack, gets up, smiles at the class, and says "His wife died."

There is a method to this madness. First of all, humor is often an underused and unexploited variable in creating a positive classroom atmosphere. Bailey and Celce-Murcia (1979: 318) encourage the use of humor:

Opportunities for humor should be exploited....If there is a cartoon, joke, or anecdote that pertains to the lesson, the teacher should share it with the group. In a study that compared outstanding teachers with beginning and "typical" teachers in inner-city schools, Moskowitz and Hayman (1974) found that the best teachers used humor in their initial contacts with students....In another study that compared outstanding and typical teachers, Moskowitz (1976) found that outstanding teachers smiled more than typical teachers, and there was more laughter in their classrooms.

Secondly, the type of humor used in the error correction lecture is designed to create strong, often exaggerated images that have the potential to touch the students on affective or emotional levels.

In giving the lecture, it is not necessary to inject humor into the correction of each error on the list. The important thing is to use humor as a teaching tool where applicable. Any teacher should be able to come up with a few humorous explanations within a single list of errors.

There is one point the teacher must always keep in mind. It is essential not to turn his interpretations into any kind of condescending or derogatory comment. Errors should always be seen as learning tools. If a positive atmosphere has been created and the teacher is seen as enjoying his experience with the students, it is unlikely any negative and unwanted impressions will be derived from the use of humor in correcting errors.

"Which Do You Prefer and Why?" (Ur, 1988: 72): Write on the board 10 sets of two or three words expressing concepts likely to arouse positive or negative reactions (e.g., snakes, spiders, crocodiles; mornings, afternoons, evenings; mud, sand, rocks; etc.). Ask the students to express and justify their preferences (e.g., "I prefer snakes to spiders because they are more colorful and graceful."). This activity can be done in the first person or in an interview format in which students write sentences reporting on their classmates' preferences. It is a good activity for practicing.

4.2.3 Discourse level errors

These kinds of errors are based on the whole text. So the first thing is to find ways from the angle of the whole text. I think the following examples are the good ways of correcting:

1). "Sweet Consequences" (Hadfield, 1990): Cut up about 40-50 strips of "reason" phrases and "consequence" phrases (e.g., "I brought my umbrella" and "it was raining"). Put the students into small groups and have them match the phrases in 20-25 "so" sentences and 20-25 "because" sentences (e.g., "It was raining so I brought my umbrella" or "I brought my umbrella because it was raining."). This activity is good for raising students' consciousness of the usage of subordinating conjunctions, as well as for helping reduce their tendency to start too many sentences with conjunctions.

2). "The Big If": Hand out copies of a picture that shows several accidents about to happen that could set off a chain of events (e.g., a girl about to step on a banana peel, a car coming around a corner where a pedestrian is crossing the street, a window cleaner about to knock over a bucket of water on some people below him, etc.). Put this pattern on the board: "If + subject (relative clause) + present tense, subject + modal of probability +

dictionary form of verb.” Have the students (in pairs or small groups) make sentences describing what might happen in the picture. The students must write at least three more possible consequences of the first “if” (e.g., “If the girl who is walking in the right side of the picture steps on the banana peel, she will fall down. If she falls down, she might break her arm. If she breaks her arm, she might go to a hospital, meet a handsome doctor, fall in love, and get married.”). This activity provides practice of the first conditional, relative clauses, modals of probability, and subject-verb agreement.

3). “Before and After” (Ur, 1988: 198-201): Hand out a picture of a room that needs to be cleaned. Have the students in small groups make a list of all the things that should be done (e.g., “The TV should be turned off.” “The bed needs to be made.” etc.). Hand out a second picture showing the room after it has been cleaned. There should be at least two new items in the room. Have the groups make a second list of what has been done (e.g., “The TV has been turned off.” “A picture has been hung on the wall.”). This activity provides practice in modals of necessity, present perfect tense, passives, and definite and indefinite articles. It is especially useful for showing students that when new information is introduced, the indefinite article “a” is often used.

The main considerations for using such activities are that the activities should focus on common errors at the sentence level or discourse level encourage student creativity and input, and allow for student interaction and problem-solving. The teacher should walk around the classroom giving help, making suggestions, and joining in from time to time.

5. Conclusion

This paper has described some of the common errors that students in Chinese university writing classes make and some methods based on activities designed to give students practice in these problem areas. The activities are meant to be carried out in a comfortable, non-threatening atmosphere in which students can make positive steps toward reducing their errors and increasing their motivation to write in English. The focal points of the activities are the teacher’s influence on classroom atmosphere, the use of humor and extended descriptions when explaining grammatical points and errors.

For teachers who don’t feel uncomfortable in the role of occasional entertainer, have a commitment toward creating an atmosphere in which affective filters are lowered, and sincerely enjoy the time spent with students, the activities outlined in this paper can be effective in raising students’ consciousness of errors, reducing the number of common errors they make, and improving their English writing ability.

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Language Situation in Post-War Sudan

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Abstract

The theme behind this paper is to review the language policy and language planning in the Sudan, after the institutionalization of peace; by exploring the recent policy of political factions in the North and the South towards languages in post-war Sudan. This effort aims at encouraging non-Arabic speaking-ethnic-groups to accept the Arabic language as lingua franca, by allowing it an official status in education and government offices. The paper also aims at encouraging the Arabic speaking majority in the North, to take the initiative to study and learn the most dominant local Sudanese-African languages, and be familiar with their oral and written literature; as well as realizing the role of these languages in enriching the cultural heritage in our country and making unity an attractive choice.

Keywords: Language planning, Language policy, Lingua franca, Local languages, Language education

1. Introduction

Language policy and language planning is one of the thorniest issues that often face nations in their historical and social development. The issue also remains as a big challenge for the ones who want to rule. In this paper I want to tackle the subject from another point of view, that is the Arabic language should not be seen in the religious context as most of the Muslim scholars and Arabic language speakers always entwine between Islam and Arabic. Islam is a religion which can also be adopted by non-Arabic speakers all over the globe, while Arabic is a language which is spoken by Non-Muslim Arabs such as the Arab Jews and the Arab Christians.

The research also aims at encouraging the Arabic speaking majority in the North, to be *positive* and *initiative* to study and learn the most dominant *local* Sudanese-African languages and be familiar with their oral and written literature; as well as realizing the role of these languages in enriching the cultural mosaics in our country. Multiculturalism is a global phenomenon in most of the modern societies today. The Sudanese people speak more than 560 local languages. Some of these languages are spoken by a handful of people and some are spoken by millions of people such as the Dinka, Neuer and Shulk. But Arabic is the most dominant as it is spoken by the majority as mother tongue and also spoken with different variations in many places as a second language. Arabic is an *integrating* social and political factor in the unity of people of the Sudan. Some local languages are adopting the Arabic alphabet and some of the Biblical Scriptures are written in Arabic as. So, if it is the situation of Arabic there, what is the problem then?

2. Statement of the problem

The problem is that, Arabic is losing grounds due to some orientations of some political groups in Southern Sudan, who are working hard to deprive this language the *official status* in the government offices and education. This negative attitude may be due to search of identity from one side, or it may be a mere reaction to the unfavourable history of Arab practices in the South from one side. It may also be due to the connection between Arabic and Islam which is not fully welcomed among some Southerners with Christian background. Of course it is my belief that every people have the right to choose for themselves the language of their communication and adopt freely their religious beliefs, but I am here to - just – remind with the benefits that can be gained by both people in the North and the South, if they could manage to establish a lingua franca that can facilitate easy communication between them in the different regions of our country; and consequently maintain living in one united country. I do not need to mention that both people in the North and the South share many economic interests. The rich tropical products in the South do always find their way to consumers in the markets of the North; as these products are *practically* unmarketable in the African countries neighbouring Southern Sudan, because these countries produce the same tropical products. However, these commodities are highly demanded in Northern Sudan, the rich Arab world, North Africa, Europe and Asia. The economy of Southern Sudan can benefit from the infrastructure that already exists in the North; to facilitate easy access to highly populated consuming markets. The trade of the South will need to *migrate* northwards via the North of Sudan to find passage to the demanding rich Arab world, Europe and Asia through the Swiss Canal, and to Asia through Port Sudan on the Red Sea Coast. Migration to the North seems to be a *fate*, for very simple reason, that the South has to defend its trade and other socio-political interests in the north hemisphere.

This work also encourages the education of local languages & local literature, because this will pave the way for a unified Sudan through interaction and mutual understanding.

2.1 The Significance of this Research:

This paper addresses the language issue and aims at speaking directly to the policy makers, educators, teachers as well as individual persons to consider the issue of language in the country. We aim to establish a common language to be used by all Sudanese, as well as trying to convince the Arabic speakers to show positive attitudes towards non-Arabic speaking groups, by respecting their languages and recognizing their wisdom through their literary creative production which can add to the diversity and the rich mosaic of our culture.

3. Languages in Africa

Languages are means of exchange for feelings and ideas. They are also tools for the handling of services and interests between individuals and communities. The language education is a big concern of individuals and communities now, in such a fast changing competitive global economy. Languages have always been unifying factors among human beings, but they were sometimes elements of conflict and discord. Natural barriers such as waters, mountains and deserts were and still are strong language barriers between people, but man through history has invented many tricks to overcome these barriers by practical means such as translation and interpretation. But language teaching and learning will remain the most effective ways for human beings to establish positive communication. The search and identification of identity of one specific people by speaking one specific language is one of the major language barriers but still this is the people's own choice. The world today speaks thousands of languages. Some of them are about to be extinct. It is a pity to realize that some local languages are disappearing now in the Sudan such as the (Anag which is an old Merwoen language). I am also very sad to learn that, there is one local language (Gulli) is spoken by only four people now, while a language (Haraza) in Western Sudan has been extinct because the last speaker passed away some years ago, AlKhalifa, et al (2006:99). But some languages are dominant and spoken by millions of people for historical, geographical or ecological reasons.

The demographic facts about the language ecology of Africa With approximately 2500 languages (or 30 per cent of the world's living languages) is something that deserves some care. Africa is one of the most linguistically diverse continents (Adegbija, 1994; Grimes, 2000; Batibo, 2005). However, Africa's language resources and their place in African development are unrecognized and little documented or researched in the context of African Studies. Language study according to Ndhlovu (2008) currently exists on the periphery of mainstream African Studies teaching and research activities. Most of the existing African Studies Programs are mainly underpinned by approaches drawn from such disciplines as history, economics, sociology and anthropology. Ndhlovu (2008) mentions that there are two diametrically opposed perspectives have emerged in relation to the presence of many languages in Africa. The first perspective is one that views the existence of many languages in negative light, associating them with all sorts of problems including ethnic conflicts, political tensions, poverty and underdevelopment. He quotes (Zezeza, 2006: 20) that for this school of thought the multiplicity of African languages is often seen as a bane of African unity, whether at the national, regional or continental level. Multilingualism is thus seen as a liability and a burden, particularly when considered in the context of the amount of resources needed to promote the use of multiple languages in the domains of education, media, law and administration, business and commerce and international communication.

3.1 Sudan in Africa

Languages issue in the Sudan can be seen in that context. The economy and education in Southern Sudan can benefit from the infrastructure already exists in Northern Sudan. The trade of the South will need to migrate northwards to reach the demanding markets in Asia and Europe. The North of the Sudan as Arabic speaking agent can help to play this role of intermediary to link Southern Sudan with the Arab world through education and trade. Migration northward can be seen advisable, if we can just contemplate on the results of last political clashes that took place in *one neighboring* country bordering the Southern region in the south. Those clashes gave solid evidences that Southern Sudan had severely been affected by the events in that neighboring country; and might be affected again by such incidents in the future. Those events made the Southern region *practically* a blocked inland area, as the Southern region does not have sea harbours. Due to those clashes the prices soured up in very short time, with severe shortage in food, energy, medicine and other commodities. This unpleasant incident has given clues that Southern Sudan is fated to northwards migration in *both* cases: of achieving political unity with the North or in case of cessation to establish an independent African State. But unity should be our goal but what grounds do we think can make this unity an attractive choice?

3.2 All Losers

The future of the Sudan is at stake due to the prevailing disputes between the two political factions, who signed

the Niavasha Comprehensive Peace Agreement (CPA) in 2005. The future of the Sudan is really dubious, but some efforts from all Sudanese including the academic personnel may soothe the political tension and help the decision makers to think over the future of our Sudanese Nation. This paper is one attempt as the writer as an academic person can provide his advice from linguistic point of view.

The writer believes that the Sudan should remain united through speaking *one* language to make unity an attractive option for Sudanese in the South and the North. The language is a welding agent and an integrating element of unity among any people in the world, as language is the conveyer of feelings and ideas from one person to another and from community to community. Ethnic diversity, multi-culture and multilingualism should not be a cause of differences and conflict between the two peoples.

Cessation – although remains the people's own choice- but I think it is not such a bright idea because it will weaken *both* partners in the South and the North simultaneously. Let us now make the following *calculations* by trying to answer the following question:

- What would happen if the people in the South decided separation from the motherland?
- What are the people in the North going to lose if cessation took place?
- What is the Sudan going to lose if this happened and a new independent state is born in the South?

a. Cessation is not that inviting idea for the Southerners because:-

- The South will miss its share in the already existing infra-structure in the North.
- It will reduce the role of the South as an agent of pressure to secure the rights of the other suppressed & marginalized Sudanese minorities.
- The South will be deprived from the North as the gate to the Arab world.
- It will be deprived from the use of the national ports on the Red Sea, the national airports in the mainland and from the domestic ports in Kosti and the other harbours on the White Nile.
- It will be deprived from the Northern markets for its tropical products.
- The cessation will help the eruption of tribalism in the South. (It did practically begin and many souls are lost)
- The South will have to share the burden of the international debts against the Sudan.

b. Cessation is not a good choice for the Northern Sudan because:

- The northern nomad herdsman will be deprived from the pasture in their usual summer march into the southern regions for grazing their herds.
 - It will stop the development of the River Nile Projects.
 - It will deprive the North from the markets of the East African States.
 - It will deprive the northern products from markets in the southern region.
 - The North will be the biggest loser because; it will be warded off the oil in the region.
 - Cessation will hold back the development of the Savanna animal and agricultural belt in the joint regions.
- Al-Mahdi (1993)

c. The Sudan

- The Sudan will be the biggest loser because a third of its population and a third of the land will be lost for ever.
- It will close down the role of the Sudan as a bridge between Africa and the Arab World.
- Islamic minorities may face some difficulties in educational and social integrity.

3.3 Multiculturalism & Multilingualism in the Sudan

Sudan is a multicultural and multilingual country. We can Just contemplate on the following data: The population of the Sudan according to the ethnic census of 1956 gives us the following data that: the population of Sudan was consisted of: 39% Arabs, 30% Southerners, 13% Westerners, 6% each of Bejja and Nuba 3% Nubian, 3% Foreigners & Miscellaneous. These percentages were based on the identification of tribes (of which 597 were registered, grouped into 56 tribal major groups). In the census people could choose which tribe under which to register themselves, but the tribes themselves were categorized by the census as Arab, Southern, Western, Bejja, Nuba, and Nubiyin (Nubian). Of course this was inadequate but remains the only ethnic census taken. The census

determined that Arabic was spoken at home by 51% of the population.

According to Jernud (1979), 90% of the parents spoke Arabic in the North, while 40% speak Arabic in the South, but Arabic is used as Lingua Franca between all tribes who speak different local languages. In his study, Jerund found that, the children of 324 families out of 372 married couples (91%) were speaking Arabic as their first language. In another study he found out that out of 414 people in Nuba Mountain who spoke five languages: Arabic, Deling, Aldaier, Tawaleesh and Bango, (99.3%) spoke Arabic. He also found that, in Kordofan out of 174 people 150 (86.2%) spoke Arabic.

Arabic according to Scholl (2008) was first introduced in the South during the Turco-Egyptian rule, which established the first official and administrative contact between the North and the South. This enabled a group of Arab and European traders, explorers and missionaries to come to the area. Formal education was introduced in the South in 1901, when the first primary school was established. It spread through the interaction between the Northerners-who went there as traders- with the Southern tribes, in addition to the physical contact between some of these tribes such as Shiluk and Dinka - using pidgins (Nilotic Arabic.) with Arabic speaking tribes of Darfur and Kordofan. Arabic vernacular is now spoken by 70% of the people in the South, while English is spoken by only 8% of the people, Al-Faki (2009)

3.4 Colonial Era

Arabic had been in continuous conflict with English in the South. Bishop Gwynne of the Church Missionary Society (1910) wrote that, "if the government would as far as possible encourage the use of English as the medium through which the business with the native could be transmitted, it would be an inducement on the part of the native to learn our language and would give Christian missionaries some slight chance over the overwhelming advantages, which Islam seems to have at present in Southern Sudan. Baraka (1984. 114)

This showed that the spread of Arabic was connected with the spread of Islam, as well as was English entwined with Christianity. This language policy towards introducing English to replace Arabic was culminated in the 'Memorandum on Southern Policy in 1930 emphasizing that officials should avoid the error of thinking that by speaking Arabic they are in some way confronting to the principles that administrators should converse with these people in their own language." But despite all those efforts to institutionalize English, the Governor General lamented by saying in (1927) that "I have fully appreciated the difficulties of ever making English the lingua franca of the South. Things have gone much further than I had expected. Whenever I penetrated to the top of the Imatong or the Belgium Congo border, I found Arabic in ready use by the local spokesmen of the people. I need not enumerate the main causes which have operated to produce this result ...we have to consider the very carefully how far it is worth effort and money to aim at the complete suppression of Arabic." *ibid* (1984:119).

It was interesting that the Governor General came to see the fact as he said, "...indeed we shall have to consider whether Arabic after all, in spite of its risk, must not be our instrument. The opinion I have here expressed is strongly held in the South. Even at remote Lui, Dr. Fraser put on the same view. Captain Kid at Shambe told me that he had sent 54 boys to Malek Mission and they all came talking Arabic although the Archdeacon is very definitely hostile to that language." *Ibid* (1984:120).

We could understand from this, Arabic was able to found good grounds and English failed to be the medium of education. This dilemma made Mr. Hussey (then Chief Inspector) to call for an urgent meeting to discuss the necessity for an authoritative language conference, as soon as possible and recommend that Sudan Government should take steps to initiate such a conference. *ibid* (1984:122). Hussey recommended the cooperation with the International institute of African Languages and Culture. So as it was an urgent matter, the Government of the Sudan obtained the services of professor Westermann, who was one of the directors of the International Institute as an expert and advisor. An inter-territorial Conference was convened as a result in Rejaf in 1928 and came out to oppose Arabic and adopted English as lingua franca in the South, and with the assistance of professor Westermann the conference made a list of six local languages for educational purposes, included Bari, Dinka, Nuer, Shiluk, Lutho and Zande. The conference also laid the foundation standard orthography named as Rejaf Orthography for the writing of these languages.

Then Dr. Tucker-linguist expert-was engaged in the production of textbooks, grammar and vocabularies of the selected languages. But his efforts failed as he put it, "My chief difficulties encountered in all languages were the fact that very few missionaries or language authorities assimilated the Rejaf spelling system." Sanderson (1984:112). Other problems rose from the fact that some of those languages were spoken by small minorities.

Arabic – though it was written in Latin characters - was still a problem according the Civil Secretary who wrote in 1929 that, "The Mission realizes that the whole question of Arabic is still not settled. It is a great pity that we

cannot go ahead though the school has the best teachers. The mission fathers themselves would like to give up Arabic but there are grave doubts whether any other language is practicable in Wau at present." Baraka (1984:124)

Arabic then was able to establish good grounds since the contact between the natives and the Arab traders was continuous and active. This problem made the civil Secretary issue a famous Memorandum clearly stated that officials should avoid speaking Arabic. They should converse with the people in their own language, and that an official who was unable to speak the local vernacular should try to use English when speaking to the Government employees and servants and even, if in any way possible, to chiefs and natives. In any case the use of interpreter is preferable to the use of Arabic, until the local language can be used." Baraka (1984:126)

This failure of educational system resulted in growing demand for Northerners employed in the South and communication between the North and the South being developed. The application of this policy broke down the previous isolation of the South and rendered it advisable that the policy of the 1930s should be revised.

The government in the South came to understand the fact that, "the people of the Southern Sudan are distinctively African and Negroid, but that geography and economy combine to render them inextricable bound for future development to the Middle-Eastern and Arabised Northern Sudan: and therefore to ensure that they should by educational and economic development, be equipped to stand up for themselves in the future as socially and economically the equals of their partners in the Sudan of the future. This new policy raised the question of languages once again so in his memorandum on the South Policy in 1946, the Civil Secretary declared that, "...in Education, I believe while the South may hope to have a secondary school, it cannot hope to support post-secondary education, and I believe that Southerners should get this at Gordon Memorial College-Arabic is not essential there, but should I think be taught to southerners as a subject from the intermediate school level upwards.

Consequently, the Governor- General authorized in 1949 the directive that Arabic should become the common language of the south. This was endorsed by the Legislative assembly in November 1949, when the Minister of Education addressed the Assembly by saying that, "...as the Sudan is one country sharing the one set of political institutions, it is of great importance that there should be one language which is understood by all citizens. The language can only be Arabic, and Arabic must therefore be taught in all our schools." *ibid* (1984:133). As an immediate result to this, Mr. Griffiths (the Principal of Bakhiet-Erudha) was sent to the South to develop a plan for the training of southerners in the teaching of Arabic. In 1951 a five-year plan (1951-1956) was adopted to expand and improve the educational system in the South by the assimilation of method of teacher training, the use of similar textbooks, the adoption of common syllabus and the introduction of Arabic above the village school level. Practical steps were taken to enable southern teachers to speak and teach Arabic, a secondary one-year Arabic course at Delling elementary Teachers' Training College was provided for Rumbek secondary school prior to their entry to Bakhiet-Erudha Intermediate Training College. The experimental work on the Arabic syllabuses was conducted in the closest liaison with Rudha Institute and a quarterly magazine in Arabic and English was produced for the educated southerners to help spread Arabic. It was planned that Arabic literacy campaigns be started by trained staff in the most populated area.

3.5 Arabic & Islam

The educated Southerners began to look at these new developments as new-Northern cultural imposition opening the way to Islam and Arabic culture; so it came to failure despite the fact that a good intention from the government side was unmistakably noticeable. Basheer (1984:157) explains this by saying that: "The Southern educated class - themselves products of missionary schools, suspected that the aim of the Northerners was to spread Islam and Arabic culture." However, there was some truth in this perception, but only some, and that being the definite relation between the Arabic language and Islam; things did not go as it was planned. But negative attitudes were still held by some northerners that in many Southern schools any student who knew Arabic well and scored high marks continuously teased by other students and labeled 'Arab' even if he were not suspected of sympathizing with Northerners. Basheer (1984:157)

4. From Addis Ababa (1972) to Niavasha (2005)

In (1972) the two factions in the North and the South were able to come to a peace agreement signed in Addis Ababa by Joseph Lagu the leader of (the Anyanya) and Numairi, the president of the Democratic Republic of the Sudan, then. The agreement recognized the self-government for the Southern region. In respect to the language policy, Arabic was named as the official language in the country while English was considered as the principal language in the South. The Self-Government Act discussed the language issue in Chapter ii, Section V that, "Arabic shall be the official language for the Sudan and English as the principal language in the South as a

working language, as matter of convince in order to meet the aspiration of the people of the region and to ensure the efficient running of the region in all its departments and units. Local languages shall be encouraged for the following reasons: (a) to serve as the practical need of the discharge of duties in day-to-day business. (b) for the promotion of patterns of culture of the people of the region.

In (1972) the first educational conference was convened in Juba in July where the regional Minister of Education appealed to the conference to tackle the language problem in Southern Sudan schools from the merely educational point of view and not to be influenced by the past political attitude towards Arabic, for he believed that the Addis Ababa Accord had removed all the worries and misunderstanding between North and South. The Juba conference came out after long debate in language with the following that, if the teaching of the tribal languages is introduced right from the first year primary for any period as medium of instruction whereas Arabic be introduced from the same age as a subject, Southern pupils will be put in a disadvantageous position with their counterparts in the North in National Certificate Examinations, but as a political expedient, the teaching of these languages should be introduced, and ways for their teaching could be found.

The issue of language was finally solved by the Executive Council Resolution as it had been decided that in the future, in rural areas, the first two years of teaching should be in local languages, after which teaching should be mostly in Arabic. Also special arrangements were taken to tackle the question of language for the children who had their instructions in English and French, where large schools may have a class learning in Arabic and English was to be taught as a subject.

This was finally decided by a resolutions from the Assembly in 1974, that "English language be re-introduced as the medium of instructions in the educational institutions of the Region as from (1974/1975) academic year but this resolution was rejected by the Executive Council which recommended a language policy clear and precise that:

a) in rural schools

i) The vernacular be used as medium of instruction in the first and the second years with Arabic and English introduced orally.

ii) The vernacular be used as a medium of instruction in third and fourth years while Arabic and English are intensified.

iii) Arabic be medium of instruction in the fifth and sixth years while English continue to be intensified.

b) in the case of Urban schools

i) Arabic shall be the medium of instructions in the first and second years while English is introduced orally.

ii) Arabic continues as medium of instructions in third and fourth years while English is intruded in writing.

iii) In the fifth and sixth years Arabic contuses as medium of instruction while English is intensified.

c) In all junior secondary [intermediate] schools: Arabic shall be the medium of instruction while English is intensified.

d) In all senior secondary and post senior secondary school, English shall be the medium of instruction and Arabic is taught as a language with its literature.

e. Adult education shall be conducted in local languages and Arabic. Baraka, (1984:163)

4.1 New Generation

The Sudan witnessed the longest civil warfare in Africa. It erupted in Aug. 17th 1955 following the mutiny by the military of the Equatoria Army Division. During successive periods from 1955-1972, 1983-2003 the toll was totaling 2 million dead, along with uncountable number of injured and disabled. Many lives were lost because of war and war related famine. The number of lost people was bigger than the total number of the lost souls in the Bosnian, Rwandan and Somalia wars combined, as stated by Dr. Garang in his address to the (United Nations Human Rights Commission in Geneva on March, 24 1999.)

Nevertheless, Sudan exerted many efforts since independence to stop the civil war. The first attempt was the Round table Conference in May 1965. Another conference was in March 1972, between Nimmairi and Joseph Lago of the Anyanya, but it failed and paved the way to another mutiny in 1982 by the (SPLM) under the leadership of Dr. John Garang De Mabyor, who lately signed on the 20th June 2005 the recent Comprehensive Peace Agreement (CPA), with the Vice President of the Sudan Ali Othman M.Taha, in Kenya. The efforts were under the sponsorship of IGAD, USA, and other European partners. They successfully ended the longest war in Africa if not the longest civil war ever known in the human history. The war erupted and continued to

accumulate hardships on everybody in the community. It did affect the life of millions of people by death or displacement. Children lost their parents; others had to share the suffrage either: physically by being recruited as young fighters in the jungle or psychologically by losing interest in education. A few lucky children had the chance of education in refugees' camps, with different culture and different educational environments in another language rather than his mother tongue. These experiences left these young learners with great physical harm and psychological pain, a thing that will need immediate rehabilitation programmes for most of them. We have to start giving them instructions in their own local languages, as it was recommended by the UNSECO to establish good intimacy between the child and his local environment. To do this (GoSS) decided to recruit English teachers from two neighbouring countries - as came in the news of July 6, 2006 from that-about 130 foreign teachers were coming to teach in Southern Sudan with more than 60 others expected to leave the country to the vast region. (www.Sudanvision:2006).

This educational policy will once again alienate these children from their local culture and traditions. This can be supported by a story from The Washington Post correspondent who reported from the Nuba Mountains, by telling the story of a Nuba boy in his new school. She said that the people of Nuba, through centuries of slave trading and forced migration, speak Arabic, the official language of Sudan. But they say they are closer ethnically and culturally to the south, where English became commonly used when the region was under British control.

But this is not absolutely the truth. The Nuba came to speak Arabic through the natural interaction with the Arabic speaking tribes neighbouring their regions in Kordofan and where they practiced Arabic in their prayers as Muslims which was their own choice as religion. The Nuba boys and girls can be taught in the local language and be exposed to Arabic as it is familiar in their homes, where it is used by their parents and their neighbours in different local variations. We can refer to one study in Haiban - a Nuba region in Kordofan- where it gave evidences of Arabic spoken by about (86.2%) of the people. It is here to mention that Nigeria according to Cyffer (2006:21) had once adopted the English language in its primary education but after a long time the experience proved a failure and they got back to instruct children in their own local tongues. The concept of "straight for English in primary education was considered a failure. Therefore the new motto became 'a child learns better best in his local language.' Luckily this new trend is encouraged by the (CPA) which approved of a language policy in the Niavasha protocols where in addition to Arabic and English, the legislature in any sub-national level of government may adopt any other national language(s) as additional official working language(s) for the locality.

4.2 Niavasha and the language issue

The war - as we know - once again erupted in 1982 and happily quenched in 2005 by the agreement of Niavasha's protocols, signed by the government of the Sudan (GoSS) and the (SPLM) in Kenya, to end the war. In the protocol of power sharing signed on 26th May, 2006 by the two factions, they included the language issue in article No. 2.8. (Akhbar Al-Youm Book Series, 2004)

In this protocol, article 2.8.4-which reads, (In addition to Arabic and English, the legislature of any sub-national; level of government may adopt any other national language(s) as additional official working language(s) at its level). It is clear that autonomous decisions can be easily made at the local government level to freely choose the language of interaction in its government and educational institutions. This is the legislative reason that let the government of Southern Sudan (GoSS) to adopt English as the official language and means of instruction in the South effective from 2007. Children will go to school to new language environment where English is going to be taught from the very start at the basic school level.

But due to the long war the infrastructure in the South needs to be reconstructed including the school environment. There is severe shortage of school buildings, teachers, textbooks and teaching aids. There is severe shortage of trained teachers in all fields and in English in particular; a thing that made the Regional Ministry of Education to recruit teachers from some neighbouring countries to fill the gap and keep the educational machine go. This recruitment of staff will definitely have its negative results socially, economically and politically. Socially, these teachers will come to the country with foreign habits that may contradict the habits of the people in the South. Economically, these teachers will be paid in hard currency and with salaries that the budget in the South cannot afford. So, the shift from Arabic to English is very costly where the contracted teacher will be paid 300 dollars as salary plus 90 dollars as meal allowance and 190 dollars for accommodation. With such an amount of money (GoSS) can afford recruitment of teachers from local native staff from the North, well trained to teach Arabic and can also train teachers from the Southerners themselves. Arabic is a welding factor among these tribes as stated by Riak Gai (2007:122) who sees Arabic as one of welding elements that willingly joins the tribes

of the South together. (Juba Arabic) which is a hybrid variety of Arabic is widely spoken by most tribes in the south with different variations. Most of the elites in the South speak Arabic as fluently as any Arabic speaker from the North. It is here to mention that learning Arabic was encouraged by effective people such as Dr. Garang as reported by Khatir (2006). He himself was an eloquent speaker although he used simple Arabic to express the most difficult political and ideological concepts. He used to encourage his leaders to master the Arabic language. He used to talk to his military forces in Juba Arabic. This Juba Arabic was also used by the SLP/M/A Radio in Ethiopia and it is still the language of transmission in Juba. It is spoken by more than 75% of the people in the South while English is spoken by only 8%, Al-Faki: (2007)

4.3 The Claim & the Flame

Arabic could have been finally established as Lingua Franca in the South, had not been frequently associated with negative practices of the 'Galaba' of the North, in their envelopment in slave trade as mentioned by Dr. Scholl (2005:22) who said that the term Galaba had negative connotations in the minds of the Southerners, as it was always associated with bad practices of Northerners in that notorious trade. This is one of the most serious psychological barriers that underline the socio-political relation between the North and the South. It is time for the people in the South and the North to go over this moment in similar reconciliation and self redeem practices that took place in South Africa after the abolishment of apartheid regime. It is the truth that all Sudanese are African by definition. This is due to the undeniable factor of geography in constituting our African pigmentation, African features, African temper and African mood. I think it is high time to realize and deny those fallacies of racial claims which have flared up the fire of racial and political disputes all over the country with those long civil wars. The genealogical claim of belonging to Arab ethnicity was the cause behind the civil wars in the South and still the cause of war in Darfur. It is true that the majority of our people in the Sudan speak Arabic, however, it does not stand as a symbol of racial identity, but Arabic is a *mere culture* similar to the situations of Latin American races or Afro-Americans who live in English, French or Spanish speaking communities but they adopt the cultures of those communities that hosted them. Those people speak those languages, but they maintain their African or Latin identity at the same time.

5. Conclusion

If we recognize Arabic as a *mere sort of culture* and not an *ethnicity associated with false claims*; I think this would reduce the tension of racial disputes in our country and encourage others to form positive attitudes towards our language and willingly assimilate our culture. I am here to refer to Dr. Al-Bagir Al-Afifi's daring paper entitled "The Crisis of Identity in Northern Sudan: A Dilemma of a Black people with a White Culture" But In spite of all the ecological, political and social difficulty, Arabic survived and "...it is there to stay" as stated by Mr. Edward B. Mandeson from Indiana University in his letter on 15/12/1984 to Dr. Tamimmi where he said that: "My contention given the historical experience for the South and the background history of the Sudanese nation with its diverse national character, the Arabic language has come to stay and all that *is needed is the casting of an agreeable language policy* which is devoid of the historical sensitivities, generated by the traumatic historical experience the Sudan has gone through, is the only way out." Yes, it is "there to stay" but of course -this time- by the own free will and choice of the people.

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The Changing Postmodern University

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Abstract

While modernism with its principles lying in reason and metanarratives was commended for rationalism and absolute truth yielded in science and technology, postmodernism rejects scientific achievements which have brought both benefits and disasters to life and widened social stratification. It describes a rejection of such fundamental Western philosophies as Euro-centrism, metaphysics, authoritarianism and domination. It denies the existence of objective knowledge, the consistence of the self and rationalism. On the one hand, the reality we live in is said to be full of holes with scientific establishments with which scientists have created for a better life, and on the other in views of ethics many of us have become skeptical about the unique existence of truth. Higher education no longer seeks the unity of culture and consensus of communal communication, but accepts to challenge itself to criticisms and to swim in global competition flows. Knowledge from universities which has both lost its ivory power and broken its science-exclusive preserving border becomes functional when students aim to ingest what they want to ingest as they find it useful for their global civic participation. Universities must consequently become a pioneering cradle in the production of new knowledge for society and human beings, and they are mandated to provide global-adaptive knowledge to global moving students. While modernist education tried to educate students for citizenship and fixed jobs, postmodernist education is believed to train them for uncomfortable uncertainties and the ability to live with chaos. Postmodernism changes our mindset. It changes higher education.

Keywords: Modernism, Postmodernism, Postmodernism in education, The postmodern university

1. Introduction

“Postmodernism” as a philosophical term itself refers to real phenomena and to an intellectual movement which is precisely called “post-structuralism” that developed in France in the 1960s (Cahoone, 2003). It is a discontinuity with the modern era which celebrated technological successes from the Enlightenment, and it connotes an escape from the legacy of Euro-centric metaphysics, authoritarianism and domination. It denies the possibility of objective knowledge, single and fixed meaning of language, the unity of the self and rationalism. It rejects most of the fundamental philosophies in Western civilization in many socio-economic and political aspects as well as education. It is inevitable that this new language and its thoughts cause confusion, ambiguity and discomfort. It sometimes poisons us. The rejection of realist knowledge and absolute truth is of most concern in education which traditionally defines knowledge as the remembering of previously learned material or the body of truth, information, and principles acquired by humankind or interpreted information that can be used. This may involve the recall of a wide range of material, from specific facts to complete theories, but all that is required is to possess a great memory capacity to memorize a stock of information, and it is impossible for students as they are not a walking encyclopedia. Together with the influences of globalization and market-oriented consumerism, education is now changing itself, and so is higher education in the new times. This article aims to present the author’s notes on such a change as a mandate at the post-modern university in many aspects. This post-modern university, of course, originates from any existing university which is operating in this changing world.

This article starts with a brief introduction to the historical move from modernism to postmodernism with a focus on the evolvement of knowledge from being considered as rationalism and totalization to being seen as a special kind of story and discourse which favors fragmentation and marginalized voices in higher education. By breaking down the abstract concept of postmodernism and its ethos, the discussion goes further with some notes on the view of knowledge at the postmodern university which must turn to be more flexible and adaptive to the changing world, and education is going through major changes in its objectives, contents and methods (Edwards & Usher, 1994). The postmodern university must then be changing its education inquiries under influences of the changing philosophies.

2. A Historical Outlook from Modernism to Postmodernism

Not only is postmodernism a philosophical movement but its doctrines have intruded many other aspects such as arts, dance, education, literature, music, politics and theology (Cahoone, 2003; Hicks, 2004; Hutcheon, 1989; Sim, 2005). The term “postmodern” is said to sporadically occur somewhere back in the 1870s when the English painter John Watkins Chapman proposed that a new school of art go beyond French Impressionism (Sim, 2005), and has captured a strong attention since the later half of the twentieth century. In 1914 Thompson used it to mean changes in attitudes and beliefs under criticism of religion, indicating an escape from doing the right thing for a wrong reason in theology. It was then used in 1917 by Rudolf Pannwitz, who described a new form of European military culture after the War, and who further developed the theme of “nihilism” proposed by Friedrich Nietzsche and judged its decadence in the context of the twentieth century’s Western culture (Cahoone, 2003; Sim, 2005). This philosophical movement puts forward a reassessment of such previous fixed values as equity, peace, verity, justice, and spells the end of metaphysics. It assumes that philosophical understandings could originate from the existential self including the living individual, their emotions and activities. Such a self is closely related to an existential attitude. This term again appeared in 1921, 1925 and 1926 to describe a new form of art and music. This so-called “postmodern” ideological trend was continuously mentioned in 1934 by Fredireca de Onis, who in his book *Antología de la Poesía española e hispanoamericana: 1882-1932* referred to a negative reaction to literary modernism (Cahoone, 2003). This word once again appeared in 1939 to mean two different things: by Bernald Iddings Bell as a failure of the secular modern world and a return to religion – though he did not really mean like the understanding of present postmodernists, and by Arnold Toynbee in *A Study of History* as a historic reference from 1875 as a cultural decline to the post-World War 1, as a popularity of mass society where the normal working class played a more important role than the capitalist class, and as a collapse of the Enlightenment rationalism. It was then used during the 1950s and 1960s as the reaction to literary modernism, and reached its peak in the 1970s as the dissatisfaction with modern architecture. It entailed an analogous use in architecture with a close connection to the analysis of post-industrial society and knowledge-, service-based economies after the Second World War. In fact, Charles Jencks in his book *The Language of Postmodern Architecture* in 1977 was criticizing modern architecture which had not satisfactorily served public concerns. The Pruitt-Igoe complex in St Louis, Missouri, which was dismantled at 3.32 p.m. on July 15, 1972 (Jencks, 1986), proved such a failure when the public had rejected the modern style which encapsulated a stronger focus on volume of architectural structures, balance and rejection of ornamentation. By contrast, postmodern architecture favored an eclectic trend freely mixed with personal preferences combining both the old and new styles as an emerging international style, and with its double-coded quality it tended to please both professional architects and the public comfort.

Reactions to modernism came in different aspects. For example, the rejection of modernism has too become popular in environmental movements in the late twentieth century with the appearance of Green political parties in Western countries (Sim, 2005) and the reactions in both international conferences and local events to the catastrophic aftermaths of industrialization and modernization culminating in climate change. In addition to environment, artists like Michael Fried claimed that the very nature of modernist painting was to dig into materiality and was subject to the tyrannical interests of mass culture which somehow resisted the manipulating effects of popular culture (Trodd, 2005). In terms of philosophy, French post-structural philosophers adopted this term in the 1980s to describe a reaction to rationalism, totalism and utopianism and to criticize the justification of knowledge by rooting it in first principles or sense-data or both. The main theoretical avowal of postmodernism is its rejection of grand theories or universal theories of Western culture due to their lost credibility and its disdain in its different shapes and forms (Sim, 2005).

The last quarter of the twentieth century has seen the debate between modernist and nostalgic theorists who favored humanism and rationalism, and who found their alliances in positivism who based their assumptions mostly on knowledge foundation known as epistemology, and such postmodern philosophers as Barthes, Derrida, Foucault or Lyotard pointed their attacks to the modern philosophical foundation. According to Mary Klages (2007), postmodernism is a complicated term which denotes an ideological system popularly deployed since the 1980s. Klages (ibid.) recommends that the best way to approach and comprehend this ideological movement is to return to the origin of modernism and the nature of modernity which mostly rejected the obsolete Victorian artistic standards. The main characteristics of modern arts include an emphasis on impression and subjectivity in writing and how arts are seen rather than what is perceived, leading to stream of consciousness writing. Modern literary also emphasizes a tendency towards reflexivity and self-consciousness, and a rejection of the distinction between high and popular culture. Postmodernism like modernism follows most of these ideas, focusing on the rejection of high and low culture, to genre distinctions, placing an emphasis on pastiche, parody, irony and pun.

Modernism refers to the twentieth century's aesthetic movement while modernity implies a set of philosophical, political and ethical ideas. The term "modern", which was assumed to first appear in the nineteenth century's sociology, was used to indicate a new time juncture from antiquity (ibid.; Nguyen, 2006). The word "modern" had its origin from the Latin word "modo" (of today) used popularly in the fifth century to denote such a separation of the Western ideology from the set of influential old Roman ideas (Cahoone, 2003; Oden, 1992), and later adopted a new meaning of progress, a tactful possession of truths compared to those in antiquity (Bock, 1979). As Frederic Jameson (1981) notes, modernism and postmodernism are cultural movements which have accompanied capitalism in three main cultural phases. The first phase is related to the occurrence of market capitalism in the eighteenth century through the late nineteenth century in Western Europe, the UK and the US while the second stage that last from the late nineteenth century to the mid twentieth century is mostly associated with monopoly capitalism. The third phase is marked as the present time with the proliferation of multinational and consumer capitalism. Historically speaking, modernism marked quite a long era in the world's history with its inception right in the Enlightenment which celebrated the success of the French Revolution in 1789 lasting until the mid twentieth century which saw the collapse of the Berlin Wall in 1989 (Oden, 1992). Baudrilla (1994) and Klages (2007) yet assume that modernism last from 1750 to the end of World War Two while Bell (1976) insists that it appeared from the end of the nineteenth century to the first few years of the 1960s with its peak from 1890 to 1930.

Modernism posed a debate over pre-modern and new values when the former showed a high respect to the existence of an outer space supernatural body who was deemed to be invisibly omniscient. Modernists criticized such a belief when they based their judgment on technological advances of the time which simultaneously opened doors to new political, social, ethical and aesthetic values with a profound confidence in reason and individualism (Hicks, 2004). During the Enlightenment, stemming from the objectivity of reality proved by scientific evidence, philosophers searched for absolute truths in order to form universal theories and create a logically appropriate social mechanism (Smart, 1990). The dialectics of the self was insisted as a foundation to understand the workings of nature on a larger scale, and modernism went even further by pointing out a remark in randomness and ephemera (Harbemas, 1987). According to Flax (1990), the basic ideologies of modernism characterized in the Enlightenment espouse the existence of the self who is structured consistently and perceives his internal workings and his relations to the external world by applying universal principles. Thanks to scientific advances, modernists started their philosophical reasoning from found rules in nature instead of unknown supernatural forces and mysticism, and they placed a focus on human autonomy and ability to form one's character, considering an individual as a sovereign entity and unit of reality instead of pre-modern thinking of "dependence and original sin" (Hicks, 2004, p. 7). As a result, individualism became a central topic in the study and discussion of human ethics. Enlightenment thinkers based their reasons mostly on the foundation of science, and hence knowledge which was withdrawn from scientific establishments became an epistemology of reason, and individualism seemed to be a catalyst for the growth in human spiritual and material life. As Hicks (ibid.) indicates, it was used in politics and yielded liberal democracy, in economics and yielded free markets and capitalism, in material production and yielded technological successes, and in the understanding of human beings and yielded medical breakthroughs.

Modernism is largely about order and rationalism. The main ethos includes a creation of rationality which is conducive to a creation of order, and it supposes that society should be ordered so as to function better and sustain stability. This grand theory was based on scientific successes which led us to industrialization, materialism, urbanization, and colonization. The mainstream thoughts were mostly in favor of the advantaged, and "others" would include irrationalism, lack of civilization, non-whites, non-Eurocentrism, homosexuality, and ethnic minorities all of which had to be eliminated. Therefore, such concepts as "disorder", "chaos" and the like that may disrupt social order are mostly filtered and stopped. Such an emancipatory regime was maintained as the central foundation for a rational society entailing its authoritarianism and political power. However, the World Wars, colonial barbarity, technological dark sides, and pragmatism have caused doubt in our present lives, and not everyone may feel happy with their one-time celebrated scientific or so-called modern achievements and applauses. This is where the voice of postmodernism is heard.

3. The Postmodern Ethos

In essence, postmodernism negates modernists' basic assumptions in regard to the existence of objective knowledge and absolute truth. While modernism was founded on a belief that there was an objective reality existing independently from one's thought and appearing almost in the same way to anyone, and such a reality could be expressed objectively through truth, science and knowledge, knowledge in postmodernism is said to be just a special story, text and discourse with intended wordy arrangements in forms of signs. In other words,

postmodernism rejects the existence of absolutely objective knowledge since what is called knowledge is merely constructed from words and their assigned meanings in a certain culture which views the world in different points of view. Such a system is judged on the basis of beliefs of those in power in order to support them in return, and hence those beliefs and truths which are justified as standards in one country or group cannot be seen as an equivalent in another. Postmodernism goes even further by stating that in Eurocentric cultures, which have forced their ideologies onto other cultures by political, economic forces, military invasions, and by those who are in power and in authoritarian aristocracy, have dominated and controlled their mainstream and orthodox thoughts and beliefs in politics, culture and science, making objectivity hardly objective (Lemke, 1994).

Postmodernism rejects the Enlightenment project in many fundamental ways and sees itself as anti-philosophical with a strong rejection of traditional philosophical movements. According to Hicks (2004, p. 6), postmodernism is metaphysically anti-realist as it holds an impossibility “to speak meaningfully about an independent existing reality”, replacing a social-linguistic construction of reality, and epistemologically rejects the insistence of an independent existing reality, refusing the role of reason as a means to acquire objective knowledge in reality. It denies the legitimacy of the whole course of epistemology and the attempt to justify knowledge. Postmodern beliefs lie in the collectivism of human nature as individual identities are largely formed by the influence of social groups. It also emphasizes relations of conflicts between these groups and how these conflicts can be resolved by the use of force which in turn leads to relations of dominance, submission, and oppression. It argues that what was normally believed to be true and standard was mostly based on the political convenience and dominance of European imperialism of the past. As such, postmodern ethics stands for a deep sympathy for those who are oppressed and disadvantaged in these conflicts.

Postmodernism too denies the existence of reality and considers it as a real illusion which is created by the language we use. What we are mostly engaged in is just the recreation of simulacra where “the image of reality bears no relation to any reality whatever: it is its own pure simulacrum” (Baudrillard, 1988, p. 170). This is the reason why there could be no single reality, and the language we use seems to define our knowledge and the way we perceive it (Hardy & Palmer, 1999). As Nazemzadeh and Kritsonis (2007) simply put, postmodernism fights against the four central themes of the Enlightenment philosophy being the existence of an autonomous self, fundamental epistemology, universal theories, and the belief that social and ethical advances could be made by science. It claims to be associated with the logic of divergence and difference which is incompatible with the logic of democracy (Blackmore, 1999 cited in Nazemzadeh & Kritsonis, 2007).

Postmodernism lies in different guises one of which is the expression of skepticism about authority, wisdom, cultural and political practices that undermines philosophical theories in support of the possession of truth or judgment criteria for truth (Sim, 2005). Such a skeptical attitude is also known as anti-foundationalism which challenges the foundation of discourse for truth. Postmodernists’ reaction to structuralism is seen as an expression of skepticism towards authority and its methods. It raises questions about cultural certainties in structuralism with the belief that the world is “intrinsically knowable” (Sim, 2005, p. 4) which offered us methods to unlock the workings of the world based on certain fixed rules. The linguistic model by Ferdinand de Saussure (1966) suggested a linguistic system of rules and internal grammar that governed how linguistic elements came into interactions. Language was seen as a system of different elements of signs, the signified and the signifier in which each element was dependent on relations to others. The meaning of a word was therefore predetermined by its existence with other surrounding words within a universal grammar. This system implied a relative stability in languages and the production of meaning which could well be predicted in a linguistic community. This system was also applied to other systems in life inducing that every system had rules to govern the operation. Yet, postmodernism describes language as a jar containing meaning which becomes independent from realities and is not dependent upon the will of one self. It sees culture as a system of signs which decide reasoning and control people’s activities after the language. Postmodernism rejects the neatness and tidiness of structuralism, assuming that there would be no loose ends, and grand narratives tend to fall into certain structures with their universalities which may not be always true in every situation, and with specific genres which cannot be applied to all. Postmodernism believes that it should be more important to appreciate differences, dissimilarity and unpredictability of analysis than just to find out similar rules within operations and predict results with certainties. One of the most famous instigators of postmodernism is Jacques Derrida, who began to analyze Husserlian phenomenology which attracted self-undermining issues in Husserl’s fundamentalism and further semiosis. According to Derrida (1973), signs are always associated with their meanings which can be mediated and generated endlessly with unpredictability. Derrida denies that there is immediate reception of the given text, and what the author of a text wants to imply is not completely conveyed to a reader’s mind as the original meaning, or as he states “There is nothing outside the text”. Human beings encounter the world with real

referents through texts and representations. Also, we cannot completely analyze an individual's perception process from language if we have no idea of the language discourse that the culture of that person uses to communicate. Language discourse of postmodernism bases its language decode on intertextuality which comes from different aspects of language and culture such as linguistic visual-audio signs, assigned meanings, referents, and cultural practices and the like.

Deconstruction is hence against the system-building argument of structuralism, the predictability and stability of language. Signs are not predictable entities and do not entail a unified meaning. There is instead a slippage of meaning because words contain echoes and traces of other words, and meaning seems to "evaporate" (Sim, 2005, p. 5) as soon as it happens in spoken or written language rather than holding a fixed meaning over time. In other words, linguistic meaning is not a fixed system, but *différance* (a neologism from the French word *différence* which means both difference and deferral) is always applied to challenge the assumption of Saussure's ethos of semiological difference, to prevent the establishment of the presence of meaning in communication, to indicate the closure of presence, and to fight against totalization and grand theories which claim to explain everything. Instead, little narratives are celebrated where they are linked to one another on a tactical basis by different groups to achieve different purposes (ibid.). Postmodernism considers little narratives as a way to create and disseminate knowledge and to break down "the monopoly exercised by grand narratives (ibid., p. 8). These small stories are seen as the primary means of scientific inquiries to search for paradoxes, instabilities and the unknown rather than just create another grand theory for authoritarianism.

Yet, postmodernism is not only concerned with signs. It also considers that every object is complex, and the complexity of a phenomenon is generative and able to grow. Completeness of phenomenon and consistency of a system are therefore impossible, and analysis does not stop (Cahoone, 2003). Totalization, stability and order in modern societies are often intended to remain via legitimating myths and grand narratives of modernism (Lyotard, 1984). It posits that every social aspect including science as the basic form of knowledge depends on these metanarratives about a dominant culture with a political purpose. The abuse of these grand stories is exerted to hide the other sides being disorder, instability or minority. In contrast, postmodernism supports these "the others", and *petits recits* (small stories) are examined from the various angles of temporary, randomness, objection to totalization, to objective knowledge and rationalism. It fights against the unity of the world, knowledge, the self and society. In fact, it sees knowledge as a human product and "a selection from a phenomenal or semiotic complexity" (Lyotard, 1984, p. 10) which we can sense by our cognition. It argues that complexity is too great to absorb, and some act of meaning and knowing must be ignored or suppressed to achieve a purpose after the text. Simply put, reality and our experience of it can be somehow seen as the product of our error and misrecognition.

In short, postmodernism is a complex philosophical movement which is involved with different counteracts to modernism in different forms. It considers truth is a myth, and reason is a dominant Euro-centric construct. Along with relativism and egalitarianism themes are voices of skepticism and rejection of metaphysics and grand theories. Yet, religious, economic and political fundamentalism with the typical example of the extreme Islamic people who are struggling against the invasion of Western cultural imperialism is trying to reassert its authority in prominence (Sim, 2005). The grand narratives that lie in these beliefs do not fade away yet. Faith turns to be the foundation in its survival. It is, therefore, probable to predict that postmodernists may find themselves in a conflict while they reject grand narratives on the one hand, but on the other they must base their reasoning on certain other fundamental explanations. In other words, postmodernism can be another grand theory.

4. Postmodernism and Education

Postmodernism rejects the perception that the main goal of education is to train students' cognitive ability for reason to produce a fully independent functioning citizen, but rather a citizen with a full social identity. Educational methods are through languages, so they must create a citizen who is sensitive to his or her racial, sexual, and class identity which is communicated via their language (Hick, 2004). It also opposes any oppression that offers benefits and priorities to "whites, males, and the rich at the expense of everyone else" (ibid., p. 17) because such a mode of education just serves the rights and interests of those in power. Therefore, education must be recast wholly with a newer focus on marginalized groups and the voices of those who have traditionally remained silent, and it should critically remind students of the historical sins and crimes of the colonial ones in authority. Students should be meanwhile taught to be receptive to different ways of knowledge ingestion. Postmodernism holds that all knowledge can be constructed in people's mind, it tends to be used not because of its truth, but rather because it is found useful (Delashmutt & Braund, 1996 cited in Nazemzadeh & Kritsonis, 2007). It also means that what is taught at school is not a mere reality but a human product of construction, so knowledge at school turns to be a matter of power or as Foucault (1977) proposes that truth has a close

association with systems of power which in turn produce truth and sustain it at their will. Postmodernism argues that knowledge has become a commodity which may then turn to be a source of conflict amongst groups and countries, and those who control knowledge hold greater political power or as Foucault (ibid.) states, society owns its regime of truth inducing regular effects of power in a circular relation. Knowledge is often seen as a product of narratives and authoritarianism. Therefore, the existence of a body of absolute truth is not encouraged, but an appropriate approach to finding out the sources of knowledge and the appreciation of why such a piece of knowledge should be learnt must be created and nurtured. Abstract concepts do not probably exist, but they in fact refer to real phenomena.

Furthermore, market liberation and free trade with the global dominance and force mould the way knowledge is produced and disseminated. Education is seen as a commodity, and students have more liberty in choosing their courses. They tend to actively choose what to study with their self-directedness, and education is deemed to be open and provisional with its mandated customer- and industry-oriented pedagogies (Barnett & Griffin, 1999). Knowledge, in other words, becomes functional when students often raise such questions as why they have to study a piece of knowledge, so educational policies must aim to place a focus on training students for social and vocational skills (Sarup, 1993). Further, students may start their education at a later stage where they have sufficient economic means and tend to choose different modes of schooling that suits their styles. Various class instruction modes and admission requirements and procedures, therefore, must be provided handful for them to choose from if a government really wishes to push socialization in education.

Due to one of the characteristics of globalization as flows or movements of people, ideas and goods (Appadurai, 1996; Christie & Sidhu, 2002; Waters, 2001), knowledge can also be transported through information technology (IT), telecommunications, and the mobility of academic staff and students. IT and global communications technologies, on the one hand, make knowledge available to those who have access to them. On the other, national and international laws on copyrights and intellectual property make it hard to retrieve information. Also, as Marginson (1999, p. 21) puts it in regard to education, these technologies facilitate the growth of market exchange in which education is defined as a corporate service that must obey the economic laws of supply and demand. IT and communications technologies speed “the translation of knowledge into transmittable information”, so knowledge becomes “saleable commodities”. The knowledge-based economy (KBE) widens the “social inequality” and “social exclusion” (Castells, 2000, p. 68), or as in Marginson's terms (1999, p. 28) “access and exclusion”, between the have and the have-not in the sense that the latter become unable to acquire sufficient education to obtain “cultural capital” (Bourdieu, 1997, p. 243) which can be used to compete for their “social status” (Marginson, 2004, p. 7).

Though modernism with its age of reason and metanarratives was applauded for optimism, rationality, a search for absolute truth in science and technology, and the assumption that reception of knowledge for the true self laid the foundation for another reception of knowledge (Ward, 2003), postmodernism rejects some scientific achievements that have brought disasters to life leading to environmental disasters and mass killing. In other words, science is believed not to be an all-time tonic. Besides, the consumerism and trading in science has caused a loss of belief in the ability to measure reality and a separation amongst professions and inter-disciplines where academic people tend to go for more and more but less and less. The reality we live in is said to be full of drawbacks of scientific establishments with which scientists have tried to create for a better life, but in views of ethics many of us have become cynical and skeptical about the unique existence of objective science or it is understandable to imply that reality is there, is just given to us by its very nature. Yet, science is made, found and used by us; i.e. it does not make us.

In regard to politics, those who are in power and want to be in power aim to both increase the utility and the use of knowledge as a source of power and conciliate the dark sides of objective science bringing to marginalized groups. Such an ambivalent approach does not become concentric in sustainable development and the pedagogical course of teaching and remaining traditionally ethical codes. Or as O'Farrell (1999) states, the reality that we are given has left us doubt in the age of reason and rationality which does not necessarily save us. Therefore, it is mandated that this reality not be given to us, yet it be made by us as mentioned earlier in this text. Such a reality where we live is seemingly a simulacrum (Baudrillard, 1988), and this loss of faith in science has laid a foundation for Lyotard (1984) to define postmodernism as a loss of faith in metanarratives which have created totalization and universalization theories that mould our reality into certain fixed ways. Education is hence charged of changing its traditional pedagogies that have fitted modern times of objective truth and science based on rationality to a new mode that fits “the reality experienced by a new generation” (Hutcheson, 1989, p. vii). The new pedagogy, in the author's view, must be based mostly on students' and society-industries' needs which may be in turn changing themselves. With global flows of people, ideas, capital and politics, students

become global citizens who will take control and may be dominated by such a force. Therefore, curricula, which on the one hand must be open and sustainable, decentralize rather than place an only focus on a hierarchy of knowledge on the other. Teaching contents must draw students to different doors to new horizons of approaching the vast space of information. Education must also pose students and administrators questions of challenging traditional assumptions of rationality, certainty and truth. Students must well be equipped with strategies to scientific inquiry methods with which they can themselves swim in the large ocean of knowledge. Such a swimmer not only knows how to swim well but is also able to gauge their ability before making the decision to swim across and understand the reason for such a decision. Further, the ends of objective science and absolute truth do not equally mean that science is spelled to its end, yet academic people start to seek for a new way to approach knowledge, or as the author believes, a deeper probe in ethical issues should be done to look into different angles of scientific inquiries to prevent their harm to life.

In addition, in view of postmodernism advances in transportation, IT and communications have brought to countries both opportunities and threats which can be considered as the dark sides of this third technological revolution. We have experienced the new times comprising of various interrelated changes on a global scale, so the ability to handle chaos and risk proactively is the required quality people should acquire to survive and develop healthily. Besides, national borders have turned to be more permeable and fragile when globalization as a process or a set of processes includes a spatial transformation in the organization of social relations and transactions (Held, McGrew, Goldblatt, & Perraton, 2000). Consequently, this new time of discontinuity urges people to come together to deal with the issues and their impacts by utilizing their own knowledge, a giant power and a dominant resource of prosperity and well-being (Marginson, 1999; Nguyen, 2000). In other words, knowledge is a necessary and sufficient condition for people in the new times to live and work effectively (Phan, 2000). One of the specific examples that education is supposed to train citizens to enter and take advantage of the process of global integration is the teaching of foreign languages (English), mathematics (statistics and probability), and computer literacy. Furthermore, education must, on the one hand, produce and maximize conditions for students' learning (Christie & Lingard, 2001; Lingard, Hayes, Mills, & Christie, 2003) to deal with unpredictability. On the other, under the influences caused by globalization, educational institutions need to be aware of social inequalities or the questions of "access and exclusion" (Marginson, 1999, p. 28), which they cannot always compensate for. They must reduce as many disadvantages as possible by providing students with two kinds of knowledge to enter the world: social and academic. Social learning builds up students' consciousness of their citizenship and civic participation, and academic learning helps engage them in understanding and applying different kinds of knowledge critically and analytically.

5. The Postmodern University

Under the influences of neoliberalism in trade and humanistic development, human beings have a demand for personal development with a wide choice of the nature of jobs and of their own instincts; universities need to diversify their courses with various modes of training suitable for a global need when the world's citizens tend to move across borders and multinational corporations tend to maximize their outsourcing. As Coffield and Williamson (1997 cited in Gilliam & Kritsonis, 2007) note, universities must stay in a close association with democratic societies and their industries to meet different soaring demands from reality. University courses, therefore, must always be innovative and meet global (global and local) demands. These courses must equip students with knowledge of its wide spectrum which they can apply in different localities and simultaneously suit in different situations. Since knowledge seems endless and cannot exist as a closed verity, university courses must equip students with the approaches to knowledge for their own edification in addition to providing core knowledge in each profession. Students should be instructed strategies to think analytically and critically in order to ingest knowledge selectively. When postmodernism holds that knowledge does not always remain objective, what is taught at universities therefore must be constructed around the matter of those who hold power and for those who wish to hold it. Students are not passive learners, but they may think education is somehow like a product used in markets and tend to maximize the satisfaction and usefulness of such a commodity. They should be trained and encouraged to understand why they have to study that kind of knowledge and know how to study most effectively. The exercises enclosed must be as authentic and realistic as a simulacrum which students will experience somewhere in their later lives. This study skill must be trained as their long-life study skill. Therefore, university courses must intermingle the training of the five quotients: IQ (Intelligence Quotient) as a necessary quotient for them to develop their academic ability, EQ (Emotion Quotient) as a sufficient quotient for them to understand and appreciate the beauty of life and external relationships, PQ (Passion Quotient) as an exceeding quotient for them to pursue their dreams and achieve their ambitions leading to successes, CQ (Curiosity Quotient) as a catalyst quotient for them to develop the other three above quotients, and AQ (Adversity Quotient)

as an elite quotient for them to overcome trouble and to excel other fellow students. The combination of the five quotients will help learners be able to draw their optimistic prospect for their future careers rather than just to cram simply for technical knowledge. Due to the diversification with a high distinction amongst students, university curricula need to be open and sustainable so that each lecturer in different localities can maximize flexibility in different times, and they can flexibly modify to transfer different kinds of knowledge in different classes. While modernist education tried to educate students for citizenship and fixed jobs, postmodernist education is believed to train them for uncomfortable uncertainties and the ability to live with chaos.

In addition, under the influences of globalization which entails flows of people and ideas, universities are mandated to provide global-adaptive knowledge to global students. As a result, delivery modes on campus and inter-campus must be conducted via an international language which until the time of writing the author believes has been the English language which again accounts for more than 95% of the world's patents. English should not be treated as a dominant language or as a discriminating feature amongst students, but it had better be a lingua franca which minimizes linguistic and technical gaps, helping academia come closer. Therefore, language training should not be started too late at tertiary level when students are preparing for their professional practice, but it should be begun at an early level besides adequate mother tongue training. Students will have a good skill in their native language to help with their work in their local contexts as well as in English for their international integration, i.e. they can use it for their overseas work and in multinational corporations. Besides, due to globalization, knowledge turns to be global itself. Knowledge is now not only produced and used at school settings, but it also appears in different forms in different contexts. As Gilliam and Kritsonis (2007) note, knowledge is too globally dispersed, and it is located almost everywhere. Students as self-managing consumers may retain the right and preference to reject the kind of knowledge that they do not find useful (Barnett & Griffin, 1999). It means that higher education quickly loses its knowledge monopoly and does not exist as an exclusive domain of experts. Knowledge consumers may possess a stronger power than universities which turn to be demanded to produce further new knowledge for their survival. Pedagogies, in other words, are requested to change their teacher-centeredness to student-driven approaches which must be responsive to industries and governmental development strategies.

As a result, universities must be a pioneering cradle in the production of new knowledge for society and human beings. Different kinds of new knowledge must be done through a process of long and careful research and be verified by leading scientists. It is noteworthy that the writer does not intend to support that there must be a distinction between theoretical knowledge and practical knowledge or to examine which considers the other as a priori (Kant, 1965). On the contrary, these two kinds of knowledge must be intermingled, and either one may come first to produce the other as theory may be created by creativity and followed by practice, and experience may produce theory. It is also noteworthy that knowledge can be seen as an exercise of power of those in power, particularly of national governments, transnational corporations and international organizations who want to enforce educational institutions to produce efficient and knowledge workers to generate scientific research outputs resulting in marketable technological products (Gilliam & Kritsonis, 2007). Consequently, though embedded with its political quality, knowledge should not entail cultural, ethnic prejudices and high slavery dependence on technologies. Instead, new knowledge had better remain purely objective in natural sciences and humanistic in social sciences. Students should be shown how to appreciate the difference and how to live with complexity rather than just criticize and discriminate differences and then become their victims.

Again, higher education is now charged with the responsibility to transmit and produce knowledge for society. On the one hand, lecturers are mandated to create and search for different sources of new knowledge as requested by economic requirements from markets and they may become part-time teachers and full-time researchers (Gilliam & Kritsonis, 2007). Together with autonomy in university management in terms of finance, curricula, assessment etc. granted by governments, traditional types of universities are now changing their jobs, facing more "multiple missions, multiple responsibilities, multiple demands, and hence open to multiple criticisms" (Lincoln, 1998, p. 2 cited *ibid.*). Universities administrators must be proactive in designing strategic plans for their sustainable survival, and according to Baudrillard (1994), the borders between universities and other stake holders such as governments and multiple organizations seem to be fragile. In addition, the KBE causes the workforce to move from industrial production to service industries and from the centrality of work to the centrality of consumption (Nazemzadeh & Kritsonis, 2007). Therefore, universities must not always operate as a separate sector in society, but they should stay as an active circuit in the larger social network, responding to change and creating change for their surrounding environment. On the other, it is important for lecturers to show students how to establish their own effective and learning strategies. Socio-economic changes have created pressure on universities to educate students for service jobs and vocational skills. Besides technical training for a

number of students, higher education is supposed to train another number of students the ability to become prospective independent researchers in many aspects of profession such as doing action research in their everyday work lives or even in nation-scale projects. Students must have the ability to sense and appreciate the good and beauty in life, and they must also be aware of what to study for what purpose, why and how to study.

The three traditional domains of educational activities, which include cognitive, affective, and psychomotor learning (Bloom, Mesia, & Krathwohl, 1964), are still insisted in education in the new times as “the goals of the training process” (Linn & Gronlund, 1995, p. 32). Higher education is expected to produce a more responsive intellectual workforce who can thrive and excel in a constantly changing environment in the new times. Therefore, Schon (1995, p. 27) is reasonable when pointing out that knowledge embedded in higher education should be not only “school knowledge” contained in curricula, held in the mind of teachers, and communicated by instructions to students. Instead, it must be built around a socio-constructivist conception of knowledge which is academic, practical and critical. This kind of knowledge should also be shared on a collaborative basis and constantly questioned, assessed, transformed, and managed scientifically since according to Proenza (2000, p. 2), in this increasingly complex and interdependent world, finding solutions to certain problems requires “shared knowledge and understanding, and also shared commitment among all peoples of the world.” As a consequence, lecturers must be constantly encouraged to volunteer in doing research and upgrade their specialization, and they must learn to accept that universities could be a battle for knowledge debates amongst different participants who could come from outside university settings. Universities, therefore, should not seek the unity of culture and consensus of communal communication (Delanty, 2001), but accept to challenge themselves to criticisms. Knowledge from universities has both lost its ivory power and broken its science-exclusive preserving border.

University education has stepped into a new discourse full of economic concepts such as accountability, cost-effectiveness, performance indicators and quality assurance (Coaldrake & Stedman, 1999). Changes in funding policies, especially in higher education with more autonomy in managing finance and in technology create more international competition and mobility (Girdwood, 1997; Mok & Lee, 2003). Higher educational institutions tend not to stay fixed within their national or regional boundaries, but open doors to recruit international students and international stake holders. Simultaneously they are both disruptively and positively influenced by media, and they are viewed as necessary for the development of economic globalism and global consumerism (Carnoy & Rhoten, 2002). Driven by this fact, it is therefore alerted that some universities market themselves as “knowledge enterprises” (Currie, 1998, p.15) which utilize marketing and managerial skills and strategies to attract international students. Many universities tend to advertise their “names” by offering sponsorships, doing charity work, and offer local authorities attractive incentives to run offshore programs. This is the process of commodification in education and the attempts to “sell” and/or “consume” available knowledge products in lucrative markets.

Finally, in the era of global neo-liberalism, the proliferation of universities benefit those with economic capital to guarantee positional and social advantage (Ball, 2002) by obtaining better education. The belief that educational institutions can choose students, and students can choose a place to study as students choose what to study on the basis of personal desire and market demands (Trnavcevic, 2004) may not always be appropriate. Although it is widely accepted that universities have certain entrance requirements, priorities and tuition structures to choose students, under the influence of neo-liberal market where privatization becomes dominant in economic activities (Hill, 2003), economic competition becomes the base to maximize their economic bottom line (Marginson, 2004). Some universities are run to maximize shareholders’ profits and tend to recruit many students. This leads to the situation where there are many bogus foreign universities which are not accredited or licensed by local authorities. Those who are not well informed have to suffer from both financial and time losses. In other words, as Hill (2003) puts it in relation to marketization in education, markets exacerbate existing inequalities. Therefore, the postmodern university must itself judge its performance on a set of unanimous ethical codes of conduct which is worth taking some space in another article.

6. Conclusion

In a nutshell, postmodernism has created a different place full of uncertainty, instability, ambiguity and contradiction in higher education in which education is seen as a commodity for student-consumers to choose. Such a personal choice similarly remains as an individual choice for tertiary institutions to operate with full autonomy which governments charge them of. The refusal of grand narratives and the favour of little narratives seem to turn themselves to another great story in which it is believed that knowledge may be decided to be true in consumers’ point of view. There seems to be no centre in the central hierarchy of scholarship, but as consumerism stands for its reason, common tradition of knowledge has turned to be pluralistic scholarship where marginalized cultures and voices could well be included in diversified forms of knowledge delivery. Further,

knowledge consumed as a commodity and its providers begin to change their types of products to tailor students' values and interests, yet they are still fostering a cultural-political understanding of those in authority for their social and political stability in existence. In the author's mind, the collapse of the absolute truth and objective knowledge ivories has, on the one hand, helped students become suitable and fit in their social advancement, and on the other prepared them for a democratic and just society. In other words, postmodern education should be diverse first in its objectives and processes and then in its operational structures (Edwards & Usher, 1994) in order to produce responsive knowledge workers for global civic participation in a decentering market. Postmodernism stays as a fluid concept which is neither completely right nor wrong. The postmodern university in its local standing must go with such a flow to reach a global market and it is now tasked to give a more humanistic meaning to its education delivery quality.

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Language Learning Strategies and Its Training Model

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Abstract

This paper summarizes and reviews the literature regarding language learning strategies and its training model, pointing out the significance of language learning strategies to EFL learners and an applicable and effective language learning strategies training model, which is beneficial both to EFL learners and instructors, is badly needed.

Keywords: Language learning strategies, Classification, Training model

1. Introduction

According to Oxford (1989), language learning strategies are behaviors or actions which learners use to make language learning more successful, self-directed and enjoyable. And Stern (1983), had noted that learning outcomes are much influenced by learning process, and the learning process is affected by the learners' internal characteristics and learning conditions. So the studies on language learning strategies have been of great significance. Although this area might hold much promise, it is still in its infancy.

2. Classification of Language Learning Strategies

Many scholars had attempted to classify learning strategies. Comprehensive classification schemes of learner strategies have been developed to describe the information derived from descriptive studies that seek to chart the subtle permutations and often imprecise definitions of learners' self-reported strategies. Earlier researchers used their own observations to describe language learning strategies, relied on categories derived from research in first language contexts, or developed a comprehensive list of learning strategies derived from many sources. More recently, strategy identification and classification have been data-driven through think-aloud protocol analysis. (Chamot 2004)

2.1 Wenden's Classification

Wenden's (1983) research examined the strategies that adult foreign language learners use in order to direct their own learning. Wenden's focus, therefore, is on what O'Malley and Chamot call meta-cognitive strategies. She identifies the following three general categories of self-directing strategies:

- (1) Knowing about language and relating to what language and language learning involves;
- (2) Planning relating to the 'what' and 'how' of language learning;
- (3) Self-evaluation. It relates to progress in learning and learner's responses to the learning experience. Wenden's framework was considered as a basis for the later EFL learner's training.

2.2 Dansereau's Classification

Dansereau (1985) draws a distinction between a primary strategy and support strategies, the former is used to directly manage learning materials, and the latter helps to establish an appropriate learning attitude and therefore aids in coping with distractions, fatigue and frustrations. Later Oxford suggested two broad categories paralleling Dansereau's primary strategies and support strategies.

2.3 Rubin's Classification

According to the criteria of whether the strategy contributes directly or indirectly to learning, Rubin proposed a classification scheme that subsumes learning strategies under two primary groupings and a number of subgroups. She describes a typology of three major kinds of strategies: learning, (interactive) communication, and social strategies. Learner strategies "contribute to the development of the language system...and affect learning directly" (Rubin 1987:23). Language learning strategies are further categorized in cognitive and meta-cognitive strategies, which directly affect the development of the language system constructed by the learner. Rubin's

cognitive strategies include: clarification/verification, guessing/inductive inferencing, deductive reasoning, practice (e.g. repetition, rehearsal, experimentation, application of rules, imitation, attention to detail), memorization, and monitoring. Meta-cognitive strategies involve various processes such as planning, prioritizing, setting goals, and self-management. Communication strategies are less directly related to language learning since they focus on the process of participating in a conversation and getting the speaker understood or clarifying his original intention. Social strategies, which contribute indirectly to language learning, are described by Rubin as activities affording them opportunities to be exposed to and practice their knowledge. They include: questions to fellow students/teachers/native speakers, initiating conversations, listening to L2 media etc.

2.4 Oxford's Classification

A distinction is drawn between direct and indirect strategies by Oxford (1990). Jones (1998) believes that Oxford has developed a system of language learning strategies that is more comprehensive and detailed than earlier classification models. However, as Oxford herself concedes, there is no agreement on the basic definitions of the terms 'direct' and 'indirect', nor on "exactly what strategies are; how many strategies exist; how they should be defined, demarcated, and categorized".

Direct strategies, which "involve direct learning and use of the subject matter, in this case a new language" are subdivided into three groups: memory strategies, cognitive strategies and compensation strategies; Indirect language learning strategies, which "contribute indirectly but powerfully to learning", are also subdivided into three groups: meta-cognitive strategies, affective strategies and social strategies. According to Oxford (1990), memory strategies such as creating mental linkages and employing actions, aid in entering information into long-term memory and retrieving information when needed for communication. Cognitive strategies, such as analyzing and reasoning, are used for forming and revising internal mental modes and receiving and producing messages in the target language. Compensation strategies, such as guessing unknown words while listening and reading or using circumlocution in speaking and writing, are used by learners when a language task is beyond their reach, to make up for their incompetence in the target language so as to continue the communication. Meta-cognitive strategies help learners to regulate their learning through planning, arranging, focusing, and evaluating their own learning process. Affective strategies enable learners to control feelings such as confidence, motivations, and attitudes related to language learning. Social strategies, such as asking questions and cooperation with others, facilitate interaction with others, often in a discourse situation.

Although many factors might influence the degree to which and the way in which language learners use specific strategies, generally speaking, they will apply all the different strategies depending on their cultural and ethnic background, personality, gender, proficiency, language learning purpose, cognitive style, the task at hand, etc. And all these types of strategies are important to good language learning. Thus, it is acknowledged that an understanding and awareness of learner strategies on the part of both teacher and students may provide valuable insights into the process of language learning. This, in turn, may enable individual learners to adopt or further develop a range of effective language learning strategies, and may encourage teachers to incorporate their active use in regular class. As Oxford (1990) put it, "strategies are especially important for language learning because they are tools for active, self-directed involvement, which is essential for developing communicative competence."

2.5 O'Malley's Classification

O'Malley and Chamot's (1990) classification emerged from interviews with experts and novices and theoretical analyses of reading comprehension and problem solving. And language learning strategies are differentiated into the three primary categories cognitive, meta-cognitive and affective or social strategies:

In their opinion, meta-cognitive strategies involve "knowing about learning and controlling learning through planning (including advance organizers, directed attention, functional planning, selective attention and self-management), monitoring (checking, verifying, or correcting one's comprehension or performance in the course of language task) and evaluating the learning activity (checking the outcomes of one's own language learning against a standard after it has been completed)". Cognitive strategies involve the manipulation or transformation of the material to be learned, such as resourcing, repetition, grouping, deduction, imagery, auditory representation, key word method, elaboration, transfer, inferencing, note taking, summarizing, recombination and translation. And Social/affective strategies mainly involve the learner in communicative interaction with another person, for example, when collaborating with peers in problem-solving exercises.

2.6 Cohen's Classification

According to Cohen (2000), language learning and language use strategies are defined as processes which are consciously selected by learners. Language learning strategies, which are used with an explicit goal of improving learner knowledge of given language, are composed of cognitive strategies, meta-cognitive strategies, affective

strategies and social strategies. While language use strategies, which include retrieval strategies, rehearsal strategies, cover strategies, and communication strategies, focus primarily on helping students utilize the language as much as possible. This may result in actions that enhance the learning or use of a second or foreign language, through the storage, retention, recall, and application of information in or about the target language.

Meta-cognitive strategies deal with pre-assessment and preplanning, on-line planning and evaluation, and post-evaluation of language learning activities and of language use events. Such strategies allow learners to control their cognition by coordinating the planning, organizing, and evaluating of the learning process. Cognitive strategies encompass the language learning strategies of identification, grouping, retention, and storage of language material, as well as the language use strategies of retrieval, rehearsal, and comprehension or production of words, phrases, and other elements of the second language. Affective strategies serve to regulate emotions, motivation, and attitudes, for instance, strategies for reduction of anxiety and for self-encouragement. Social strategies include the actions which learners choose to take in order to interact with other learners and with native speakers, such as clarification and cooperation. Retrieval strategies refer to the strategies helping to call up language material from storage, through whatever memory searching strategies the learner can muster, like the keyword mnemonic. Rehearsal strategies stand for strategies for rehearsing target language structures, which are employed for the purpose of practicing the target language structures. Cover strategies are compensatory or coping strategies that learners use to cover their lack of the language competence or create the impression that they have control over material when they do not. Simplification and complexification are typical examples of cover strategies (Cohen, 2000).

3. Training Model of Language Learning Strategies

Rubin (1981) claims that the strategies are not the preserve of highly capable individuals, but could be learned by others. O'Malley et al. (1994) also states that the learning strategies of good language learners, once identified and successfully taught to less competent learners, could have considerable potential for enhancing the development of second language skills; and that second language teachers could play an active and valuable role by teaching students how to apply learning strategies to varied language activities and how to extend the strategies to new tasks both in the language classroom and in content areas requiring language skills. With the development of strategy training, researchers have probed and tested various models for strategy training.

3.1 Pearson & Dole's Model

Pearson & Dole (1987) design one strategy training model for L1 learners. It advocates that teachers first give students the explanation of the benefits of applying a specific strategy and the modeling, which is followed by students transferring the strategy to new environment. Students may better understand the applications of the various strategies if they are first modeled by the teacher and then practiced individually. After some strategies have been introduced and practiced, the teacher can further encourage independent strategy use and promote learners' autonomy. Pearson and Dole's model includes the following sequences (Cohen, 1998):

- (1) Introduction to the target strategy through examples. The teacher exposes the students to examples and discusses with them how, when, where and why the strategy is used;
- (2) Definition and explanation. The strategy is defined and its application is demonstrated with the teacher modeling;
- (3) Guided practice. The teacher and students do exercises together in order that the students can do independent practices;
- (4) Independent practices. The students do the same type of exercises independently.

Pearson & Dole's model cast some lights on learning strategy training, however, this model is narrowed down on one simple strategy or skill, and thus, it's hard to develop students' problem-solving competence in complex and authentic learning tasks.

3.2 Oxford's Model

Oxford's Model (1990) has many strong points. It is carried out step by step in the following procedure:

- (1) Learners are asked to immerse into an authentic language task without instructional cues;
- (2) Suggest and demonstrate other helpful strategies, mentioning the need for greater self-direction and expected benefits, and making sure that the students are aware of the rationale for strategy use;
- (3) Allow learners plenty of time to practice the new strategies with language tasks and show how the strategies can be transferred to other tasks;
- (4) Provide practice using the techniques with new tasks and allow learners to make choices about the strategies

they will use to complete the language learning tasks;

(5) Help students understand how to evaluate the success of their strategy use and to gauge their progress as more responsible and self-directed learners.

Generally, this model is flexible in terms of procedure, in other words, each step can be modified or rearranged in different orders for different needs and intentions. But the weak point of this model is it is hard to be inserted into a regular classroom program.

3.3 Chamot's Model

The Cognitive Academic Language Learning Approach (CALLA) is investigated by Chamot and O'Malley. It is designed to develop the academic language skills of the students with limited English proficiency. Since their first proposal of this approach in 1986, Chamot and O'Malley have continuously been working on the model, enlarging and refining it. This model integrates academic language development, content area instruction and explicit instruction in learning strategies for both content and language acquisition. The CALLA (Chamot, 2005; Chamot et al., 1999) model is composed of six steps, namely:

(1) Preparation. In this stage, the teacher identifies students' current learning strategies for familiar tasks, such as recalling their prior knowledge, previewing the key vocabulary and concepts to be introduced to the lesson;

(2) Presentation. In this stage, the teacher models, names, explains new strategy; asks students if and how they have used it, such as selective attention, self-monitoring, inference, elaboration, imagery and note-taking strategies;

(3) Practice. In this stage, the students practice new strategy; in subsequent strategy practice, the teacher fades reminders to encourage independent strategy use by being asked to check their language production, plan to develop an oral or written report or classify concepts;

(4) Evaluation. In this phase, the students evaluate their own strategy use immediately after practice, determining the effectiveness of their own learning by summarizing or giving a self-talk, either cooperatively or individually;

(5) Expansion activities. In this phase, the students transfer the strategies to new tasks, combine strategies into clusters, develop repertoire of preferred strategies and integrate them into their existing knowledge frameworks.

(6) Assessment. In this stage, the teacher assesses the students' use of strategies and impact on performance.

Chamot's model integrates strategy learning into the content-based and academic activities, which reflects the philosophy in language learning and teaching. The CALLA model is recursive rather than linear so that teachers and students always have the option of revisiting prior instructional phases as needed (Chamot, 2005) and useful for language learners of different levels, which has been considered as a guide for implementing a whole-language or language-across-curriculum approach to instruction, and undoubtedly it has been applied in the EFL classroom program.

3.4 Cohen's model

Cohen's (1998) Styles and Strategies-Based Instruction Model (SSBI) is a learner-centered approach, which includes both explicit and implicit integration of strategies into the course content. Generally speaking, in a SSBI Model, the teachers usually play the following roles:

(1) Teacher as diagnostician. The teacher helps the students identify current strategies and learning styles

(2) Teacher as language learner. The teacher shares own learning experiences and thinking processes.

(3) Teacher as learner trainer. The teacher trains the students how to use learning strategies.

(4) Teacher as coordinator. The teacher supervises students' study plans and monitors difficulties

(5) Teacher as coach. The teacher provides on going guidance on students' progress.

Comparatively speaking, Cohen's model describes and prescribes what a teacher should do in a regular EFL classroom. It provides more flexibility for teachers to explicitly and implicitly embed the language strategies training into regular classroom program. And it makes more sense in the context of student-centered EFL instruction. Many experimental or non-experimental strategies training researches on cognitive and meta-cognitive strategies training adopt this model.

3.5 Grenfell and Harris's model

Grenfell and Harris (1999) developed a model of language learning strategies instruction as the following:

(1) Awareness raising. The students complete a task, and then identify the strategies they used.

(2) Modeling. The teacher models, discusses the value of new strategy, makes checklist of strategies for later use.

- (3) General practice. The students practice new strategies with different tasks.
- (4) Action planning. The students set goals and choose strategies to attain those goals.
- (5) Focused practice. The students carry out action plan using selected strategies; the teacher fades prompts so that students use strategies automatically.
- (6) Evaluation. The teacher and students evaluate success of action plan; set new goals; cycle begins again.

In summary, all the above-mentioned models share a number of common features stressing on the importance of developing students' meta-cognitive understanding of the value of learning strategies and it can be facilitated by teacher's demonstration and modeling. Though practicing and evaluating, the strategies get internalized and automatized and then being transferred to solve new tasks.

4. Conclusion

Researches into what learners do to solve language learning problems have resulted in the identification of specific strategies and attempts to classify them according to various criteria. Different researchers have labeled different learning behaviors out of different considerations. Although considerable headway has undoubtedly been made, language learning strategies classification systems clearly need further development and standardization. In particular, an applicable and effective language learning strategies training model, which is beneficial both to EFL learners and instructors, is demanded.

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Analysis of Students' Error in Learning of Quadratic Equations

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Abstract

The purpose of the study was to determine the students' error in learning quadratic equation. The samples were 30 from three students from a secondary school in Jambi, Indonesia. Diagnostic test was used as the instrument of this study that included three components: factorization, completing the square and quadratic formula. Diagnostic interview was also used to identify at which level students' errors occur in solving problems. The type of error is based on Newman Error Hierarchy Model that includes reading type error, comprehension, transformation, process skill, and encoding error. Data was analyzed using descriptive statistics: percentage and frequency. The findings showed that most students make error in transformation and process skill in solving quadratic equations. There was no error found in reading. The number of students who made encoding error and carelessness was small. The students' error in solving quadratic equation was due to their weaknesses in mastering topics such as algebra, fractions, negative numbers and algebraic expansions.

Keywords: Quadratic equation, Comprehension error, Transformation error, Process skill error

1. Introduction

Problems that arise within the education system are very complex, including the problems associated with mathematics. Mathematics is the basic knowledge needed by students to extend their learning to a higher level. Even mathematics is required in our daily lives, regardless of educational background and social life. The benefit of mathematics is not only limited to knowledge in computation, but more important, when each individual can master mathematics well, then their pattern of thinking is more rational and critical. The principles of mathematics enable people to see the problems as facts not as fiction (Hudoyo, 1998).

National Council of Teachers of Mathematics (2000) has emphasized the goal of mathematics education reform is to produce students who are skilled in resolving problems, in addition to fostering attitudes, interests and a high motivation towards mathematics. Students should be exposed to skills in interpreting problems, planning solutions strategy, implementation of plan and rechecking of answers. In order for the students to think mathematically, students should be exposed to various strategies of problem solving by doing each step carefully, and systematically.

Error in solving mathematical problems often occurs either in writing, or orally. During the process of teaching and learning mathematics, students will face many obstacles because problem solving in mathematics is a skill that is very complex. Sometimes students know how to answer the question stated, but careless in computation. According to reports of the Third International Mathematics and Science Study (TIMSS, 1999), Indonesian students ranked 34th out of 38 countries at the international level. It shows mastery of mathematics among students in Indonesia as a whole is still weak. This weakness may be due to the learning process that focus more on rote learning, involves less group work, interaction and communication. The mastery of basic mathematical knowledge is essential in concept development. Without a clear understanding of basic concepts and skills learned in the early stages, will result in the learning process becomes more difficult at the next stage. This occurs because the learning process in mathematics is categorized as hierarchical learning process (Liew & Wan Muhammad, 1991). Mathematical concepts are interrelated with one another.

The result of National Evaluation of Learning Study (EBTANAS, 2007) for 2001 to 2007 in Jambi Province for the subjects of mathematics is still very low. The report by the Education Ministry of the State of Jambi (Dinas Pendidikan Propinsi Jambi) has shown that the performance is still low and has not yet achieved the target. There are many errors performed by the students particularly in solving quadratic equations. Most errors are found in solving quadratic equations as compared to other topics. The reason of the occurrence of the errors is because students have difficulty in solving quadratic equations. A study by Clarkson (1991) found that comprehension errors make up a high proportion of the errors made when students attempt to solve mathematical word problems. However, Norasiah (2002) found that most students in her study made comprehension and process skill errors. Findings by Noraishiyah (2002) revealed that process skill errors are the most common.

The conceptual framework that is used in this study is based on Newman Error Hierarchical Model. The model of error investigation proposed by Newman (1997) has proved to be a reliable model for mathematics teachers. The framework has six types of errors: reading error, comprehension, transformation, process skill, encoding error and carelessness. The Newman Error Hierarchical Model is suitable to be used in identifying students' error in mathematics. This model has the hierarchy that classifies types of error based on the problem solving level done by students. According to Clements and Ellerton (1996), Newman used the word "hierarchy" because she reasoned that failure at any level of the sequence prevents students from obtaining satisfactory solutions. Prakitipong and Nakamura (2006) pointed out, in the process of problem solving there are two kinds of obstacle that hinder students from arriving at correct answers:

- (a) Problems in linguistics fluency and conceptual understanding that correspond with level of simple reading and understanding meaning of problems, and
- (b) Problems in mathematical processing that consists of transformation, process skills, and encoding answers.

This classification implies that the students have to interpret the meaning of the question before they proceed to mathematical processing to obtain appropriate answer.

The outcome of the written students' work in their test will be evaluated according to the type of error in Newman Error Hierarchical Model based on the first breakdown point. The conceptual framework is shown in Figure 1

2. Purpose and Objective of the study

The purpose of this study was to analyze students' error in learning quadratic equations which focused on subtopics such as factorization, completing the square and quadratic formula. The following are the objectives of the study:

- a) to determine the type of students' error in using factorization
- b) to determine the type of students' error in using completing the square method.
- c) to determine the type of students' error in using quadratic formula.

3. Methodology

This study is a case study that used a survey method. The respondents were 30 Form Three students from a secondary school in Jambi, Indonesia. The justification of selecting these students as respondents are as follows i) easy access to school, ii) has a situation that is rich in process and sample iii) the researchers can develop a close relationship with the sample, thus the quality and credibility of research data will be more secured.

3.1 Instrumentation

The study used a set of test question to identify type of students' error. The researcher developed all the items and made some modifications. The final instrument with 16 items has three subtopics: factorization, completing the square and quadratic formula. The Cronbach alpha reliability coefficient of the instrument is 0.83. The discrimination index is more than 0.3. Therefore, all items of the instruments are acceptable as good item (Abd Rashid & Siti Rahayah, 2001).

The subtopic of factorization has 6 questions, 5 questions for completing the square and 5 questions for quadratic formula. The researcher also interviewed the respondent. The interview procedure was based on a modified Newman Error Hierarchical Model and it was conducted if the respondent failed to answer correctly in their written test. If they managed to get the answer correct for the second time then the first error that they make would be considered as carelessness. If the answer was wrong again for the second time then the students were required to read the question and explained what is required by the question. They were also asked to interpret

the quadratic problem, perform operation and write the answer. Table 1 below shows the number of items according to subtopics and the tested skills.

The researcher referred the instrument to two experts who were mathematics teachers who have more than 17 years experience in teaching mathematics in order to check the validity of the instrument. Any inappropriate items were modified as suggested by the experts in order to suit with the purpose of the study.

Respondent were interviewed based on Newman interview procedure. The following are the questions of the interview:

- i) Can you read the problem? (Reading level)
- ii) What does the question ask you to do? (Comprehension level)
- iii) What do you use to solve the question? (Transformation level)
- iv) Can you show me the working steps that you have used in order to find the answer? (Process Skills)
- v) Tell me what is your answer? (Encoding)

4. Results

The respondent's profile according to gender and their achievement is represented in Table 2 below. As shown in Table 2, the students are grouped in three different category of achievement: low, medium and high. The school has classified students' achievement based on placement test. Three (3) male and four (4) female students belong to high category, the medium category has 5 males and 7 females and the low category has 6 males and 5 females.

4.1 Type of Error in Using Factorization

For item 1 to 6, most type of error made by students in using factorization to determine the root of a quadratic equation were transformation errors followed by process skill errors. The details of the error type based on item are shown in Table 3.

4.2 Type of Error in Using Completing the Square Method

For item 7 to 11, there are a total of 16 comprehension error, 46 transformation error, 55 process skill error, 4 encoding error and 1 carelessness. Most type of errors made by students were process skill errors. The details of the error made according to their type are shown in Table 4.

4.3 Type of Error in Solving Quadratics Equation Using Quadratic Formula

For item 12 to 16, there are a total of 8 comprehension error, 55 transformation error, 71 process skill error, 2 encoding error and 3 carelessness. In solving quadratics equation using quadratic formula, it was found that most students made process skill errors. The details of the error made according to their type are shown in Table 5. The findings of this study conclude that the error made in learning quadratic equations consist of error in comprehension, transformation, process skill, encoding and carelessness. However, most of the errors made were transformation and the process skill errors.

5. Discussion

5.1 Type of error in using factorization

The most frequent errors made by student in using factorization include comprehension error, transformation error and process skill error. They have problem in the meaning of the word root. Most comprehension errors occur when students do not understand the terms used. Students' often misunderstood what the question wants. This weakness is probably due to the lack of emphasize by teachers in teaching the factorization method. Teachers must ensure that the teaching of mathematical concepts must be balanced with the arithmetic skills. The findings of the study are supported by the research of Intanku (2003), Norasiah (2002), Rahim (1997) and Roslina (1997). They agreed that students always make error in understanding the terms used since the mathematical terminology is being ignored.

The error type in transformation occurred during computation process especially during multiplication. This takes place due to computation problem especially among low achievers. Based on Norasiah (2002), most students make error at the process skill level especially in the expansion of quadratics expression. In computation, the students make mistake in positive and negative sign when developing algebraic expressions. Errors also occur when replacing value that has a negative sign. The findings of the study support the research of Norasiah (2002), Roslina (1997) and Parish & Ludwig (1994) that most low and average students face difficulty in factorization and simplifying algebraic expressions as well as performing algebraic operations.

5.2 Type of error in completing the square

In completing the square, students have shown the tendency to make error in transformation and process skill. This error occurs because students failed to understand and describe what is required by the questions. Most students did not manage to perform the completing the square method. This results in failure to solve the problems. Results of this study concurred with the findings of Norasiah (2002) and Rahim (1997), in which problematic students failed to translate mathematical problems into mathematical form and also having problem understanding the special terms in mathematics. This failure may be caused by lack of emphasis by teachers on understanding the language of mathematics and the skills needed by the students. This may also result from the failure or inability of teachers to ensure that every student master the basic skills before moving to new topics. Graham et al. (1999) concluded that the learning of mathematics at the early stage should focus on the development of concept in order to prepare for learning of advance concept at the higher level. This type of transformation error occurs when the students failed to see carefully and clearly what is required by the questions. As a result, they write the answers that are not suitable with concepts and method that they have learnt.

5.3 Type of error in Solving Quadratics Equation Using Quadratic Formula

Transformation errors and process skill errors are the most errors found among students in solving quadratics equation using quadratic formula. The students have problem in computation and applying the quadratic formula. Examples of process skills errors committed by students involve the operation of addition, subtraction, multiplication and division. At the same time students also experienced difficulties in replacing the positive and negative sign, resulting in errors in using the formula. Although there are some other errors in solving quadratic equations such as carelessness and encoding errors, the number of errors are small. Results of this study are in line with the research findings of Liew and Wan Muhammad (1991). The emphasis on algorithmic skills without explanation on the concept or principle are the factors that cause difficulties in mathematics.

6. Conclusion

The results of this study revealed that most error are transformation errors and process skills errors. Research on analysis of students' error in solving quadratic equations will be of most benefit to teachers in secondary mathematics. The analysis of each student's problem will enable the teachers to plan their teaching effectively and meaningful. Based on the analysis, teachers will identify the roots of the problems in students' learning. As a result, the outcome of the research can be shared with their colleagues in order to solve the students' problem. This study will also help mathematics educators get information on the students' problem in mathematics learning. In order to counter students' problem, teachers should be well prepared and be able to conduct analysis on students learning. The findings of this study can be as a reference for teachers to find alternative ways in solving students' problem especially in solving quadratic equations.

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Table 1. Number of Items According to Skills

Subtopic	Skill	Item Number	Number of Item
Factorization	Determine the root of quadratic equation using factorization	1 - 6	6
Completing the square	Solving quadratic equation using completing the square method	7 - 11	5
Quadratic formula	Solving quadratic equation using a formula	12 - 16	5

Table 2. Respondent's Profile

Profile	Category	Frequency	Percentage (%)
Gender	Male	14	46.7
	Female	16	53.3
Achievement Male	Low	6	20.00
	Medium	5	16.67
	High	3	10.00
Female	Low	5	16.67
	Medium	7	23.33
	High	4	13.33

Table 3. Type of Error in Factorization

Item	Frequency of Error				
	Reading	Comprehension	Transformation	Process Skill	Encoding
1		3	5	8	4
2		5	13	9	3
3		3	17	10	
4		5	13	11	
5		2	12	9	
6			16	14	6
Total		18	76	61	13

Table 4. Type of Error in Completing the Square

Item	Frequency of Error				
	Reading	Comprehension	Transformation	Process Skill	Encoding
7		2	4	7	1
8		3	7	6	3
9		2	9	11	
10		4	11	14	
11		5	15	17	
Total		16	46	55	4

Table 5. Type of error in solving quadratics equation using quadratic formula

Item	Frequency of Error				
	Reading	Comprehension	Transformation	Process Skill	Encoding
12		3	7	12	2
13		2	9	11	
14		1	10	20	
15		2	12	15	
16			17	13	
Total		8	55	71	2

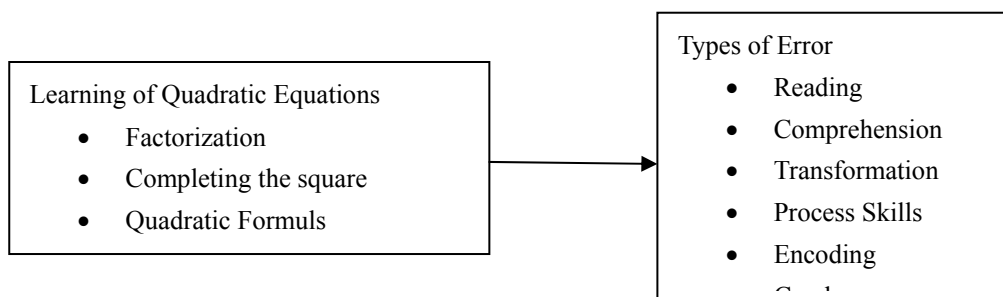


Figure 1. Conceptual Framework of the study.

Resilience and Risk

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Abstract

In the age of the human Genome Project wide spread prodigious information technology, our system of education is unable to keep pace with and meet the demands for knowledge, skills, and identification and treatment of academic, emotional, social, mental and health concerns of our youth. As the Saskatchewan task force on the state of education in Saskatchewan, Canada (1999) noted, the educational system's problems mirror those problems found in society in general. Increasingly, these societal problems are being deferred to the educational institutions for identification, treatment and prevention. While all parties tend to agree that prevention of problems is desirable, there is not general agreement about the efficacy of prevention programs rather than deficit models, nor the means by which to develop resilient students. The purpose of this paper is to identify risk factors and their potency, to identify protective or resilient factors and their potency, to identify the relationship and relevancy of these two concepts for students, and to identify family, community and school practices that foster resiliency.

Keywords: Risk, Risk factors, Resilience, Protective factors

The purpose of this paper is to identify risk factors and their potency, to identify protective or resilient factors and their potency, and to identify their relevancy and relationship to students with learning difficulties and to identify family, community and school practices that foster resiliency. In the age of the Human Genome Project and widespread information technology, our system of education is scrambling to keep pace with and meet the demands for, knowledge, skills, and identification and treatment of academic, emotional, social, mental and health concerns of our youth. As the Saskatchewan task force on the state of education in Saskatchewan, Canada (1999) noted the educational system's problems mirror those problems found in society in general. Increasingly, these societal problems are being deferred to the educational institutions for identification, treatment and prevention. While all parties tend to agree that prevention of problems is desirable, there is not general agreement about the efficacy of prevention programs rather than deficit models, nor the means by which to develop resilient students.

Describing children as being "at risk" is a means of predicting vulnerability or risk for a wide range of negative outcomes, such as school failure, dropping out of school, poverty, drug abuse, delinquency, crime, violence, unemployment, divorce, ill health and early death (Silberg, Rutter, D'Onofrio and Eaves (2003)). West and Farrington (1973), in their study of juvenile delinquent boys, determined that the most potent risk factors for delinquency were low family income, large family size, parental criminality, low intelligence and poor parenting. In the year 2010, it is disheartening to note that these same risk factors are on the rise and causing our children to be vulnerable to failure in school and in life, despite widespread efforts on the part of the educational system to address risks and provide interventions.

Adolescence is often a time of rebellion and significant physical and psychological changes (Kerr & Stattin, 2000). Kazdin (1993) and Crocker & Crouter (1995) estimate that one-half of America's youth at some point in time experiences a turbulent path. Risk-taking behaviours, those activities or behaviours that are detrimental to the health and well-being of youth, frequently are part of this turmoil (Lamb, 1992). It is generally accepted that problem behaviours are undesirable in society and cause negative outcomes that adolescent problem behaviour accounts for half of the illness experienced during these years (Kerr & Stattin, 2000; Donovan & Jessor, 1985;). Youth today are more likely to participate in risky activities that intensify their probability for lifelong disability or death (Carnegie Council on Adolescent Development, 1995). Duos (1990) used the term "new morbidities" to highlight the seriousness of possible consequences as a result of adolescent problem behaviour, with reference to three particularly erratic behaviours: substance abuse, early unprotected sexual activity and youth violence. The American Academy of Pediatrics (2001) and Huggerty (1984) referred to the "new morbidity" as a group of health problems for children and youth that are now more observed than the causes of traditional morbidity. In addition to disease and injury, biological, psychological and sociological factors that can have a substantial impact on the emotional, developmental and

learning potential of children and youth are identified. Poverty, lack of prenatal care, disruptive or dysfunctional home life, child abuse and neglect are among the factors of the new morbidity.

Poverty is the number one indicator of the many variables that increase the risk of disability (Fujiura & Yamaki, 2000; Seelman & Sweeney, 1995). The enlarged world of disability is a result of such things as violence and abuse, aging, substance abuse and stress, inadequate prenatal care, low birth weight, adolescent pregnancy and child rearing, poor nutrition, environmental/toxic exposures such as alcohol, smoking, drug abuse and lead, sexually transmitted diseases, including pediatric HIV and Aids, injuries and child abuse and neglect (Seelman & Sweeney, 1995; American Academy of Pediatrics (2001).

Poverty acts as a catalyst for many of the variables that increase an individual's risk of failure or disability. Insufficient prenatal care, single teenage pregnancy, poor nutrition and low educational status are frequently found among the poor. This population of poor people is comprised mainly of women and children. Currently, slightly more than half of all people living in Canada are women or female children. Women make up the large majority of single parents and continue to make up a disproportionate share of the population with low incomes. In 2004 16.6% of the total female population (Statistics Canada, 2004) were living in low-income situations, compared with 14.4% of the male population. The average earnings of employed women remain substantially lower than those of men. The earnings of women in 1997 were 73% of what men made. In 1997, 56% of lone-parent families headed by women had incomes below the poverty line income cut-offs, as did 49% of senior women who lived alone (Statistics Canada, 2000).

Low birth weight babies' survival rate has increased dramatically over the past few decades. In the US, rate of deaths caused by injuries has plummeted from 57.5 deaths per 100,000 injuries in 1950 to 29.4 deaths per 100,000 injuries in 1986 (National Center for Health Statistics, 1999). In Canada, the infant mortality rate has remained consistent at 5.3% from 1993-2003. However, the result of surviving prematurity, injury, heart attack or stroke may be a disability that can reduce a person's quality of life and the need for continuing support services. Additionally, the environment for child rearing can have a profound impact on cognition and physical and psycho-social development. Environmental stress, insufficient medical attention, and the increased likelihood of physical and emotional abuse are intensified in low socio-economic settings.

Violence and abusive behaviours are major causes of death, injury and stress. Women, children and older adults most often are the ones harmed, as violence is an exercise of power and control over more vulnerable individuals or groups of people regardless of gender, race, culture or economic background. Violence can take many forms including physical, sexual, emotional, psychological and economic abuse with ramifications for physical injury, sexually transmitted diseases, post traumatic stress, emotional trauma and death.

Violence among youth is a serious problem in schools and all of the persons involved in education, running the gamut from the students themselves, to parents, administrators, teachers, support staff and professional service personnel. A study by the Center for Disease Control and Prevention (2002) determined that nearly 50 killings or suicides occur each year at or near U.S. schools. Homicide is the second leading cause of death for young people ages 15 to 19 overall (Statistics Canada, 2004) and that addressing violence in the schools will require a total community effort.

Edelman, in 1996, listed some of the issues facing American teachers in schools today. Every four minutes a baby is born into poverty in the United States and every 15 minutes a baby dies. A child is killed by a gun every two hours. Every day in the United States approximately 2,660 children are born into poverty, 8,493 children are reported as having been abused or neglected, 15 children are killed by firearms, 2,833 dropped out of school, 2,700 girls became pregnant and 790 infants are born with low birth weights. More than one-third of poor children in the United States live in working-poor families. Fourteen percent of the working poor children have teenage mothers, and half of them live in married, two parent households (The Children's Defense Fund Yearbook, 2008). In Canada, the average homicide rate for infants under the age of one year was 25 for every 1 million. The motive for homicides of young children was most often frustration while teenagers aged 14-17 were most often killed as a result of an argument. In Ontario, 1 in 5 has a mental health problem and 11% of Ontario students from grades 1-12 report having seriously considered suicide. (Urquhart, 2006). The explanation offered is that good jobs are not available for low-skilled, low-educated people, while those persons with special skills in areas such as technology, have been able to earn more. A 1996 census report in the United States shows that from 1947 to the mid- 1960's the poor and middle class families share of the wealth was growing, and then declined. Since 1982 the gap between the rich and poor has increased. Low income families are often single parent families with higher costs for child care. Francis, in 1996, asserted that the key to addressing inequality is education (Francis, 1996).

Educational disabilities are often a result of abuse. Up to 25 percent of abused children may endure permanent disabilities as a consequence of abuse and about 52 percent of neglected children may suffer permanent disabilities. The primary causes of this are from head trauma and malnutrition. Consequences of violence may be delayed in nature or have a cumulative effect. The stress incurred may develop into severe emotional trauma or physical illness. Children with disabilities are more vulnerable than other children, with estimates that they are mistreated 4-10 times that of other children (Sleeman & Sweeney, 1995). The Uniform Crime Reporting Survey states that in 2003, just under 28,000 physical assaults and over 9,000 sexual assaults against children and youth aged 17 and under were reported. According to the data, the risk of violent victimization for c + and youth is highest for older children. Rates of victimization for both female and male children are under 500 per 100,000 population for children under 8 years of age. By age 14, rates are 4 times higher at 2,000, per 100,000. Of the 15,000 sexual assaults reported in the survey, 61% of victims were 17 and younger. About 4/5 of these victims were girls and more than 2/3 were between 11 and 17 years old. One fifth (1/5) of all reported crimes were committed against children and youth aged 17 and under, representing 30% of the total reported crime in Canada (Government of Canada, 1992).

Socio-economic status is related to children's degree of risk of injury as a result of abuse and neglect. In families with incomes of less than \$15,000, the rate of physical abuse was three and one-half times greater and the rate of sexual abuse six times greater, than for other children. Physical abuse was more frequent than sexual abuse in both high and low income families (Sedlak, 1986) the degree of injury or disability was related to family income. The rate of serious injury was roughly seven times greater, of moderate injury was five times greater, and of potential injury seven times greater, for children from lower socio-economic status than those from high income families (Sedlak, 1991). There were approximately 21.52 investigations of child abuse and neglect per 1,000 children in Canada in 1998 (Public Health Agency of Canada, 2001). 34% of the physical abuse investigations were found to be substantiated compared to 38% for sexual abuse, 43% for neglect, and 54% for emotional maltreatment. Child and spouse abuse tend to occur in tandem as Gayford (1975) reported that 37 percent of the women and 54 percent of the men who had been victims abuse beat their children.

Psychological disorders may be considered a new morbidity of childhood. Nearly one in five children have one or more developmental, learning or emotional disorders (delays in growth or development, a learning disability or an emotional or behavioural problem that lasts three

months or more or requires psychological treatment APA, 2000). The elevated divorce rate, the increased number of children living in dysfunctional families, the greater rate of survival of low birth weight babies and prenatal exposure to drugs are among the variables these high numbers. The Education Commission of the States (2000) that 12 percent of children endure damage that interferes with their potential for learning. In Canada the rate is closer to 10% (Hutchinson, 2005). Twenty percent of all Canadians will experience a mental illness during their lifetime. In 1999, 3.8% of all admissions to general hospitals were due to psychological disorders (Stats Can, 2004). Preventable factors identified with development of learning problems were: low birth weight, maternal smoking, prenatal alcohol exposure, prenatal exposure to drugs, lead poisoning, child abuse and neglect and malnutrition.

Poverty and other environmental factors create more children at risk but youth of all backgrounds make daily choices that can significantly alter their lives. Joy Dryfoos (1998) says as many as half of all 10 to 17 year olds can be categorized as moderate to very high risk because of their level of involvement in delinquent behaviour, substance abuse, early sexual intercourse or problems in school. Edelman says, "Children of rich and poor alike are growing up amid family breakdown, divorce, and easy access to drugs and sex, without any sense of direction. Physical poverty is killing our children's bodies, but spiritual poverty is squashing their souls" (Edelman, 1996, p.15). James Coleman (1996) contends that our children are suffering from a loss of "social capital" – the norms, values and human resources that parents and adults in the community must make available to children for their educational and social development. For a variety of reasons and involvement with other adults in relationships that do not cross generations (such as in most work settings) – the resources of the adults in the community are not available to assist the psychological health and the social and educational development of children. With the absence of these adults for guidance, youth turn to peers, the mass media or other sources, for the norms and values they use in making choices. Peers can be either a motivating influence or an impediment to academic achievement. In his study, Brown (1990) found that peers generally supported getting a diploma and earning reasonable grades, but through other means such as cheating, rather than through hard work. The mass media influences academic achievement by stealing time away from studying and influencing the attitudes and decisions about issues such as the use of drugs and alcohol, sexuality or academic achievement. American adolescents spend \$40-45 billion on themselves yearly and are prone to violence when others try to

steal their jackets or sneakers, and youth, rich with drug money, set impossible standards for material belongings, with which honest youth are unable to compete.

"A new class of untouchables" is emerging in our inner cities, on the social fringes of suburbia, and in some rural areas, young people who are functionally illiterate, disconnected from school, depressed, prone to drug abuse and early criminal activity, and eventually, parents of unplanned and unwanted babies. These are the children who are at high risk of never becoming responsible adults" (Dryfoos, 1990).

However, there are problems inherent in the reliance on the concept of risk as a means of addressing problems faced by our youth. Many of the students who are identified as being at risk are those whose appearance, language, culture, values, traditions, home communities and family systems are different from the host culture, causing one to question the basis for identification (Keating, 1996). Often the primary factor for being identified as being at risk is difficult or problem behaviour while the quiet, withdrawn child may be at as much or more risk (O'Reilly & Fleming, 1993). Finally, there are problems in using what has been called a deficit model, where we try to change children to make them fit into the structures of our institutions and programs rather than attempting to make the institutions and programs fit the needs of students. It has been argued that early identification practices create lowered teacher expectations regarding the abilities of the students, while blaming poor school performance on conditions outside of their control (Slee and Werner, 2001). Successful interventions become less likely when identification occurs after a pattern of poor performance sets the expectations for future poor performance, in the minds of teachers and students alike (Lewis and Norwich, 2001).

Beginning in the 1950's, there has been a resurgence of interest in the concept of resilience, the positive attributes in individuals and institutions. Rather than focussing on those persons who were unsuccessful, in part due to the vulnerability of their lives, studies began investigating the persons who were successful in spite of those existing conditions. According to Masten, Best and Garmezy (1990) resilience is defined as the process of, capacity for, or outcome of successful adaptation despite challenging or threatening circumstances. Bernard (2001) and Marshall (2004) describe resilience as a set of qualities, or protective mechanisms that give rise to successful adaptation despite the presence of high risk factors during the course of development. Linquanti (1992) stated that resilience is:

...that quality in children who, though exposed to significant stress and adversity in their lives, do not succumb to the school failure, substance abuse, mental health and juvenile delinquency problems they are at greater risk of experiencing.

Definitions vary but the researchers tend to agree that resilient individuals have traits in common such as higher intelligence, lower thrill seeking, lower associations with delinquent peers, and an absence of anti-social behaviours, substance abuse and juvenile delinquency (Werner, 1989).

Werner and Smith (1989, 1992) studied over 600 people in Kauai, Hawaii over a span of over 40 years and Garmezy and Rutter (cited in Van Patten, 1990) investigated over 200 children in the mainland of the United States. These researchers found that the majority of children, despite the high risks inherent in their lives, grew up to be healthy and successful adults. Werner and Smith (1989) determined that most children appear to possess self-righting abilities and can flourish in the face of adversity. They concluded that specific risk factors appeared to have less impact on individual lives than the existence of positive and caring relationships, and that it is apparently never too late to effect change in a person's life. In 1992, Werner published *Overcoming the odds: High risk children from birth to adulthood* in which she offered evidence that risk factors are not as powerful as protective factors in predicting adult outcomes.

Masten, Garmezy, Tilligen, Pellegrini, Lurkin and Larsen (1990), however, caution that labeling children as resilient can be as misleading and potentially as harmful as labeling children at risk. They assert that children can be more or less resilient in different situations and at different points in their lives, depending on the interplay and aggregation of individual and environmental factors (Brooks & Goldstein, 2002). Masten et al. identified three types of resilience. The "overcoming the odds" type of resilience refers to the belief that individuals have personal strength that allows them to withstand adversity. It also can refer to coping with sustained and acute negative circumstances, such as family conflict, and thirdly, it can refer to a recovery from trauma such as the death of a parent. It was Rutter in 1990 who pointed out that, 'resilience cannot be seen as a fixed attribute of the individual. If circumstances change, the risk alters' (Rutter, 1990, p.345).

Resilience refers to protective factors that are internal and external to the individual. Like risk factors, protective factors have a cumulative effect. The more protective factors a child has, the more resilient he is likely to be (Brooks & Goldstein, 2002). Rutter (1990) cautions against viewing the child as strong or weak, but as whether

the child is able to negotiate risk situations. It serves no purpose to merely put an optimistic spin on what is known about risk factors. Rutter (1990) describes four types of protective processes that he believes moderates a risk factor. Firstly are those that reduce a person's exposure to risk, secondly, those that reduce negative reactions to bad experiences, thirdly, those that promote self-esteem through achievement and finally, positive relationships that provide opportunities in life.

Protective factors within the individual child are things such as higher levels of autonomy, social competence, problem-solving skills, independence, empathy, task orientation, curiosity, peer relations and a sense of purpose and future. Rutter (1987) describes social competence as children's ability to think of several solutions to social problems. The Consortium on the SchoolBased Promotion of Social Competence (2004) claims:

... social competence involves the capacity to integrate cognition, affect and behaviours to achieve specified social tasks and positive developmental outcomes. It comprises a set of core skills attitudes, abilities and feelings given functional meaning by the contexts of culture, neighbourhood and situation.

The Consortium (2004) goes on further to state that social skills cover a range of contexts, including the ability to appropriately respond to social cues, such as facial expressions, to effectively solve interpersonal problems, to realistically anticipate consequences to one's actions, to effectively behave socially and to express positive optimism about personal actions.

Werner (1989) suggests that 'required helpfulness' is a factor in resilient children's experiences. These experiences include responsibilities and tasks that involve them working in the community and school, such as taking care of siblings, being responsible for pets or cleaning the school playground. Rutter claims that a positive outlook and a sense that one can withstand challenges is a key ingredient. He describes self-esteem and self-efficacy as:

... a feeling of your own worth, as well as a feeling that you can deal with things, that you can control what happens to you. One of the striking features of problem families is that they feel at the mercy of fate, which is always doing them an ill-turn. So one important quality is a feeling that you are in fact master of your own destiny (Rutter, 1984, p.76).

Other important factors related to resiliency are age, social support, locus of control, competence, self-esteem, temperament, social maturity, need for achievement, past coping ability and family and community variables. Wolin & Wolin (2004) use the word resiliency to describe clusters of strength. They include resiliencies of insight, in dependence, relationships, initiative, creativity, humour and morality. Winfield (1994) describes resilient children as those who have parents who are concerned about their children's education, who offer guidance and support to their children on a daily basis and who are aware of their child's interests and aspirations. Research identifies protective factors related to the family, such as the consistency and quality of care and support to the child during development. West and Farrington (1973) pointed to the importance of adequate and consistent parental role models and compatibility between the parents, parents who spend time with their children and pass on social achievements, parents who demonstrate productive use of leisure time and parents who present as firm and consistent without the use of rejection.

Werner and Smith (1989) identified familial factors as family size (four or less), the number of caregivers in the home, in addition to the mother, manageable workloads for the mother, structure and rules for the child during adolescence and few chronic, stressful life events during childhood and adolescence. Resilient families have celebrations such as birthdays have a stabilizing effect during times of crisis, believe in their ability to control life and establish routines for a variety of activities, for example meal time (Brooks & Goldstein, 2002; McCubbin & McCubbin, 1983).

Children of lower socio-economic status are considered to be at greater risk than students who come from more affluent backgrounds, but there are certain characteristics of communities that appear to afford protection, such as the support afforded by families and the social services available to youth and their families (Pence, 1996; Wolin & Wolin, 2004). Many argue that caring and support is the key ingredient for resilience (Rutter, 1987; Garnezy, 1985; Masten et al., 1990; Wolin & Wolin, 2004). Caring and support was identified by Erikson in 1963 as the basis for future healthy development. Increased vulnerability of youth and families may be due in part to the depersonalization of the community, a shift "...from a human context ruled by face-to-face interactions and the weight of public opinion to an anonymous social context ruled by abstract laws and institutional rules" (Csikszentmihalyi, 1993, p. 49). The lack of community involvement and responsibility contributes to isolation and alienation of individuals. The Manning Theory of ecological psychology (Barber, 1968; Schoggenh, 1989) and the psychological concept of over populated environments support this point of view. In an overpopulated environment, the ratio of opportunities and roles to people is low, where individuals

have less tolerance for individual differences and feel less valued and less responsible. In overpopulated environments, the ratio of opportunities to people is relatively high and people feel more valued, more responsible and are more tolerant of individual differences. An underpopulated community is also more likely to have face-to-face interactions with increased community involvement, support and responsibility. Therefore, a dimension of resilience may be the extent to which the environment is under populated thereby providing meaningful engagement for involvement and responsibilities.

Children and families in communities are distinguished by the educational, health and social phenomena of their lives and also by the labels attached to them. They are composed of the ethnic, racial, social class and gender groups they represent. Immigration, the first language spoken in the home and the language currently spoken in the home are contributing factors to risk and resiliency, as are personal and religious beliefs they hold and the traditions, practices and customs they value. How we as a society respond to this diversity affects the prevention programs we value and the generations of people that will follow us.

Youth from diverse ethnic and cultural backgrounds are disproportionately represented in juvenile justice, special education and emergency health care systems (Statistical Briefing Book, 2004). Many are homeless and live in poverty (Statistical Briefing Book, 2004). Some are from single-parent households and some live in extended family arrangements. Some persons due to migration, are separated from their natural support systems and rely on their own internal support systems together with family's traditions of care and self-help. The diversity of family life must be honored in our approach to prevention while helping families to access help from community. We must foster interventions that help families develop coping strategies that are appropriate within their traditions and customs of care, while helping them to gain familiarity with the support systems that can foster the resiliency to survive (Bernard, 2004). "The family is potentially the most effective social institution for rearing healthy children. From this it follows that the defense of the family is the first line of defense of the child" (Eisenberg, 1975, p. 801). Additionally, the centrality of the community in the lives of youth and families is essential to resiliency. This centrality recognizes that the family is dependent on other institutions for its endurance. As a society we need a proclamation that states that 'no family is an island'. The school, church, businesses, parks, recreation facilities, and transportation links that constitute the components of community are all essential supports of a family unit (Earls & Carlson, 1993, p. 116).

School also can serve as a protective factor for children and adolescents. Children are more likely to display resilience if they attend schools that have good academic records and caring teachers. The positive experiences that children can derive from school may involve academic success, sporting or musical achievement, assuming responsibility in the school or developing positive relationships with teachers and peers (Rutter, 1979; Marshall, 2004). Clark (1983, Weist, 1997, Wolin & Wolin, 2004) found that an intact family was not consistently linked with resiliency but that an important factor of resilient children is having at least one significant adult in their lives. Often, the significant adult identified is a teacher.

Success at school may be supported through a pragmatic and relevant curriculum and accommodating school personnel. Werner and Smith (1989) and Marshall (2004) found that teachers who took a personal interest in their students and provided positive role modelling were the most frequently identified non-family influences for resilient students. Interventions in schools also can have an effect on the resilience of children. Edmonds (1986, p. 45) concludes that: a school can create a coherent environment, a climate, more potent than any single influence--teachers, class, family, neighbourhood--so potent that for at least six hours a day it can override almost everything else in the lives of children.

In the field of education, some programs and policies have been based on resiliency research. The Comprehensive Training to Assure Resiliency in Students project (1999) outlines five strategies to support resilience. Schools should offer opportunities for students to establish significant relationships with compassionate adults. Secondly, schools should build on social competencies and academic skills to provide experiences of competency and success. They should offer students the opportunity for meaningful engagement and responsibility within the school and the community. Fourthly, schools should identify, work with and support services for children and youth. Finally, schools should ensure that they do not contribute with faulty practices to the risks already encountered by their students.

Bernard (1993, 1995, 2001) agrees that schools should foster the ability to form relationships (social competence), to problem solve (metacognition), to develop a sense of identity (autonomy) and to plan and hope (a sense of purpose and future) in their students by offering caring relationships, high expectations and opportunities for students to participate in the school. Teachers have the power to tip the scales from risk to resilience. These teachers provide and model three protective factors that enable positive development by

meeting youth's basic needs for safety, love and belonging, respect, power, accomplishment and learning and meaning. Teachers can provide caring relationships by listening to students and offering validation for their feelings and showing kindness, compassion and respect (Centre for Effective Collaboration and Practice; Higgins, 1994; Meier, 1995). They should be nonjudgmental and should not take students' behaviours personally.

Teachers' high expectations can structure and guide behaviour and challenge students to perform (Delpit, 1996). These teachers recognize students' strengths and help students to self-identify their strengths. They assist students to grow from damaged victim to resilient survivor by helping them to not take the adversity in their lives personally, not see the adversity as a permanent state and not see setbacks as pervasive (Seligman, 1995; Siligman & C, 2000). Teachers who promote resilience in their students let students express their opinions and imagination, make choices, problem solve, work with and help others, and give back to the community in safe and structured ways. They treat students as responsible individuals, allowing them to participate in all aspects of school (Rutter et al., 1979; Rutter, 1984; Bernard, 2001).

The development of resilience lies in relationship, beliefs and expectations, and willingness to share power. Bernard (1997) states that certain approaches can provide the structure for developing these relationships, and for providing opportunities for student involvement. The curriculum should be thematic, experiential, challenging and multi-perspective. Instruction should accommodate a diverse range of learning styles, interests, and experiences and allow for reflection on the part of the learner, critical thinking and dialogue. Resilience can be supported with grouping students in such a way as to promote diverse perspectives and inclusion, cooperation, shared responsibility and a sense of community. Additionally, Marshall (2004) states that administrators should create a school climate that supports teachers' resilience, reach a staff consensus about innate resilience, support school-community collaborations, and support teaching practices that foster resiliency in students.

Evaluation practices that support resilience focus on multiple intelligences, authentic assessment and self-reflection; a number of ways of being successful are made available to students. Effective schools have students spending time working independently, interacting with teachers and expressing more positive statements about their schools. The students express more satisfaction with their schoolwork and peer relationships, perceive their parents as more involved with their schooling, and believe that their teachers hold high expectations for them. Frequently the students report higher aspirations and motivations and better social and academic self concepts. In addition, they report more engagement with school, a belief that their teachers are more supportive and that classroom rules are clear and understandable to them. Regardless of their demographics, schools with high achievement scores are more orderly and structured than low achieving schools and the parents have higher expectations for academic achievement for their children (Wang et al., 1995; Krovetz, M. 1999).

It would appear that direct practices, over which teachers have the greatest control, is what differentiates effective from ineffective schools. These practices relate to student abilities, motivation and behaviour, classroom management, student/teacher relationships, and the amount and quality of instruction. However, it is difficult to pinpoint specific successful strategies for integrating a system of delivery that takes into account the needs of the students and the strengths and weaknesses of the school setting. Wang et al., (1995) suggest that existing community resources be coordinated with school resources and that all organizations contribute staff and finances, mutual leadership and clear communication.

In Canada we have a commitment to education for all people regardless of economic, social, ethnic, and religious backgrounds. All persons are provided equal access to public education and there is a continuing effort to make education available to a diverse range of people. Teachers, who face an increasingly diverse population of students must adapt to continually changing societal values and educational needs.

Throughout the ages people have been concerned about the moral values of youth. Dag Hammarskjöld stated that there are some problems we can never solve, we just grow out of them as we reach another language of trust and compromise (cited in Van Patten, 1997, p. 34). John Dewey believed the ideology of democracy was both a historical construction and a referent for dignifying politics, human efficiency and social struggle (Dewey, 1916). Socrates, over 2,000 years ago, taught the importance of character development and morality. During Colonial times, corporal punishment and social ostracism were used to maintain social order based on a tight knit community with the family at the center. The Puritans taught respect for authority, neatness, punctuality, responsibility, obedience, self-responsibility and respect for the rights and property of other persons. The industrial period was replaced with the age of information and social conflicts and fragmentation and as a result, codes of ethics were developed as an aid to solving disputes and identifying moral issues.

Generally the Code of Professional Practice for teachers, like codes of ethics in other professions, is a moral guide that includes ideals of society developed through our evolution as a civilization. As societal concerns are ever-growing in our educational system, individuals have a diverse range of views and opinions about the role of ethics, values and morals in education (Benninga, 2003). Many advocate for the return to authoritarian discipline and the unquestioning obedience to rules, regulations and mandates. Others believe in democratic discussion, interaction and networking about moral and ethical conduct of students (Savulescu & Kahane, 2009). Burron (1996) points out that parents and guardians have ethical and moral obligations toward their children's care and are interested in their schooling. On the other hand, society, not parents, pays for unwed mothers, absentee fathers and unsocialized children. Value conflicts in our society require continuing efforts to address the potential decline in civilization. Current technological and scientific advances have lead us rapidly into new innovations and discoveries, but in the face of this we are suffering from social conflicts and lack of an integrated community.

The question becomes, "What does this look like in real life?" My personal experiences may lead to some understanding of the turmoil of the resilient individual. At age 4 my oldest sibling, a brother aged 17, accidentally died in a hunting accident. My older sisters who are 12 and 7 years older than I reported that prior to this tragedy our family had been happy and well-balanced. Not so afterwards.

The older girls left home at early ages to go to University, leaving me and my little brother who is 2 years younger alone with our parents. It is often said that a tragedy can pull a family together or blow it apart. Somehow the latter was chosen in our case. Parental issues ranging from extramarital affairs, alcohol misuse and abuse, violence and neglect became the norm for my brother and I. We were 9 and 7 years old. We had maternal grandparents who were worried and involved with us at arm's length and our sisters came home often, worried at what they would discover. It was an age of "not getting involved" and Child and Family Services followed the creed and did not get involved. We were in a small rural farming community where not only did we know everyone, we knew what was going on in most of the homes. Despite this, no one came forward to intervene on the behalf of my brother and I. I felt as if the world did not care and felt a lapse of faith in a God who did not protect me.

Who were the significant people in my life who believed in me and helped me to become resilient? Obviously, the sisters were a source of caring and support but being sisters they offered sources of conflict and bitterness as well. Living in a community where any adult might correct a child or offer guidance was another source of support but at the same time there were people in this group who were not trustworthy. I learned this when I entered puberty and was cornered in the community curling rink a few times by older men, friends of my father, who had no scruples about mauling a pre-pubescent girl.

There were teachers who showed empathy and understanding and who seemed to genuinely want to help. My grades were routinely amongst the highest in the class causing most teachers to admire my work. Teachers were surprised when they asked my parents to attend meetings or other functions at the school and were met with resistance and open refusals. When asked why, I was unable to explain the situation as it was my shameful secret that I felt compelled to protect. The teachers who demonstrated compassion and understanding and who encouraged me in my school work helped me to understand that an education was one of the best tickets out of there that I could hope for and since I was an A student, I applied myself. This may sound like an over-simplification but it is the simple truth. Unfortunately, in my grade 12 year I experienced what is now referred to as "date rape" and became pregnant. I left my home town to live with one of my older sisters and gave the baby up for adoption. I felt that giving the child up was the best hope she had for a well-balanced and happy life. It also provided me with the best chance to go to university and establish myself with a career.

I earned a Bachelor of Arts degree and then a Bachelor of Education degree to become a teacher. From there I earned a Masters degree and then a Ph. D. in education and several certificates from the Department of Education. This need to achieve comes from a place deep inside that is as urgent and mysterious to me as it is to anyone else. It also is derived from the fact that I had the prerequisite skills to accomplish these things. I have the intelligence and the drive. As I mentioned, the drive came from the need to escape, to get out of an intolerable situation. Once I escaped, the drive continued and I continued to study and gain more achievements. Where this exigency will ultimately lead is a question I cannot answer.

I did not experience some of the more salient risk factors, namely school failure, poverty, crime, unemployment, or divorce that are deemed to affect a person's ability to prosper in the face of adversity. On the topic of divorce, I used to wish that my parents would separate because their relationship with each other

and with us was so volatile we lived in fear of what would happen next. Sometimes divorce is not the worst thing; having the parents stay together for the sake of the kids can be.

I know that the students I went to school with suffered greatly when they were incapable of school success. They were ashamed, humiliated, and downtrodden from the steady stream of failures. They lived in fear of failing a school grade until they became hardened to the sense of failure and learned to protect themselves from teachers whose very presence was a reminder of their failure. Truly, we cannot create a situation where all students have the gift of cognition, but we can as teachers create an environment where all talents are cherished and admired, not just the academic achievers. We can create a climate of acceptance and community where members support one another in their endeavours. We can offer accommodations and assignments for students that more closely meet their learning needs and learning styles. We can be empathic and understanding and offer support to all students in their quest for identity and achievement.

A common goal of teachers can be seen as to serve the public with respect, concern, courtesy, and responsiveness to the needs of their students. The collective agreement as to what these needs are and the best means of addressing them is lacking and causes a dilemma. Should we place our focus on the risk factors for failure and deliver interventions based on a deficit model, or should we determine what protective factors mediate the negative outcomes of risk factors and deliver programming based on a preventative model? I flourished with the support offered to me by a couple of my teachers and believe that this is the route we should take, focusing on the positive rather than dwelling on the negative. Those of us in at risk are well aware of our deficits and need to understand our strengths. As teachers, we ought to encourage each other and our students to mine their talents and share their gifts with others, contributing to our society in meaningful ways and creating happy people.

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Teaching Function and Practice Thinking of Psychological Movies

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Abstract

Psychology teaching was implemented in virtue of excellent psychological movies, which not only could help to stimulate students' interest, and make the abstract theory concretion and visualization, but also provide the scenes similar to the reality for students' learning with attempts to improve their learning achievement. However, as for the exhibition of psychological phenomenon, psychological movies had its own limitations, and the teaching process was relatively time-consuming. Therefore, it was only applied as one of the teaching assistant forms.

Keywords: Psychological movies, Psychology teaching, Function, Thinking

1. Introduction

As a comprehensive art, film was closely associated with psychology. In the film categories, there is a special type of film, namely psychological movie. It came into being in the 1930s-1940s, when Freud's psychoanalytic theory was very popular among the United States. Hollywood had produced a large number of psychological movies reflecting the psychopathy and psychology, and these films were called psychological movies (Lv, 2005, PP. 39-40). Afterwards, a large quantity of psychological movies thrived in the world moviedom, and those movies reflecting psychology became increasing widespread.

Psychology teaching was a special social activity through the teaching, and was also a special activity of systematically teaching students research achievements of psychology in virtue of certain organization forms. The contents between what psychological movies reflected and expressed and psychology teaching was consistent to some degree, and those movies were completely became the available materials for psychology teaching. Therefore, in psychology teaching, it was feasible to achieve the teaching tasks of psychology-related courses using psychological movies.

In recent years, I carefully selected 20 psychological movies such as "Concubine," "Horse Whisperer", "Edward Doctor," "Good Will Hunting" and so on, and applied them in the teaching of several courses such as "Personality Psychology", "Psychological Counseling", "Public Psychology" and so on. In combination with the specific content of each course I guided the students to appreciate those films, and practices showed that it was a more effective approach to complete the teaching tasks by dint of psychological movies.

2. Role of psychological movies in psychology teaching

2.1 Attract students' attention and interest

Picture and sound were the basic elements of film language, furthermore, film's plot and story line, dynamic modeling and comprehensive artistic approaches (Jin, 1999, PP. 48-60, 48-60) all made films an art which people were prone to accept. Classroom teaching mainly resorted to languages, and was far less compared to the movies, whether in multi-dimensional nature of information transmission, or expression means, etc. Full attention was the prerequisite psychological condition for students to be engaged in learning activities and effectively acquire knowledge, and film's own characteristics determined that they would attract and maintain students' attention spontaneously. If based on the unconscious attention imposed by films, teachers steered the purpose and directivity of students' attention, and carried out pertinent explanation and analysis, and then students' unconscious attention could be transformed into conscious attention which contained psychology contents.

In 1901, Thorndike, educational psychologist in USA, conducted the famous "graphic decision experiments" using college students as subjects. On this basis, he pointed out that learning transfer would occur as long as there were common elements between two topics (Mo, 2002, PP. 268-269). What psychological movies reflected was consistent with several psychology courses, and therefore, teachers played a leading role consciously when students were enjoying psychological movies. Hence, students would have a further deep view of what psychological movies reflected. Positively driven by the direct interest resulted from psychological movies, interests in psychological movies would soon be transformed into other interest in the contents of relevant disciplines.

For example, during the process of appreciating the classic psychological film "Edward Doctor", induced by the suspense one by one set by the suspense master Alfred Hitchcock, students would get into the ups and downs of the plot deep, the interests in the film plots would be inspired promptly, and with growing awareness contradictions and plots developments inspired by suspense, students would naturally concern about the fate of the hero and the story ending. Who the hell was Edward doctor? Why did he imitate the president of the hospital? Why did he lose memory? Why did he think that he was the murder while he didn't kill the president? Why did he have such bizarre dreams? These issues would always remain in the minds of students during the process of appreciation, and they could not help to seek for explanations of those issues. With the film's interpretation of psychoanalytic doctrine, they would find answers from this theory, and interests in these issues would also be transformed into the interests in the theory eventually.

2.2 Make abstract psychological theory concrete and visual

Psychology is a cross-discipline closely associated with the disciplines such as philosophy, history, sociology and so on, and contents related to psychology courses were abstract and profound, which was tough for students to understand and grasp. As is well known to us all, students' learning is a mental process accepting main indirect experiences. What courses related to psychology contained is the wisdom crystallization of psychologists over the past century, and a kind of indirect experiences for students. However, accepting those indirect experiences by students should resort to specific and visual sensual experience. The plot is specific, the characters are vivid, and the expressions of the issues are also lively in psychological movies, and these materials could make up the emotional inexperience weaknesses of students precisely when learning. Therefore, psychological movies make the abstract psychological theory manifest specifically, emotionally and physically, and thus become a visual and specific carrier for students when learning psychological theory.

For example, in the teaching of "Personality Psychology", contents such as what is personality, what are personality features, what is personality trait theory and so on, were tough for students to understand. During the appreciation of the movie "Concubine", through the well-informed history story of Chu-Han hegemony and analyzing the different attitudes and behaviors of characters such as Xiang Yu, Liu Bang, Lv Zhi in the film, students usually had a clear view of the personal performances and unique personalities of main characters, as well as primary personality traits and central traits of each character. In this way, the original abstract and ambiguous content in the minds of the students would gradually become lively, and students would have a more profound understanding of the corresponding theory.

2.3 Provide realistic situations similar to reality for students to acquire knowledge and skills

Constructivism showed that best way for learners to complete the meaning construction of what they have learned was to let learners feel real and experience in the real-world environment, not just to listen to teachers the introduction and explanation about such experience. Therefore, teaching should make learning implement in the situation similar to the reality with attempts to solving the problems encountering in their real lives (Mo, 2002, P. 134).

In the learning of psychological counseling and treatment, due to the lack of practical experience, students' grasp of certain theory and technology was limited to simple understanding and superficial cognition. They had unclear view of the symptoms of several psychological problems, and did not find the real value of some counseling and treatment methods and technology, let alone correct and effective application. In psychological movies, there are many subjects on psychological counseling and treatment. For example, "Horse Whisperer", the film hero Tom Booker gave a long psychotherapy to the disabled girl, Grace, who hit a car accident, in order to cure her psychological obstacles. He adopted many treatments, such as natural tension, motivation, catharsis and so on. At the same time, the treatment principle of active unconstraint, respect and empathy, as well as the treatment style of humanism embodied vividly. Such films showed many psychological counseling and treatment situations near to the reality through the portrayal of psychological counseling and treatment process in a certain case. Through the film appreciation, students would make sure how to identify symptoms of psychological problems in a real scenario, how to seize keys to psychological problems, how to share empathy exchanges with visitors, and how to implement the principles and methods of psychological counseling and treatment. Therefore, the appreciation of such films is of significant help for students to understand psychological counseling and therapy theories and enhance the operation level.

2.4 Improve students' mastering level of knowledge

In the teaching of certain knowledge related to psychology, I did a number of comparative experiments between two parallel classes. One class as the control, only routine teaching was implemented. Other class, as experimental class, when learning the contents about personality theory and psychological counseling, teachers

and students appreciated movies and then discussed together. First, students of two classes were pre-tested on the relevant knowledge of the same content, and results showed that there was no significant difference of grades in general between two classes. After routine teaching in control and selected film appreciation and classroom discussion in experimental class, students of two classes had a unified test. Through the statistical analysis of grades, I found that scores of teaching contents such as personality theory, psychological counseling, personality and so on in experimental class were significantly higher than the control, which indicated that teaching in virtue of movies was obviously effective for students to enhance their learning achievements.

3. Thinking of the application of films in the practice of psychology teaching

3.1 The combination of students' "appreciation" and teachers' "analysis"

If letting students appreciate psychological movies simply, their attention would be attracted by the bizarre suspense plots of the film, and the content and objectives they concerned always deviated from the original intention of teachers who let them appreciate the movies. Therefore, the appreciation of students should integrate with the analysis of teachers, in order to achieve the desired teaching effectiveness of teachers. In teaching practice, teachers could take out some plots related to courses and analyze and interpret them after students appreciated movies; they could bring forward some issues which need consider and concern, let students enjoy the movies with questions, in order to enhance the purpose of appreciation; they could explain and analyze simultaneously when students enjoyed the movies; they could edit films first, delete the story plots unrelated to the teaching content, or in order to keep the integrity of stories, tell students these plots using general language, and then appreciate and explain alternately. Taken together, in this process, effective exertion of teachers' leading role was the premise to promote the psychological movies to exert their values.

3.2 Correct orientation of psychological movie's role in teaching

Movie teaching was only complementary to classroom teaching, and one of assistant forms of classroom teaching. Although psychological movies were of considerable help to complete the teaching task of psychology-related courses and enhance teaching quality, their function should not be exaggerated unilaterally. Furthermore, psychological movies should not be abused in the teaching of psychology-related courses, or psychology classes would become a film appreciation class, and a recreation class. In that way, not only students were difficult to obtain systematic and complete knowledge, but also leading role of teachers in teaching would lose. Therefore, the application of psychological movies to carry out the teaching of psychology-related courses couldn't become the dominant form of psychology teaching. It should only combine with other forms of teaching, through mutual cooperation and complementarity and appropriate and timely employment, and then their active role in teaching would exert.

3.3 Limitations in the teaching in virtue of psychological movies

Firstly, teachers should consider a variety of requirements when selecting movies, which is a more time-consuming work. Film Arts have been born for hundreds of years, and hundreds of thousands of movies came out. Hundreds of movies have been produced and published annually in China. Selecting appropriate movies from vast film works for psychological teaching really need more time and energy. In order to use psychological movies in teaching, teachers should not only study film art and pay attention to film art development at home or abroad, but also take time to appreciate movies by themselves, only in this way, could they collect movies with psychology values. Meanwhile, teachers should consider time characteristics, psychological characteristics and hobbies that students possess in the selection of movies, try to select those works with strong characteristics of times, and also consider the amusement and artistry of the selected movies. It is more important to consider that classroom teaching is a particular process of educating people, and thus select movies should be prominent ideological works. Consequently, given these requirements, teachers should screen and select ideal ones from film works patiently.

Secondly, appreciation process is relatively time-consuming. Now movies could take 2 hours, or even 3 hours. The full appreciation of a film could occupy much time of lessons. Sometimes teachers should advise students to appreciate the same film for several times. Teachers should also explain and analyze the corresponding contents, or guide students to discuss. Hence, compared to the simple teaching pedagogy, completing specific teaching task through the appreciation of the psychological movies require a larger amount of hours.

Thirdly, the elaboration of psychological problems in some movies was quite superficial, and short of integrity. "Edward Doctor" is one of the most classic psychological movies. Many theories of psychoanalytic doctrine, such as subconsciousness, childhood experiences, dream interpretation, psychological analysis technology and so on, have been reflected in the movie, but these contents were only designed and arranged by the director

according to the requirement of plots whose connections were loose among them. The film only gave a superficial description about these contents, lack of profound theoretical study. It was hard for people to see their status in the theories of psychoanalytic doctrine, and they were difficult to form a relatively complete system. After all, psychological movies were not specially tailored for psychology. Even the portrayals of psychological phenomena in some films were completely untrue, and taking the film "Heroic Duo" as an example, the hypnosis was described to be so incredible, or even an eye contact could make another people asleep quickly, which was totally inconsistent with the fact. Therefore, in the practice of teaching, teachers should carefully screen something right or wrong, proper and improper in the movies, in order to avoid something misleading to students.

In addition, movies which were more successful in the portrayal of psychological phenomena are mostly western films, especially for the American films. Social, family and personal values penetrated in some movies were inconsistent with our adored values, and even harmful to the health development of young people. Consequently, teachers should guide students to identify and animadvert on those contents with particular emphasis, and thus resist their adverse effects.

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Business Students' Views of Peer Assessment on Class Participation

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Abstract

The purpose of this project was to introduce peer and self assessment on tutorial class participation to a marketing unit at Curtin Sarawak. This assessment strategy was introduced with desire to improve class participation and increase student involvement in assessment. At the end of semester, a questionnaire was used to gather responses from a sample of 77 students about their opinions on the peer assessment practice. Students agreed that the practice promotes a sense of ownership, engagement and personal responsibility of the learning experience. But at the same time, many experienced some stress in the assessment process and found it not easy to evaluate their peers. The study found students do not reject peer assessment strategy.

Keywords: Class participation, Peer assessment, Business student, Curtin Sarawak.

1. Introduction

Despite the universal advice against grading class participation from assessment and measurement scholars (Davis, 1993), class participation remains an important item of student evaluation in business courses, especially where case discussions are an integral part of the course. A study of core curriculum syllabi at Seattle University discovered that 93 percent of courses included class participation as a component of course grades (Bean & Peterson, 1998). At Curtin University of Technology, Sarawak Campus, more than half of business programs building participation into course grading. Normally it constitutes a relatively small proportion of the course grade ranging from 5 percent to 20 percent. Majority of business students study at this campus are local Malaysians. Knowing the background of these students, many come from education systems where students are passive learners and they are not encouraged to speak up or ask question in class, it is a challenge for these students to participate actively in classroom discussion. The personality of some also inhibits them from speaking up in class, leading them to feel stressed to have this method of assessment.

Assigning a class participation mark is very complicated because of its subjective nature. Several evaluation tools have been published to assist teachers in assessing class participation (Bean & Peterson, 1998; Chapnick, 2009; Craven & Hogan, 2001; Maznevski 1996; Melvin, 1988). The use of published scales may assist in the process, but assigning a class participation grade remains difficult to objectify. The equivocal nature of evaluating class participation makes it an ideal area in which to share evaluation with students. Multiple evaluators may increase the accuracy of class participation grading. Student involvement in assessment typically takes the form of peer or self assessment. As research suggests, peer and self-assessment has been increasingly used as an alternative method of engaging students in the development of their own learning. It encourages for example student autonomy and higher order thinking skills, whilst in contrast potential weaknesses can be minimized with anonymity, multiple assessors and moderation by tutors (Van Den Berg, 2006).

A quick email survey indicated that peer assessment on class participation is a rare practice in the School of Business at Curtin Sarawak. The use of peer assessments is confined to assessing students' oral presentation and contribution to group work, which is mainly conducted in management and marketing courses only. Thus, the purpose of this project was to introduce peer and self assessment on tutorial class participation and to collate information on students' opinions of this assessment process.

2. Literature review

Class participation promotes active learning, critical thinking, development of listening and speaking skills needed for career success, and the ability to join a discipline's conversation (Bean & Peterson, 1998). When students see that their participation is being graded regularly and consistently, they adjust their study habits accordingly so as to be well prepared for active class participation.

To grade class participation fairly, the lecturer needs to create an environment that gives all students an opportunity to participate. According to Bean and Peterson (1998), the most common participatory classroom uses open or whole-class discussion, wherein the lecturer poses questions aimed at drawing all class members into conversation. Another is the "cold-calling" mode, where the lecturers poses a question and then calls on

students at random to formulate their answers. Still another kind of participatory class employs collaborative learning, in which students work in small groups toward a consensus solution of problems designed by the lecturer and then report their solutions in a plenary session.

According to Topping (2009), peer assessment is an arrangement for learners to consider and specify the level, value, or quality of a product or performance of other equal-status learners. In simple terms, it is students grading the work or performance of their peers using relevant criteria (Falchikov, 2001).

The use of peer assessment in higher education has been advocated by many academics (for example Stefani, 1994; Boud, 1995; Topping, 1998 & 2009; Falchikov & Goldfinch, 2000; Sivan, 2000). The method has been tried out at different levels, across disciplines and with different types of assignments including writing, portfolios, oral presentations, test performance, and other skilled behaviors (Topping, 2009). The use of peer evaluation of class participation has also been previously reported (Bean & Peterson, 1998; Gopinath, 1999; Melvin, 1988; Ryan et al., 2007).

There is substantial evidence that peer assessment can result in improvements in the effectiveness and quality of learning, with gains for assessors, assesseees, or both (Topping, 2009). Peer assessment involves students directly in learning, thus promoting a sense of autonomy and ownership of the assessment process which improves motivation. Peer assessments can lead teachers to scrutinize and clarify assessment objectives and purposes; criteria and grading scales.

On the other hand, peer assessment process can cause anxiety to both assessors and assesseees. Social processes can influence and contaminate the reliability and validity of peer assessments. Peer assessments can be partly determined by friendship bonds, enmity, or other power processes, the popularity of individuals, perception of criticism as socially uncomfortable, or even collusion to submit average scores, leading to lack of differentiation (Topping, 2009).

The validity and reliability of peer evaluations is debatable. Over 70% of the studies find reliability and validity adequate (Sadler & Good, 2006); a minority find them variable (Falchikov & Goldfinch, 2000; Topping, 1998). Literature review regarding self and peer-assessment shows, in general students tend to overrate themselves. A tendency for peer marks to bunch around the median is sometimes noted. Student acceptance varies from high to low. Contradictory findings can be explained in part by differences in contexts, the level of the course, the product or performance being evaluated, the contingencies associated with those outcomes, clarity of judgment criteria, and the training and support provided (Topping, 2009).

3. Method

The study consisted of two cycles of action research which involves business students enrolled in Services Marketing unit over two semester periods in 2009. Forty-two and thirty-five students enrolled in Semester 1 and 2 respectively. Each semester has two tutorial groups. These students were either in their second or third year of studies at the Business School, Curtin Sarawak. Tutorial participation contributes ten percent to the final grade of the unit. Though it is a relatively small proportion of the unit grade, yet it is large enough to motivate students to attend and participate in weekly tutorial discussions. Each tutorial group met once per week for one and half hours throughout a 12-week semester.

During the first session in both cycles of the action research, students were informed of the nature and process of peer assessment, clarify rationale and expectations. This was part of the subject induction. Students were given the opportunity to voice their opinions and ask questions on the assessment. In the first cycle the criteria for assessment were provided by the lecturer but in the second cycle the criteria were established by the students. As suggested by Topping (2009, p.25), involving students in developing the criteria for assessment promotes a sense of ownership and decreases student anxiety. Following the lecturer's introduction of the methodology, students are asked to suggest criteria for assessing their fellow students. They started with brainstorming in small groups followed by a presentation of the criteria accepted by each group. To arrive at an agreed set of criteria, a discussion was facilitated by the lecturer to examine the meaning of each criterion, its use and relevance. Based on the agreed list of criteria, the lecturer developed an assessment rubric for class participation.

Students received the rubric (assessment form) on week 2 together with a complete student list. A short training to show students how to do peer assessment was conducted. The problem of impressionism in assessing classroom participation can be substantially alleviated through a scoring rubric. Using such a rubric, points for class discussion were assigned at three different times in the twelve-week semester (weeks 4, 7 and 10). With regularly assigned points, students had the opportunity to evaluate and improve their performance, thus making the final class participation mark less arbitrary. Feedback and coaching were given where needed.

Each student has to assess everyone in the class including themselves. In every tutorial session, students were asked to put their names on their desk for identification purpose. Each week there was pre-assigned readings, case studies or open-ended assignments given to the student. Throughout the semester, student participation was evaluated during whole-class discussions, small group presentations, question and answer sessions, and other in-class activities. In order to maintain confidentiality, the name of the assessor was not included in the assessment form. The individual mark on class participation (10%) was determined by taking the average individual score obtained from peer assessment, adding to the lecturer's score, then divide by two to derive the final mark. Two class representatives were appointed to assist the lecturer in computing and compiling the final marks.

At the end of the semester, student reactions to peer and self-assessment were solicited by means of anonymous questionnaires conducted before the students knew the assessment results of the unit in both cycles of research. The questionnaire consisted of 4 closed questions, 2 open questions and 13 statements to which students were asked to respond by indicating their level of agreement. A 5-point category scale was used, with 5 = *strongly agree*, 4 = *agree*, 3 = *neutral*, 2 = *disagree* and 1 = *strongly disagree*. The questions were derived from other published studies (Brindley & Scofield, 1998; Ryan et al., 2007) and based on the author's experience with issues of class participation assessment. Mean for all statement were calculated and percentage was used to display the responses of the closed questions.

4. Results

Table 1 presents the mean score of each statements rated by the students. In the sample as a whole, students appear to find the assessment exercise of benefit and their responses were positive on six statements, taking a score above 3.50 as positive. The study corroborates Brindley and Scofield's study (1998) where students expressed that the practice promotes a sense of ownership, engagement and personal responsibility of the learning experience (mean score 3.82). Moreover, they perceived an increase in personal motivation (3.81) as a result of their active participation in peer assessment. The results also reflected that students fully understood what was expected of them in doing the peer assessments (3.79) and the scoring rubric given was helpful in doing the peer evaluation (3.68). This is not entirely unexpected because the lecturer had spent a large amount of time discussing the process with the students and preparing them for the assessment task.

On the other hand, the results show that the students found it not easy to evaluate their peers. Refer to Figure 1 – that indicates 70% of the students disclosed to alter marks as the assessment progressed. Many students did not feel the need to participate more because of peer assessment. The statement “I participated more because I knew my peers were evaluating me” only has a mean score of 3.45.

In general, the mean score of Semester 1 is higher and more positive than Semester two, even though Semester two students were involved in developing the assessment criteria. It was natural for Semester two students to assign higher score on the statements “I fully understand what was expected of me in doing the peer assessments” and “I found it easy to evaluate my peers on their class participation” due to their involvement in setting the assessment criteria. But their rating on other statements indicated that they are less in favor of the peer assessment exercise. The literature suggests that allowing the students to be involved with the creation of the evaluation criteria may improve student understanding and acceptance of the assigned grades (Dochy et al., 1999). However, the result of this study reflected a slightly different view.

According to Topping et al. (2000), students experienced a sense of socio-emotional discomfort in grading their peers. In this result, only two students stated no pressure in the peer evaluation exercise, 71% experienced some pressure (see Figure 2).

Figure 3 indicated the main pressure appears to stem from the assessment process as a whole (41.6%) and class participation (32.5%). It was interesting to note that only 13% of the students felt that the pressure came from their peers and another 13% from tutors. These results supported the findings of Brindley and Scofield's study (1998).

From the sixty written comments given, seven students reported that they get to know their peers better and paid more attention in noting the class participation of others. One student suggested to include students' photographs would help in assigning peer scores.

5. Discussion

Some literature advised that peer assessment of class participation should not be recommended for grading purposes due to the issue of reliability and validity of peer evaluations. The objective of this study was to explore students' opinion of their involvement in grading class participation. The study found that students do not reject

peer assessment strategy. The author concurs with Gopinath (1999) that the benefits of peer assessment extend beyond the question of reliability of the grade. This issue can be minimized if students are provided with precise rating criteria and asked to rate through an interval scale on the different criteria which capture the essence of class participation.

The traditional belief that “teacher knows best” and holds the reins of power in the assessment process needs to change especially in an Asian learning culture. To develop student autonomy in learning and promote active learning, students have to get involved in the process of setting learning objectives and the process of assessment. Thus in this study, having peer assessment provided an input into lecturer’s assessment of class participation served the objective of student involvement. Student involvement in assessment process also tends to increase the transparency of assessment and students’ motivation in class. Peer assessment is, therefore, a valuable exercise in self-development and preparation for students’ future careers. It certainly helps in building Curtin Graduate Attributes - thinking skills, information skills, communication skills, learning how to learn, and professional skills - among the students.

Peer assessment is not a set prescriptive process, but rather one that may take time to develop and may also change over time depending on the course content, class size, the curriculum, the university culture, and the students themselves. It is suggested that students need to undergo attitudinal changes towards their learning roles and need practice in more self-evaluative role behaviours if peer assessment is to become more acceptable and successful (Brindley and Scofield, 1998). In this study, students who disliked peer evaluation believed the process was bias and could result in an unfair grade. This was commented on by eight students in their written remarks. Some felt that it was a tedious process and bringing unnecessary pressure to students as peer assessment was rarely practiced consistently in Business School. A student indicated preference using self assessment instead of peer assessment.

It is recommended to introduce self assessment exercise to various types of assignments and business units at Curtin Sarawak, starting with the first year students. This serves to expose the students to different assessment method and develop them into more autonomous learners, and less dependence on the tutor for all the answers. As these students progress in their course, greater experience will be gained in assessment and learning, then peer assessment may become more acceptable and successful, and increase in value.

To conclude, this study shows that students see the value of peer assessment and it improves the learning experience and satisfaction. Students felt connected to each other in class as they paid attention to each other’s discussions, took greater ownership of their learning. Peer and self assessment promotes partnership between student and lecturer that is empowering and equal. The outcomes of this study may be of interest to lecturers who wish to introduce self and peer-assessment in higher education. This action research of peer assessment on classroom participation produces useful insights on the practice of peer assessment and sheds light on student attitudes to peer assessment.

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Table 1. Students' View on Peer Assessment (n=77)

Statement	Overall Mean (n=77)	Semester 1 (n=42)	Semester 2 (n=35)
		Mean	
Peer assessment promotes a sense of ownership, engagement, and personal responsibility in my learning experience.	3.82	3.90	3.71
Involvement in the assessment process increases my personal motivation in the class.	3.81	3.93	3.66
I fully understand what was expected of me in doing the peer assessments.	3.79	3.71	3.89
Peer assessment promotes self-evaluation and develops my critical thinking and other professional skills.	3.69	3.83	3.51
The assessment form given is helpful in doing the peer assessments.	3.68	3.62	3.74
Peer assessment marks should be taken into consideration to compute the overall participation score.	3.61	3.74	3.46
I feel that peer evaluation was fair in helping to determine my class participation grade.	3.49	3.60	3.37
I would recommend using peer evaluation grades in the future.	3.45	3.60	3.29
I participated more because I knew my peers were evaluating me.	3.45	3.48	3.43
I do not feel sufficiently capable to mark other students' participation level.	3.23	3.29	3.17
I feel intimidated by the whole process.	3.14	3.12	3.17
Assessment should be the sole responsibility of tutors.	3.08	2.90	3.29
I found it easy to evaluate my peers on their class participation.	2.94	2.74	3.17

Note: Scale: 1 – 5, 1 = Strongly Disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, 5 = Strongly Agree

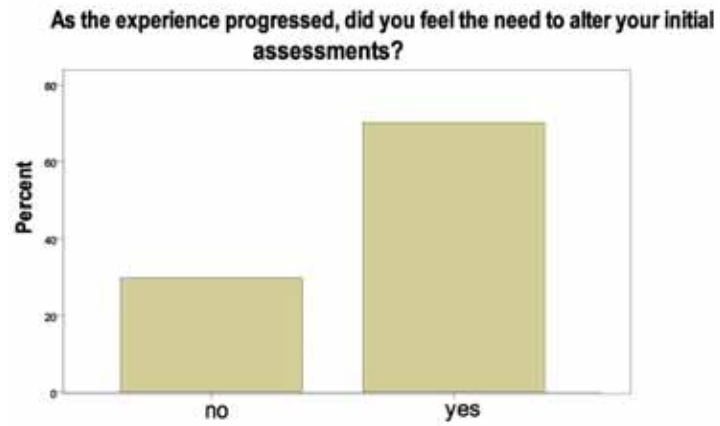


Figure 1. Alter mark

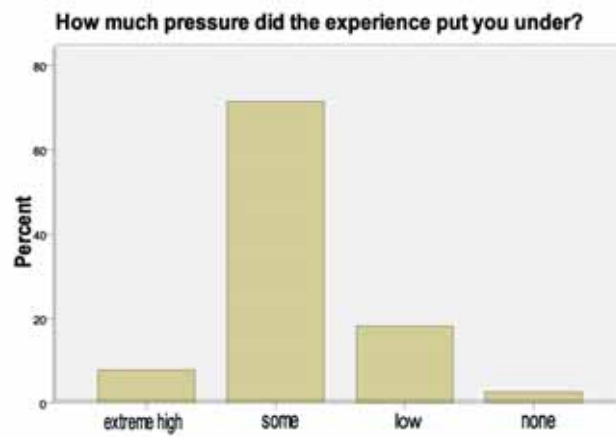


Figure 2. Amount of pressure

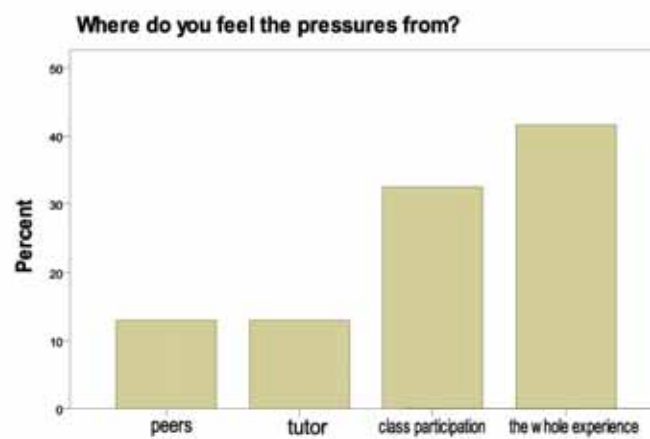


Figure 3. Source of pressure

The Orientation and Development of the Public Affair Management Specialty

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Abstract

Though the specialty of the public affair management has been developed for ten years, but it is still facing the actuality that the orientation and development are difficult. Only by confirming the cultivation target and the development orientation, the development of the specialty could find the development approach and method. According to the actuality of the public affair management of China and the public management education, this specialty should orientate to cultivate public management and service personnel for the establishment units, and cultivate startup and service personnel for the non-governmental organizations, and cultivate the modern citizens with public thought, public responsibility, and public ability, and cultivate the builders with modern public spirit for the local economy and the social development. Based on that, to fully perfect the course system and the teaching mode, and enhance the power of teachers, could really develop and stably enhance the specialty of the public affair management.

Keywords: Higher education, Public affair management, Specialty construction, Cultivation target, Development thought

The specialty of the public affair management has been developed for ten years in China. In these ten years, there were over three hundred colleges to found this specialty, and they all made certain exploring for the construction and development of this specialty, but at present, all of them are in the stage with crisis and mess, and more and more colleges begin to feel and notice this mess, and to find the way is their common task. The mess is mainly embodied in many aspects such as blur specialty orientation, unobvious specialty characteristics, disordered curriculum provision, quite serious employment situation (China Education Online, 2004), weak power of teachers, and feeble practice teaching. Only by confirming the orientation of the specialty, the development orientation of the specialty could be confirmed, and following aspects will be discussed for the orientation and development of this specialty.

1. Oriented cultivation target in the public management education system: public management and service personnel for the establishment units

The orientation of the public affair management specialty is decided by its state and function in the public management education system. The public management education of China comes from the administration management education of 1980s, and up to the reform of the colleges and universities undergraduate specialty catalog in 1997, the public management was first took as the first-class subject in the species of the "management", and the first-class subject of "public management" included twelve second-class subjects such as the public relation science, the public policy science, the city management, and the public management science. It is obvious that the public management and the public affair management are the paratactic second-class subjects of undergraduates under the first-class subject of "public management" (China Education Online, 2004).

In the universities of China, Tsinghua University, Beijing University and Fudan University have the college of public management, and the universities with the high-level of public management education and research development would not found the specialty of public affair management, but the specialty of public management with the education of MPA, and undertake the training task of the government officials' quality of public management for the country and provinces.

The special research and study class about the culture originality industry Development, the research and study class of public management core course, and other seven research and study classes opened by the School of Public Policy & Management of Tsinghua University, all limit their recruitment students should have the identify requirement above the director level (individuals could be deputy director level) except for the young reserve cadres public management quality course research and study class which only required that the trained target must be the governmental young cadres (Tsinghua Government Official Training Network, 2009). Some trainings such as the social insurance agencies directors training class of the national labor and social security

ministry and the third county-level cadres training class of Beijing have trained the county-level cadres of Beijing, and the cadres from relative national ministries and committees, and industrial cadres from various provinces and cities (School of Public Administration Renmin University of China, 2009). And other public management colleges in Beijing University, Fudan University, Beijing Normal University, and Nankai University all undertake the training of national or local cadres' quality of public management, and the research task about the reform, enhancement, and construction of the public management function of national governments and institutions.

At present, there are 100 colleges which have the authority to cultivate the degree of MPA. The year of 2009 is the tenth anniversary that China set up the specialty degree of MPA, and in the Recruitment Advertisement of the National MPA Degree Advisory Committee, there are 100 MPA colleges, and their cultivation target is the special talents with high level, composite and application for the governmental departments and the non-governmental public institutions, and the special talents urgently required in the public management domain. The enrollment condition is that the servicing officials who acquired the undergraduate degree with the diploma before July 31, 2006. And these colleges would mainly recruit the staffs from the governmental department and the non-governmental public management institutions. The governmental department management personnel according with the recruitment condition have to have the recommendation opinions of the provincial personnel department according to the uniform requirements of State Administration of Civil Service. For the non-governmental personnel, the qualification censor table is filled by the personnel department of their units. The matriculation proportion of non-governmental department should not exceed the 20% of the recruitment quota of the year (The Academic Degree Commission of the State Council of China Authorized 100 Universities to Cultivate MPA, 2009).

Various level CPA schools also undertake the important duty to train party and administrative cadres, state civilians, and theoretical cadres in rotation. Therefore, the main body of public management in China is the government, but the public management education cultivating governmental talents is undertook by the public management colleges of various famous universities and various level CPA schools. Though the education of MPA could cultivate high-level talents for the non-governmental institutions, but their enrollment quota could not exceed 20% of the total amount, and others are the state civilians. The actuality of the public management education in China should be important reason that the cultivation target of the public affair management specialty orientates its target as the application talents for the business units and non-governmental institutions.

In the exiting course that the government function transformation, the business unit reform, and the employment system reform of government and business unit are relatively slow, the cultivation target of the public affair management specialty is only those managers and servicers with the public management concept and new public management ability for the establishment governments and villages. In the establishment units, the consciousness of public management and service is weak, and the professionalization degree is not high, and the policy of public management and service is not complete, and there are more complex public problems which should be solved. Therefore, large numerous of professional public management talents are needed in China to engage, discover, think, and solve the public management and service problems in the establishment units. These talents include the common civilians, "village officers", and community managers, and the sources of these talents are the popular enrollment examinations for civilians, business posts, and "village officers". Though these enrollment examinations are not easier for the graduates of the public affair management specialty, but these students would more know the public management than the students of other specialties, and possess more consciousness, theories and responsibilities of the public management, so the students of the public affair management specialty should more take the enrollment examinations for civilians, business posts, and "village officers" as their employment target, and the colleges should also take them as their important direction of the specialty cultivation. Colleges should cultivate students to care about the establishment affairs with strong public consciousness and responsibility, and analyze, think, explore, and solve the problems about the public management and service by the professional spirit and ability, and really drive and promote the healthy development of the reform business of China.

Therefore, the public affair management specialty of local colleges should cultivate students' public spirit, public sense of responsibility, public policy analysis ability, and processing ability of public affairs. And for the public management colleges of famous universities, they should not only enhance the administration and party cadres' public spirit and modern public management level, but also train the teachers of the public management specialty for local colleges, which could offer essentially advantageous conditions for the students of the public affair management specialty to accept the professional education on higher level.

2. Oriented cultivation target in graduates' narrow employment environment: startup and service personnel for non-governmental organizations

Except for cultivating talents for the business units, the cultivation target of the public affair management specialty is also to cultivate managers for the non-governmental organizations (or non-profitable organizations). But at present, the development of the non-governmental organization is not perfect in China, and the amount is small, and the operation mechanism is not complete, and they are not called as the really social organizations because of their strong dependence on the government, so the social affairs could not be really managed by the society. Whether the professional talents are deficient and the management service is not good, or the economic support could not be found though the talents and concepts are ready, and many problems still exist in the public affair management. In fact, the society still manage its affairs by itself, which could not reduce the burden of the government, but the management and service could more embody and realize the demand and will of the public, and more utilize and save the social resources. The Ministry of Education of China had added the specialty of the public affair management ten years ago in the adjustment of the undergraduate specialty catalog, and added the new specialties such as the cultural industry management, the exhibition and convention economy and management, and the public polices in 2004, which are again embodied and emphasized that the wills and decisions of the country in the government function change, the administration reform, and the government and society reform.

Therefore, the cultivation target of the public affair management specialty should not only aim at cultivating managers and servicers for existing non-governmental organizations, but mainly cultivating the founders for non-government organizations in the current stage, and the researchers, analyzers, and establishers for the construction and management of non-governmental organizations. At present, many provincial and municipal governments all offer supports for college graduates for their business start-ups, and provide proper opportunities and better environment for the students of the public affair management specialty in the non-governmental organizations. The public affair management specialty of local colleges should more emphasize students' basic knowledge and theories for their business set-ups and management in the non-governmental organizations, and cultivate them how to finance, utilize the social resources, survey the real demand of the society in the actual national situation of China, and establish their new level and ability in this new service industry to satisfy the demand of the society.

3. Oriented cultivation target in the inconsistent employment: modern citizens with modern public management concepts and ability

It is the real fact that the employment approach of the students of the public affair management specialty is very narrow, so their employment in enterprise has been the necessary choice. But the managers, constructors, and teachers of this specialty have to possess definite professional consciousness and responsibilities of the public affair management. Even the graduates in the initial stage of the public affair management specialty have to take the posts of enterprise management, the education staff should also let them take the concept, responsibility and ability of the new public management, and the development and management mode of enterprises is different with the public management, but the development and management of enterprises can not leave the national policies of the economy and management, and the social responsibility and public thought undertaken by the enterprises. In the practice of enterprise management, these graduates could feed back the economic policies and the success and failure of the public policies by the professional view of the public management, and accordingly promote and enhance the economic policies and the public policies by modern civilians' rights and obligations. And they also could pay attention to the public crisis and problems of the country and the society by the spirit of public thought, and accordingly help to dispose the public crisis and problems by the identity of enterprise or entrepreneurs, and promote the perfection of the public crisis disposal mechanism. Therefore, the cultivation and enhancement of entrepreneurs' civil consciousness will be one of important cultivation target of this specialty. The establishment of students' public theory, the cultivation of theoretical analysis ability, and the formation of the professional thinking analysis habit should be the emphases of the specialty teaching, and students should all can analyze the public problems of the society by a rational modern citizen's thinking and mind no matter which post they are, and promote the development of the social public spirit and the advancement of the social public civilization.

The cultivation of the enterprise-oriented talents of the public affair management specialty should set up the professional courses of the public beneficial enterprises, or the enterprise or industry management courses with strong industry chain, such as the water supply corporation management, the communication management, the electric power management, the bus corporation management in the public beneficial enterprises, or the tourism

management, the originality industry management, the cartoon management, the news and press management, and the museum management in the cultural industry.

4. Oriented cultivation target in the combination with the local economic and social development: local builders with the public spirit

The specialty of the public affair management should cultivate the public managers and service staffs for the establishment units, and cultivate the modern citizens with modern public consciousness, theory, responsibility, and ability for the society, and the establishment property and the universal property of its cultivated object decide the localization of the specialty orientation, and the specialty should cultivate professional talents for the development of the local economy and social development. Therefore, the specialty should survey and research the city development plan, the city public business development plan, the talent demand of the city, and the talent cultivation measure and plan of the city where the school is located in detail. On the one hand, the development direction of the specialty should be confirmed in the survey and research, and on the other hand, the school should discuss the talent cultivation demand, cultivation mode, and the employment with relative city departments and units to confirm students' employment first and accordingly promote the stability and healthy development of the specialty.

5. Development thoughts about the course system, the power of teachers, and the teaching mode

In the orientation of the specialty, only above factors are considered, students could be seriously cultivated, and the "deep base, wide caliber, and multiple directions" of the course system could be carried out. Based on the subjects such as the politics, the economics, the management, the psychology, and the sociology, the module courses of various directions should be established respectively, such as the policy analysis, the city management, the cultural industry management, the community management, the rural public business management, and the social security, and the base of the subject is the required courses, and the module course should mainly consider the integrity of the module, with the multiple module selection. At the same time, many practical and research courses such as the public affair management case analysis, the social problem survey research, the public affair management policy analysis, and the public affair management should be provide for students to select, which could not only deepen students' professional base and develop students' professional domain, and cultivate students to grasp the habits and ability of analyzing problems by the professional view and theoretical thinking way.

In the course offering of the public affair management specialty, the teachers of this specialty are required quite higher, but the power of teacher of the public affair management specialty in local colleges is not optimistic. Teachers of this specialty should not only possess deep theoretical bases about the politics, the economics, the management, the psychology, and the sociology, but have deep theoretical level and practical ability in certain module direction, and have the teaching level and ability of teaching higher theory and practice to students. In the enhancement measure of teacher power of "introducing exteriorly and cultivating interiorly", it is very important to enhance existing teachers' level and ability, for example, some colleges appoint their teachers to attend in an advanced studies in brother colleges for the same specialty, and encourage their teachers to get a doctor's degree, and exercise their teachers in the practice base, or offer holidays to enhance their specialty, and ask famous colleges to take place the teachers training class of the public affair management specialty. In the construction and development of the specialty, the key is strong teacher power, and various colleges must make some real works to promote the development of this specialty.

With strong power of teachers, the perfect course system could be implemented in the effective teaching mode. The most effective teaching mode is the combination of theory and practice, with the instruction of theories and the analysis and operation of practice. In the instruction, students should establish the theoretical frame of the course even the subject, and fill in practice pictures and images in the theoretical frame, and the former is theory, and the latter is practice. General practice modes include practice, experiment course, graduate practice, and social practice, and these modes are necessary practice teaching part in the professional teaching. But the more feasible and convenient teaching mode combining theory with practice should be the arrangement and implementation of the practice in the course teaching. One or several teachers charge in the teaching of several courses in one module, and the theoretical instruction and practice of this courses should be designed and arranged by these teachers together, and they should bring students to study and research in the close combinations of theory and practice, such as classroom case teaching, the problem research, the spot survey, or the project participation, which could be closer with the course schedule and the theoretical content of the course, and could more embody the combination of theory and practice, and more effectively educate students than the current courses. Of course, these measures need teachers to pay sufficient energy and time to study, develop, and

research, and need the college to largely support in many aspects such as time, charge, and system.

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Neurocognitive Performance: Returning to Competition

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Abstract

Athletes who suffer from concussions under report their symptoms in order to expedite their return to competition. Athletic trainers and coaches must be aware of what is going on with athletes, even if it means requiring them to refrain from competition. Ninety percent of concussions are minor and can be difficult to diagnosis. There is a lack of guidelines available for physicians and athletic trainers to follow when dealing with concussions. However, healthcare officials are recognizing the importance of concussion management and experts agree that athletes who have concussion symptoms should not return to competition until they are fully resolved. Computerized testing can efficiently and effectively assess and diagnose a concussion. Physicians and athletic trainers can monitor these tests, which saves athletes time and money. Computerized tests such as ImPACT and CRI provide clear results that are easy to read. By reviewing the results physicians and athletic trainers may better diagnose the symptoms which prevent the athletes from being dishonest about their symptoms in order to return to competition before they have recovered.

Keywords: Concussion, Return to competition, Head injuries, Neurocognitive performance, ImPACT

Purpose

The purpose of this paper was to study concussions and determine when an athlete suffering from this injury is ready to return to competition. An additional focus will be to search for information related to athlete's neurocognitive performance after symptoms of a concussion have dissipated.

1. Introduction for Need for Study

Injuries happen in most sports, and when they do who is in charge of determining when the athlete can return to participation? For the most part, the athlete has too much control of when they think they can perform well enough to participate in activities. "The complexity of concussion injuries requires clinicians to use a variety of tools for information, but the current tendency is to base the return-to-play decision on the athlete's self-reporting of symptoms and ability to perform sport-specific tasks without a recurrence of concussion symptoms" (Notebaert & Guskiewicz, 2005). Athletic trainers or coaches are responsible for making the call as to when an athlete will be permitted to return to competition. When dealing with concussions athletes must be vigilant because the risk of permanent damage is much higher than other injuries. Over the last decade there has not been a set criterion for when athletes who have suffered from a concussion may return to activity. So when is an athlete who has suffered a concussion, ready to return to participation? "Sport related concussions are a distinct clinical subset of traumatic brain injury because they are often witnessed and not usually associated with other injury. More than 90% of these injuries are of mild severity characterized by transient confusion, brief amnesia, and no loss of consciousness. Thus it is possible for an athlete to be concussed and still continue to play. Also, management decisions are easily influenced by an athlete's desire to return to competition and a coach's will to win. Although some traumatic brain injuries are more severe than others, none are trivial, and each has the potential to be lethal" (Benson, Rose, Meeuwisse, Kissick, & Roberts, 2002). There is a need for continued study of these injuries because of the possibility of permanent damage concussions may cause. "Team physicians and athletic trainers increasingly are recognizing the importance of concussion management in athletes. "Although consensus has not been reached regarding the specifics of return-to-play guidelines after a concussion, experts uniformly agree that athletes should not return to play until all symptoms have resolved" (Erlanger, Saliba, Barth, Almquist, & et al., 2001). "There are 300,000 sports related concussions per year. If an athlete returns to competition too quickly after a concussion, there is a high chance of brain damage or death if another concussion is received. Second

Impact Syndrome, which is when a person who is recovering from a concussion gets another one, is responsible for approximately 30-40 deaths in the last decade” (ImPACT, 2009). According to the Center for Disease Control, A concussion, which is also known as a Traumatic Brain Injury (TBI), is “caused by a blow or jolt to the head or a penetrating head injury that disrupts the normal function of the brain. Not all blows or jolts to the head result in a Traumatic Brain Injuries (TBI). The severity of a TBI may range from “mild,” i.e., a brief change in mental status or consciousness to “severe,” i.e., an extended period of unconsciousness or amnesia after the injury” (Mitchko, Huitric, Sarmiento, Hayes, & et al, 2007). According to Dr. Michael Collins, assistant director of the University of Pittsburgh Medical Center's (UPMC) Sports Medicine Concussion Program “The blow shakes the brain in the skull like a yolk sloshing around inside an eggshell” (McCollum, 2009). Concussions have many symptoms some of the more common symptoms that are reported by athletes are: headaches, nausea, balance problems and/or dizziness, fuzzy or double vision, sensitivity to light and/or noise, feeling sluggish or foggy, change in sleep patterns, concentration or memory problems, and unconsciousness.

2. Methodology

Guidelines have not been set for the assessment of concussions. “Past surveys suggest that most athletic trainers do not adhere to any specific concussion classification system or return-to-play guidelines in the clinical decision making process” (Ferrara, McCrea, Peterson, & Guskiewicz, 2001). Doctors, coaches, and athletic trainers can use whatever type of assessment that they feel comfortable with. There are many types of tests that can be done to assess concussions such as surveys, which are basically questions that physicians or athletic trainers ask the athlete to determine how severe a concussion is, memory tests and balance tests. There are also tests that can administrated with scans which include CT, MRI, and EEG scans that will determine if an athlete has a concussion. All of these tests lead to the same conclusion, does the athlete have a concussion and how severe it is. Many schools and athletic trainers are testing the [neurocognitive](#) performance of the injured athlete. What does this mean? This means that the athlete is tested on mental process such as perception, memory, judgment, and reasoning.

In some cases, when obvious signs are not apparent, concussion symptoms may go unnoticed. This is why many medical professionals, athletic trainers, and coaches are turning to neurocognitive performance testing. Neurocognitive performance tests can not only show if the athlete is suffering from a concussion but also the recovery progress of the athlete. Another important key factor is that these tests diagnosis if the athlete is not telling the truth about their recovery process in order to return to competition. “Recently, the practicality of eliminating or delaying neurocognitive testing in cases of “simple” concussion has been questioned. One group recommended self-reported symptoms be used to the exclusion of other measures, in large part because neurocognitive decrements have not been shown to persist beyond symptom resolution. In contrast, others suggested that neurocognitive testing should be implemented soon after the concussion diagnosis due to the potential for an athlete to underreport concussion-related symptoms in order to expedite return to play” (Broglio, Macciocchi, & Ferrara, 2007). These tests can bring into perspective is if an athlete is truly healthy enough to return to competition after the symptoms are reduced. “We are uncertain whether concussed athletes who no longer report post concussion symptoms continue to show neurocognitive impairment related to their injuries” (Broglio, & et al., 2007).

There are different types of computerized tests that are available for athletic trainers and other health professionals to use. These tests are taken on computers over the internet. After a test is taken a chart is produced which is reviewed by a professional. To use these computerized tests athletes must first take a baseline test to evaluate where their neurocognitive performance is when healthy. If a concussion is received the athlete retakes the test to find out the severity. Before the athlete is able to return to competition, they must retake the tests until their neurocognitive performance is at a level that is within the limits of their baseline score. After the athlete receives a concussion the number will spike up indicating the severity of the injury. After the concussion, the athlete must refrain from activity until his/her overall score is back to the baseline score. An advantage that these computerized tests offer is that the diagnosis takes a short period of time. “CRI (Concussion Resolution Index) baseline assessments take less than 25 minutes, and post concussion assessments take approximately 20 minutes” (Erlanger, & et al., 2001). Going to a professional to administer this test would take much longer. “Implementing traditional neuropsychological protocols is time consuming, inefficient, and expensive. Athletes must be tested individually in a face-to-face format; testing requires 30 minutes to 2 hours per athlete; administration, scoring, and statistical analysis must be carried out by trained clinicians; and, in the event of a concussion, follow-up tests must be scheduled, administered, scored, and statistically analyzed. All of these factors allow the athletic trainer's the ability to use the results in a timely fashion” (Erlanger, & et al., 2001).

In a recent study, the ImPACT test was used to examine the effects of sports-related concussions. Athletes were administered a baseline test before competition started. "Our concussion battery includes the Symptom Assessment Scale (SAS) and the ImPACT (ImPACT Applications, Inc, Pittsburgh, PA) neurocognitive assessment for concussion" (Broglia, & et al, 2007). As practice and competition got under way, anyone who suffered a concussion clinically diagnosed by a physician completed a series of tests. "During the self-reported symptomatic (SRS) period after injury, the athlete's symptoms were monitored and recorded daily on the SAS. On the day the athlete self-reported being asymptomatic (SRA), the complete assessment battery was re-administered" (Broglia, & et al, 2007). For the athlete's data to be used in the analysis they had to meet three criteria. They first had to complete the baseline test which was administered immediately then the athletes were diagnosed to determine if a concussion was found and within 72 hours follow up exam is administered. The third requirement athletes had to meet was to determine if the severity of the symptoms at the SRA assessment point. "After complete injury resolution, each athlete was classified as having sustained a simple or complex concussion based on the guidelines provided in the summary and agreement statement of the 2nd International Conference on Concussion in Sport. A simple concussion was characterized by no loss of consciousness at the time of injury and symptom resolution within 10 days of injury. A complex concussion was characterized by a loss of consciousness lasting longer than 1 minute at the time of injury or symptoms persisting beyond 10 days after injury" (Broglia, & et al, 2007).

3. Findings

"ImPACT takes approximately 20 minutes to complete. This computer program measures multiple aspects of cognitive functioning in athletes including: attention span, working memory, sustained and selective attention time, responsive variability, non-verbal problem solving, and reaction time" (ImPACT, 2009). This test is comprised of six modules that when mathematically combined produces composite scores for verbal memory, visual memory, visual-motor speed, and reaction time. "The computer test also includes an evaluation of concussion-related symptoms. On a 22-item symptom list, the athlete ranks each item for current severity on a Likert scale (0 to 6); the maximum total score is 132" (Broglia, & et al, 2007). According to the study, 21 NCAA Division I athletes met the criteria. There were 16 males and 5 females, whose average age was 19.81 years, +/- 1.25 years; the average previous concussions were 1.76, +/- 2.02. Out of the 21 athletes, 17 (81%) were shown to have simple concussions, and 4 (19%) were shown to have complex concussions. "Of all the concussed athletes included in the analysis, 15 (71%) were identified as impaired according to the RCI calculations on at least 1 ImPACT cognitive variable at the SRS assessment relative to baseline. An additional 2 athletes were identified as impaired on the ImPACT symptom inventory, for a total of 17 athletes (81%) identified as impaired on at least 1 cognitive or symptom variable. Impairment on specific variables included 7 athletes on verbal memory, 8 on visual memory, 5 on visual-motor speed, and 9 on reaction time" (Broglia, & et al, 2007). In this study there were eight athletes who no longer reported any concussion related symptoms. When data from the ImPACT test were reviewed it showed that these athletes continued to have impairments on at least one variable when compared to their baseline test.

4. Conclusion

Concussions may be difficult to identify since more than 90% of concussions are of mild severity which make them difficult to diagnose. Coaches and athletic trainers may become caught up in the emotions of the game and overlook the athlete's symptoms. These professionals need to be alert for signs and symptoms that athletes may be experiencing which range from looks of confusion, forgetfulness, unconsciousness, and amnesia. Concussions are injuries to the brain and if they do not receive medical attention they can cause serious brain damage or death. Post concussion syndrome may lead to ailments such as memory loss and frequent headaches which may develop into various other disabilities.

New ways of assessing and diagnosing concussions are available. Computerized programs are becoming more reliable and time effective. Visiting a physician can be expensive and time consuming, however, with the new computerized programs such as the ImPACT and CRI tests assessing and diagnosing a concussion takes a matter of minutes. With these modules, physicians and athletic trainers may efficiently and effectively handle a concussion and know when the athlete can safely return to competition.

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Enhance Academic Study in Vocational Education in China

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Abstract

The increase in international trade and the information technology boom led us to begin to face the previously unthinkable of academic shortage towards vocational education. The main objective of this paper is to present the problem and find ways to solve it. The main finding included lack of investment from society and high degree involvement of government, the curricula is without of academic flexibility, students are sorted into different school types largely on the basis of their entering exam score, shortage of high-quality teachers and instructors. Thus this paper puts four ways to tackle the problem: decrease the involvement of government; setting hybrid curricula and providing technical research project; providing attractive option that the possibility to study further in university for vocational school graduates; emphasizing general and academic knowledge over industry and vocational skills by aligning academic institutions and firms.

Keywords: Academic study, Government, Education budget, University

1. Introduction

Expanding access to vocational education can be an attractive option for people in developing countries seeking to improve labor market outcomes. A large number of graduates from vocational schools fueled China's manufacturing export machine as skilled workers. However, it has become obviously that with increasing international labor market demands that heavily rely on commercial and technology and therefore, require academic flexibility from the job applicants. Shifting demands of modern life require academic flexibility to adjust to the changes constantly going on in the labor market. Therefore, vocational education is perceived as a disadvantage for a job applicant due to the limited skills and knowledge that the vocational schooling has provided for him.

Thelen pointed out in vocational education new technologies and new production requirements demand on going upgrading of training, mostly in the direction of more general skills and more theoretical training. Lauglo argued that vocational education was least practical because students frequently migrated to cities for better career opportunities that often made their vocational education irrelevant for the job aspirations that they pursued. They were restricted in their job choice to the limited skills and knowledge that they had acquired at vocational schools. Due to lack of academic education, they could not fulfill the requirement of society development. The current globalization also has spurred major debates on vocational education in many countries such as US, Italy and Germany. In two, the US and Italy, major reforms aimed at strengthening general, academic skills had been enacted. In Germany, government tried to establish national standards to improve school and students performance.

Our paper makes four main findings. First, students are primarily sorted into school type based on their entering test scores. Second, budget of vocational education is small amount. The involvement of local government is at high level to vocational schools. Third, vocational schools remained major skill-oriented instruction, students could not get the preparatory path towards higher education. Finally, there are not enough high quality instructors in vocational schools.

There are four main contributions to the literature. The first main contribution is independence from government involvement. The second main contribution is providing hybrid curricula with more academic lessons and technical research project. The third main contribution is supporting the way to future university study. The final main contribution is aligning academic institutions and firms.

We organize the rest of this paper as follows. The next section provides background of the China vocational education system. Section 3 investigates the findings and presents the ways to solve problem. The final section gives the summary.

2. Background of vocational education in China

In China, general high schools prepare students specifically for the university education. Vocational and

technical high schools (henceforth, referred to as vocational schools) provide vocational training with the main objective of imparting specific marketable skills. Their graduates are eligible to participate in the college entrance examinations but not directly to university. Traditionally, only graduates of the elite gymnasium have been admitted to university study. In China students are sorted into different school types largely on the basis of their entering exam score. General high schools attract the highest scoring and talent students, while vocational schools serve the lowest-scoring students.

Figure 1 shows the investment share of total education budget with general high school and vocational school. Vocational education is considered to be more expensive than general education [2]. But since 1993 vocational education budget began to be lower than that of general education. In 2004, vocational education budget was only 6.15% of the total amount and 4% lower than that of general education. Lack of fund can not sustain a high quality teacher team especially with high academic level.

Insert Figure 1 Here

Figure 2 points out the high degree involvement of government. Up till now there are 2590 private vocational schools. They make only 4% share of the total number of vocational schools. The World Bank [6] emphasized the importance of private provisions of vocational education or training due to high costs of provision and the abundance of private providers. The situation in China is contrary.

Insert Figure 2 Here

3. Analysis and Solution

3.1 Further Study for Vocational Education Graduates

According to the background information, general education which can support further academic study in university is more attractive to Chinese students. Traditionally talent students go to study in university. They can get high score and have the chance to entering general high schools. As the vocational school can not provide the way to university directly, its route seems a dead end. If students in vocational schools have the possibility to go for further study in university, it will not only attract more talent students, but also the vocational schools students will pay more attention to academic study. Thus even if the graduates could not pass the entering exam to university and turn to find jobs, the skill-oriented course with academic education would enable them to land in various jobs.

3.2 Hybrid Curricula and Technical Research Project

Vocational schools provide various courses to students, such as business, computer, fashion design, automotive, travel and welding. However, one factor that most individuals would like to enroll in a certain type of course is its demand status. Both the vocational schools and students ignore that the academic flexibility for the graduates would lead to fit their knowledge and skills to the changing demands of labor market. We suggest the possibility of hybrid curricula and research projects. Vocational school curriculum still can remain mainly “academic” or general. The subjects included mathematics, English, physics and history. Students could take such subjects (some 4-5 hours a week) and yet remain on the preparatory path towards higher education. Research projects can play an important role in vocational education, technique invention and innovation is also a part of the responsibility of vocational schools.

3.3 Less involvement of Government

The degree of independence of vocational schools from governmental control is another important issue that determines the efficient implementation of vocational education and its beneficial implementation in a country. In china most of vocational schools are public and have strong relationship with government. The government support vocational education less budget since 2001 and it has great impact on the development of vocational schools. It also can not respond to the market change timely and efficiently especially facing high requirement in the fast change of globalization trend. The vocational education should be moving towards more skill and technique oriented instruction. It would be much more efficient to entrust vocational educational and training programs to private providers who would keep track of labor market changes and demands more effectively and would provide more relevant, up-to-date, more academic trainings at their expense, thus freeing significant portion of public money and lessen the impact from decrease of government budget.

3.4 Alliance with Academic Institutions and Firms

Vocational schools are suffering an acute shortage of high-quality teachers especially facing the requirement of academic education. As vocational education budget is not enough, teachers' income is at a low level comparing to that of general high school teachers. Another reason is that vocational education is considered as a

second-class education that makes it difficult to employ high quality teachers. Independence of vocational schools from governmental control can partially solve this problem due to more investment from private fund. We suggest that emphasizing general and academic knowledge over industry and vocational skills by aligning academic institutions and firms is way to bring high quality instructors. Professors and teachers from universities and generally high schools can greatly support academic teaching task in vocational schools. This is also a way to get full use of high quality teaching resource in China. Local business leaders can be volunteers in schools, thus the linkages with enterprises and universities, incentives to attract and retain qualified instructors and students and forms good feedback systems.

4. Conclusion

Following noteworthy conclusions can be drawn from the overall discussions in the paper. Several significant reasons of lack of academic education in vocational schools could be summarized as follows: shortage of investment from society and high degree involvement of government, the curricula is without of academic flexibility, students are sorted into different school types largely on the basis of their entering exam score and vocational schools are treat as second-class schools. Vocational schools are in shortage of high-quality teachers and instructors.

To tackle the above shortcoming several suggestions have been made. Decrease the involvement of government; setting hybrid curricula and providing technical research project; providing attractive option that the possibility to study further in university for vocational school graduates; emphasizing general and academic knowledge over industry and vocational skills by aligning academic institutions and firms.

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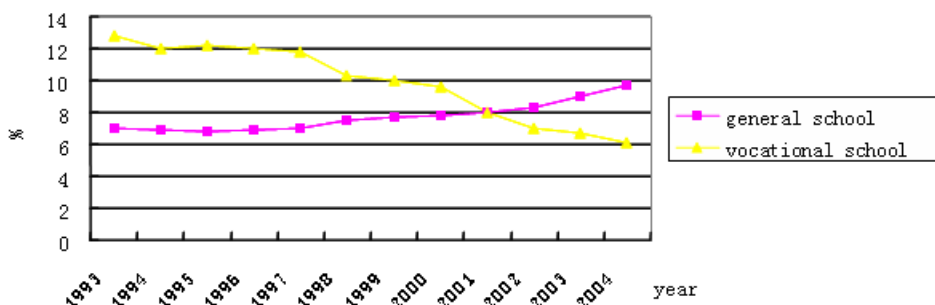


Figure 1. budget of vocational and general education in total education budget share

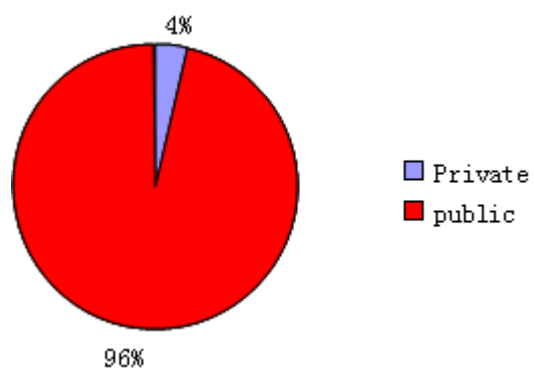


Figure 2. private and public vocational schools

Will Graduating Year Accountancy Students Cheat in Examination?

A Malaysian Case

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Abstract

Due to a series of high profile accounting scandals and corporate collapses such as Enron, World.Com and Andersen, ethical conduct has been widely recognized as a crucial element in accounting profession and education. The growing concern over the ethics of professionals has also called for more academic research into this critical area. Our study aims at assessing ethical behaviors of the future accounting professionals (i.e. final year accounting students) in Malaysia. This study which uses questionnaire survey examined the students' ethical attitudes as to whether they would act unethically in an examination. Also, their attitudes towards whistleblowing – if they become aware of such unethical conduct were examined. A vast majority of students (73 per cent), decided to be on the safe side – neither being purely unethical nor whistleblowers. Of the students, 11 per cent chose to become whistleblowers. While only 16 per cent would act unethically in exam, the percentage significantly declined once the risk of being caught was introduced. This indicates that students have not moved further from the first level of Kohlberg's stages of moral development which highly depends on the punishment and penalty in order to behave ethically. Results also reveal that students with good academic achievement were less likely to cheat in exam. Furthermore, a larger proportion of male students as compared to female tend to behave unethically. Overall, the study indicates favorable results since the majority of respondents would not prefer to indulge in unethical behavior, although they are not being purely ethical.

Keywords: Ethics, Accounting education, Students, Kohlberg, Malaysia, Whistleblowing, Gender, Moral development

1. Introduction

The accounting scandals and corporate collapses surrounding Enron, World-Com, Global, Crossing and Tyco have caused some to believe that there now exist a "crisis in accounting" (Business Week, 2002). In Malaysian context, public confidence in the accounting profession was badly shaken by the collapse of the deposit-taking cooperatives, and by the Bank Bumiputra and Pan-Electric fiascos in the 1980s (Ooi and Chuah, 1989). To this, Mahfuzah et al. (1996), reported that Malaysia is experiencing an increase in white-collar crime that accountants have failed to detect. There are cases where accountants are sued by their clients, as well as shareholders of their clients respectively. In the former, examples of companies which sued accountants are Bandar Utama City Corporation Sdn. Bhd. and Meton Properties Sdn. Bhd. In the latter, among the accounting firms involved are Johari Abas and Anor and David Low See Keat and Orsants, where they were sued by the shareholders for their

losses because the former had failed, as expected to detect wrongdoings of their client companies in the course of their normal duties (Adam et al., 2002).

Viewed from the above scenario, Ameen et al. (1996) suggest that there is a deterioration of ethical behavior in the accounting profession. Teoh (1990) reported the concern among the accounting academicians, corporate accountants and practitioners in Malaysia that professionalism and ethics should be upheld. In relation to that, the purpose of this study, then, is to assess the ethical attitudes of graduating year accountancy students in one university in Malaysia. In particular, these students were surveyed as to whether they will cheat in an examination, whereby they were being offered to receive a copy of the examination paper prior the actual exam day. In the first situation, there was absolutely no chance of being caught, while in the second situation, there was a ten per cent risk of being caught. The students' attitudes towards whistleblowing – if they become aware of such improprieties were also surveyed. Moreover, the effect of gender differences on students' ethical decision was also considered.

This study is significant in that the moral behavior of students in college today is likely to carry to the workplace in the future. The study contributes to the literature in several ways: (1) adding additional evidence to the existing studies on students' ethical decision when facing with real life corporate dilemmas particularly of students in developing countries; (2) providing guidance to accounting educators in incorporating ethics into the curriculum; and also (3) assisting the accounting practitioners and employers in understanding the ethical attitudes if their prospective employees.

This paper is structured as follows. The next section provides a summary of relevant literature on several important issues in ethics. This is followed by a description of the research methodology employed. Results and discussions are then presented, with conclusions and limitations contained in the last section.

2. Literature review

2.1 Whistleblowing

A whistleblower can be defined as someone who discloses significant acts of corruption, waste, fraud, mismanagement or abuse of authority in contravention of the country's law or regulations in either the public or private sector (Lee, 2005). To blow a whistle, undoubtedly, requires extraordinary courage. The whistleblower's dilemma is of two-fold: Near and Miceli (1985) states that "first, the observer must decide whether the activity observed is actually wrongful; that is, illegal, immoral or illegitimate". Next, if the observer determines that the situation is wrongful then that individual must determine if whistleblowing is an alternative in the situation and, if it is an alternative, then to decide whether or not to report that situation". Research on whistleblowing, however, has not established a set on variables that influence the decision to report (Randi & Keenan, 1998)

2.2 Stages of Moral Developments

Ethics education, as commented by Shenkir (1990, p.31), should recognize that different students will be operating at different stages of moral maturity. In this context, Kohlberg's (1976) model of moral development suggests that an individual's moral choices change over time and can be explained by any one of the six distinct stages of moral development. These stages determine the level of moral reasoning used by individuals in distinguishing right actions from wrong actions, and thus will impact an individual's "sense of moral obligation" and ability to "deal with ethical conflict" (Loeb, 1988, p.322). The six distinct stages of moral reasoning, in which moral development proceeds through as developed by Kohlberg (1964), and as paraphrased by Davis & Welton (1991) are as follows:

In relation to Kohlberg's (1976) model, White (1980, as cited by Davis & Welton, 1991) advocates that college is one of the best places to encourage these types of values development. She believes that college experiences allow one to progress through the stage of concern for individual rights and proceed to the last of Kohlberg's stages, concern with consistent, comprehensive ethical principles.

Viewed from the above, in this present study, we are also interested to test whether accounting students has moved out of the first level to the second. In doing this, we provide repeating scenarios which includes the element of a chance being caught, for all the three available scenarios, if the students are involve in any of the unethical action.

Insert Table 1

2.3 Gender Differences

Gender differences is the most frequent individual attributes tested in empirical ethical research (Ruegger & King, 1992; Serwinek, 1992; Ford & Richardson, 1994). Nevertheless, a survey into literatures suggests that the

issue of gender-based ethical differences is complex (Coate & Frey, 2000). Prior studies on gender effects on moral development have yielded only mixed results and thus it is a contentious issue (Abu Bakar et al., 2008; Roxas & Stoneback, 2004; Malone, 2006; Rest, 1986).

Some authors found there are significant differences between male and female students in their ethical attitudes (including Giacomino & Akers, 1998 and Roxas & Stoneback, 2004). Majority of these studies reported that females are ethically more conservative and are concerned more about ethical issues and business ethics, thus arguably reflecting a higher moral development and thus, moral standards (Coate & Frey, 2000; Cohen et al., 1998; Larkin, 2000; Ruegger & King, 1992). For instance, Ameen et al. (1996) reported that female accounting students are "...more sensitive to and less tolerant of unethical behavior" (p.596). In consistent of that, Betz et al. (1989) found that males display more willingness to engage in unethical behavior if the result of the action is to bring power or money.

On contrary to the preceding arguments, some studies report no significant gender differences in ethical judgments on social or business issues (Can S & Dilek Onkal-Atay, 2003; Abu Bakar et al. 2008; Stanga & Turpen, 1991; Butler & Clark, 1999).

Some explore further into the issue to find its justifications. For instance, Roxas & Stoneback (2004), in reviewing the rationales and potential explanations of gender differences, commented that the gender socialization approach argues that males and females have distinctive different values and traits due to gender creating different moral orientations and resulting in different decisions and practices. Other potential explanations are provided by some other authors including Yankelovich (1972) and Gilligan (1982). For instance, Yankelovich (1972) concluded males and females to have a different moral orientation with women having a "greater sense of commitment to doing things for others and men more pessimistic".

3. Research methodology

3.1 Participants

The participant subjects in our study were final year graduating students pursuing their Bachelor Degree of Accounting at International Islamic University Malaysia (IIUM). Generally, these students had completed most of the core accounting modules (financial accounting, management accounting, taxation and auditing) and are ultimately likely to start their profession in accounting field in the near future. The questionnaires were distributed and administered to all 235 final year graduating students. This was carried out during the formal lecture period where students were given approximately 15 minutes to complete it. Students were not told that this was a survey to ethical attitudes. All they were told was that there were no correct answers and were encouraged to answer according to their own feelings. As with most questionnaire surveys the complete anonymity of the respondents were assured. A total of 210 usable responses were received, representing an 89.4 per cent response rate.

3.2 Survey Instrument

The survey instrument (questionnaire) used in this study was primarily adapted from studies by O'Leary and Cotter (2000) and O'Leary and Radich (2001), with some modifications made to ensure it is more applicable and readable to the existing participants. The instrument contained two parts; the first part is intended to seek students' attitudes towards several ethical dilemmas, while the second part sought the demographic information of the participants.

In particular, the first part of the instrument consisted of two ethical vignettes. The first scenario was pertaining to the decision of whether to accept an offer to receive a copy of a final paper exam the day before the examination. Scenario two was exactly similar to scenario one, except that the former included the possibility of being caught. Specifically, scenarios one and two of the questionnaire is aimed at gaining information on the ethical attitudes of the sample students based on the following research questions:

- 1) What are the final year accounting students' ethical attitudes to accepting an examination paper before the exam?
- 2) How are their ethical attitudes affected by the risk of getting caught?
- 3) Is there an impact of gender on the ethical decisions of students?
- 4) What are students' attitudes towards whistleblowing?
- 5) Is there a relationship between students' performance and their ethical decisions?

4. Results and discussion

4.1 Overall results

We shall begin the discussion of the results by translating the three available answers into simpler terms. With respect to Scenario 1 and 2, we can interpret the three answers as the following: i) Those that *'accept Michael's offer and get a copy of the paper'* are considered as unethical, ii) Those who *'thank him for the offer but decline'* are considered as trying to be on the safe side, iii) while those who *'thank him for the offer, decline, and immediately inform his employers of his offer to you'* can be considered as whistle blowers.

Insert Figure 1

Based on results for Scenario 1 (see Figure 1), a large majority of the respondents (i.e. 73%) are trying to be on the safe-side. Neither are they being purely unethical nor whistleblowers. It is quite expected, though, that the number of unethical respondents exceeds the number which choose to become a whistleblowers, with 16% and 11% respectively. This, however, may not be a good sign of students' ethical behavior, which partly reflects their willingness to involve in unethical behavior given the situation faced by them out rightly benefited their self-interest, in particular their academic standing.

Insert Figure 2

In this respect, nevertheless, the results seem to be quite on the contrary once the students are being posed with a risk of being caught (i.e. Scenario 2-refer to Figure 2). While the percentage of students who tries to remain on the safe side remains the highest (i.e. 80%), a greater percentage of whistleblowers come into rescue (i.e. 19% as compared to the earlier 11%). This leaves those who have the guts to behave unethically reduce from 16% to a mere 1% (i.e. an overwhelming decrease by 15%).

In a way, this very small percentage (i.e. 1%) of unethical students can be considered as those who are totally unethical person who does not care of the negative consequences that will befall them should they behave unethically. This may also reflect that regardless what the policymakers or other regulatory bodies do to prevent fraud or the like, there will still be the very few, specifically accountants in this context, who would remain to indulge in unethical acts regardless the harm it caused them in the future. These very few accountants might not have the slightest sense of accountability to the public at large.

Additionally, with reference to the increasing number of those who are willing to become whistleblowers (i.e.19%) once they are faced with the ethical risk of being caught, it indicates that accountants would do what they are supposed to do (i.e. whistleblowers) when there is a proper 'stick' mechanism in place, to kind of penalize them accordingly. This particularly means that regulation, implementation as well as enforcements are still very much needed should we want the majority of accountants to behave in an appropriate manner.

This confirms the claim that there is a personal uncertainty for the whistleblower; the system is generally biased against those who simply want to do what's proper. In many cases, whistleblowers are victimized and the price they pay can be exorbitant. Sometimes the rightful authority blatantly fails to protect informants on corporate and market misdeeds. Many accountants who witness the wrongdoings of their colleagues or higher ups are loath to speak out, as the risk of recrimination is high (Lee, 2005). The culture of 'you scratch my back and I will scratch yours' prevails in at least in the business environment.

When comparing the results of this study with O'Leary & Radich's (2001), with special reference to the two related scenarios, the present results seems to be highly consistent in at least two aspects. First, the largest percentage of respondents would prefer to be on the safe side. They neither being purely unethical nor whistleblowers. Secondly, the percentage of respondents that would indulge in unethical act reduces quite tremendously once the students are threaten with the 'stick' (in O'Leary & Radich, 2001, the percentage reduced by 22%).

However, this present study does not support O'Leary & Radich (2001) findings in the sense that in the latter study the percentage of whistle blowers does not change or more specifically increase when 'stick' is provided.

4.2 Relationship between gender and ethical attitudes

In determining the impact of gender on their reaction towards ethical dilemma (refer to Table 2), it is interesting to note that male students are more likely to behave unethically, with 39% of them are willing to cheat in examination (a 28% higher than its female counterparts). The percentage of male respondents who would decline the offer is also way below the female respondents with 61% and 89% respectively. This study, thus, supports the earlier literature for example Arlow (1991), Ameen et al. (1996) and Coate & Frey (2000) which says female

are more inclined towards making ethical judgment. Nevertheless, the difference of gender impact on whistleblowing is indeed very minimal, with a 1% difference.

Insert Table 2

Further analysis using chi-square test was done in order to determine the significance of relationship between the students' attitudes to cheating in examination and gender differences for Scenario 1. The result shows that the act of being unethical to cheating in examination, being on the safe-side and the whistle blowers are significantly related to gender ($\chi^2 = 17.5$, degree of freedom = 2, $p=0.00$). Nevertheless, this study does not find consistent result with O'Leary & Radich (2001) in the sense that the latter found that there is less significant gender differences in the ethical stance towards illegal copying.

Next, we try to confirm our results on gender differences by examining Scenario 2 (refer to Table 3). Here, it is found that when there is a chance of being caught, almost all males and females would not dare to behave unethically, with 2.6% and 1.2% respectively. Here, however, it still remains that more males than females who are unethical.

Insert Table 3

Further analysis using chi-square test was conducted in order to determine the significance of relationship between the students' attitudes to cheating in examination and gender differences for Scenario 2. The analysis shows that there is a significant relationship between students' attitude when risk of getting caught being introduced and gender differences ($\chi^2 = 4.053$, degree of freedom = 2, $p \leq 0.05$). In other words, students' ethicalness would significantly differ across gender.

4.3 Relationship between academic performance and ethical attitudes

With respect to the relationship between students' ethical decision and their academic achievement (measured using current CGPA), the result is quite reasonably expected. Using the Spearman correlations, this study finds the Spearman correlations are significant with an inverse relationship between the variables. More specifically, referring to Table 4, the results for Scenario 1 Spearman correlation is negative 0.157 at the 5% significance level, while for Scenario 2 the Spearman correlation is negative 0.115 at 10% significance level.

Insert Table 4

These results can be interpreted that good students were less likely to cheat in examination as compared to those with lower grades. Among the possible reasons could be that these top performers internalized or at least have better understanding on whatever ethical-related matters or courses which they might have learnt throughout their study period. This understanding might have been positively manifested in their reaction towards ethical situation. As a matter of fact, the students under survey have taken the Auditing 1 subject which covers the Malaysian Institute of Accountants (MIA) Code of Ethics. In addition, the university itself has specifically requires its students to undertake one religion-based subject which relates to ethics, specifically named as the 'Fiqh and Ethics in Everyday Life'. This study, however, does not identify whether the respondents have or have not taken this particular subject. This might be one limitation in this study which might very interesting to be explored in future related studies. Another possible reason for the finding could be due to the fact that good students normally are willing to strive to earn or deserve the good results, rather than 'get' the good results. They also might be well prepared for the exam, and thus would not prefer to indulge in unnecessary unethical act simply to materialize their dream to perform in their exams.

Overall, the study shows quite favorable results since the majority of respondents would not prefer to indulge in unethical behavior, although they are not being highly ethical. This could be partly contributed by the fact that the mission and vision of the university and the department of accounting in which the study was carried out inter alia foster the Islamicisation of the ethics of Muslim students. Being part of the system, the students are supposed to be imbued with Islamic moral and spiritual values which are necessary in order to successfully impart ethical values. Among others, they not only have to take a specific religious-based subject on ethics, but also in their co-curricular activities, there are at least four religious-based modules in which they have to go through before graduating from the university.

5. Conclusion

Concerns on ethics in accounting profession have placed emphasize on academic research in this area. This study used a questionnaire survey to examine students' attitudes towards cheating in an examination. The study reveals that a vast majority of the students are opting to be on the safe-side (i.e. neither act unethically nor be a whistleblower). However, when the risk of being caught for cheating on an examination was introduced, all

except 1% of the respondents chooses not to act unethically. There is also evidence from this study that male students tend to indulge more in unethical manner compared to female. Additionally, ethical behavior has a significant relationship with academic achievement where higher academic achievers are inclined to act ethically.

Realizing the importance of ethics to the accounting profession, accounting education at the higher level institutions should focus on improving ethical capacity of the graduates by seriously and explicitly implementing ethics contents and courses in the accounting curriculum (Abu Bakar, 2007). Organizing ethics-related programs such as debates, talks and seminars on ethics, may also enhance ethical behavior of students.

Douglas et al. (2001) contended that culture or environment would have an impact on the ethical judgment of an accountant. Hence, in order to internalize ethics to accounting students equally important is to create an ethical environment within university whereby ethical belief and manners are portrayed in daily conducts and decisions of all parties including academic and non-academic staff as well as students. Ethical leadership of university's management team would also give strong influence to the ethical capacity and awareness of the graduates produced. In promoting the ethical environment it must be made well accepted to all and to materialize it is a long term commitment of the institution (i.e. university).

6. Limitations

The results obtained here should be interpreted in the light of several limitations. The major limitation relates to the nature of the university in which the study is being carried out. This university is can be considered as a religious-based university, as its name implies (i.e. International Islamic University Malaysia), where the integration of religion and knowledge is very much propagated and emphasized to and on its staffs and students. This is reflected in its curriculum whereby it requires all of its students to undertake four religious-oriented subjects throughout their university education. One of the subjects is Ethics and Fiqh in Everyday Life. Thus, there would be a possibility that these students are 'well-ethicized' by their university, and thus the results might not reflect the population of other accounting students in other university. To address this, another study that extends this present study to other institutions of higher learning (IHL) in Malaysia would be very much useful.

Secondly, the subjects of this study were students from one university located in an urban city in Kuala Lumpur. Shaub (1989) concludes that geographical location may influence an individual's ethical perspective. Third limitation is the one-time application of the survey instrument. A longitudinal study on a specific group of students, possibly beginning with a group of freshmen and tracking them as they progress through their university years would address this problem (Ziegenfuss, 1999; Davis & Welton, 1991).

However, with consideration to these limitations, this study should be treated as part of a larger body of research needed to enhance our understanding on the ethical attitudes of accounting students. It should be borne in mind that a single empirical study such as this, could not, in any case, be viewed as conclusive.

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Table 1. The six distinct stages of moral reasoning

LEVEL 1 : Preconventional Level	
Stage 1	Sticking to rules backed by punishment of superior authority.
Stage 2	Following rules when in one's best interest, avoiding punishment, bargaining with authority.
LEVEL 2 : Conventional Level	
Stage 3	Seeking approval of friends and family, the need to be good in your own eyes.
Stage 4	Obedience to law and order, avoiding the breakdown of society.
LEVEL 3 : Postconventional Level	
Stage 5	Awareness of other people's rights, universal principles of justice.
Stage 6	Concern with consistent ethical principles, equality of human rights and respect for the dignity of human being as individuals.

Table 2. Cross tabulation: Percentage within Scenario 1

	Gender	
	Male	Female
Accept Michael's offer and get a copy of the paper	39%	11%
Thank him for the offer but decline	51%	78%
Thank him, decline and inform his employers	10%	11%
Total	100%	100%

Table 3. Cross tabulation: Percentage within Scenario 2

	Gender	
	Male	Female
Accept Michael's offer and get a copy of the paper	2.6%	1.2%
Thank him for the offer but decline	89.7%	77.8%
Thank him, decline and inform his employers	7.7%	21.1%
Total	100%	100%

Table 4. Spearman's RHO

Scenario 1	Current CGPA	
	Correlation Coefficient	-0.157*
	Sig. (2-tailed)	0.023
	N	210

*Correlation is significant at the 0.05 level (2-tailed).

Scenario 2	Current CGPA	
	Correlation Coefficient	-0.115
	Sig. (2-tailed)	0.096
	N	210

*Correlation is significant at the 0.05 level (2-tailed).

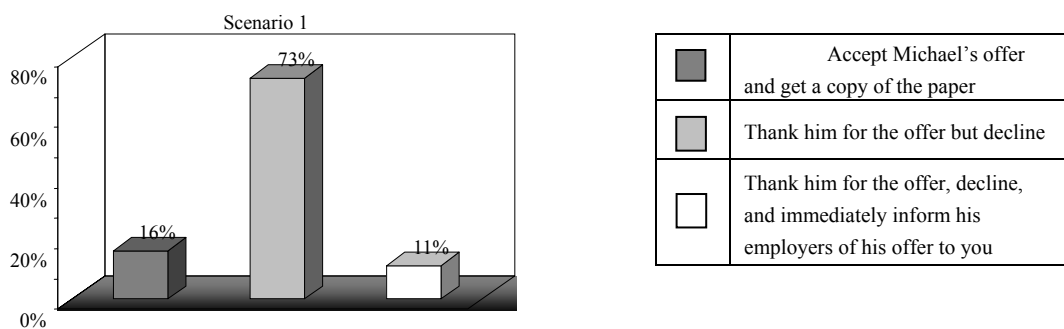


Figure 1. Students' ethical attitudes to cheating on an examination (Scenario 1)

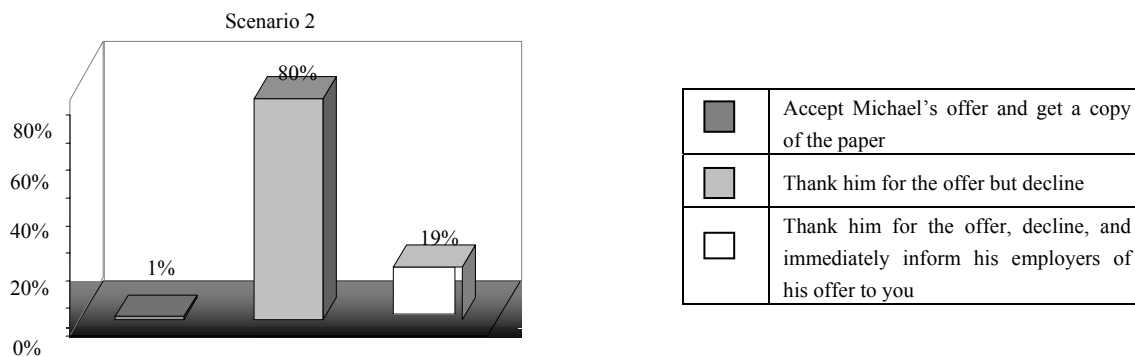


Figure 2. Students' ethical attitudes to cheating on an examination with 10% chance of being caught (Scenario 2)

Reading Abilities and Strategies: A Short Introduction

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Abstract

This paper gives a short analysis of reading abilities and reading strategies. Much research has been done to investigate the nature of reading, though it's had to exactly define reading abilities and strategies. Different kinds of readings are discussed in this paper and distinctions are made between first language reading and second or foreign language reading.

Keywords: Reading abilities, Reading skills, Reading strategies, First language reading, Second or foreign language reading

1. Introduction

It is commonly recognized that there are different levels or strands of understanding or comprehension of a text. Distinctions are made between literal, referential, and critical understanding. A literal understanding is an understanding of meanings that are directly stated in text, or an understanding of the main implications. Comprehension at this level involves surface meanings, readers find information and ideas that are explicitly stated in the text. The second level is referential or interpretive understanding. At this level, readers go beyond what is said and read for deeper meanings. Readers must read carefully and analyze what they have read, they need to be able to see relationships among ideas, for example, how ideas go together, and also see the implied meanings of these ideas. It is obvious that before readers can do this, they have to first understand the ideas that are stated (literal understanding). Referential comprehension includes thinking processes such as drawing conclusions, making generalizations and predicting outcomes. Finally, the third level is critical reading whereby ideas and information are evaluated. Critical evaluation occurs only after readers have understood the ideas and information that the writer has presented. However, appreciative comprehension should be added here, which is reading in order to gain an emotional or other kind of valued response from a passage.

However, just as Alderson (2000) notes, although intuitively appealing, such distinctions among levels of understanding are not always easy to define, since language is rarely completely explicit, normal language processing requires the reader to make inferences. The three levels are not distinct.

2. Reading Abilities, Skills and Strategies

2.1 Reading Ability: Divisible or Not?

Language ability is identified by some as a set of language skills. A great deal of teaching and testing materials are organized around one such proposal, that of the four skills of listening, speaking, reading, and writing, and the four skills model still remains pedagogically useful today, though it lacks support of empirical findings. Reading is considered by many teachers, textbook writers and language test constructors to be made up of different skills and components. It is often claimed that sets of reading components provide useful frameworks on which to base course design, teaching, and test development.

A reading skill can be described as "a cognitive ability which a person is able to use when interacting with texts" (Urquhart & Weir, 1998). Thus, unlike comprehension, which can be viewed as the product of reading a particular text, skills are seen as parts of the generalized reading process. So far, many different lists, taxonomies and even hierarchies of skills have been developed. Davis (1968) defines eight skills. Munby (1978) elaborately writes a reading ability list, he distinguishes nineteen reading microskills, which has been influential in syllabus and materials design as well as language tests design. Heaton (1988) also defines fourteen skills of reading ability. Hughes (1989) describes four levels of reading skills: macro-skills, micro-skills, grammatical and lexical abilities, and low-level operations.

Despite the widespread influence of a multidivisible view of reading on current practice, this view is greatly challenged. The idea that language ability is essentially unitary or holistic has been discussed in language teaching and testing circles since the 1970s. An early influential advocate of a holistic view of language ability is John Oller (e.g. Oller, 1979). His famous Unitary Competence Hypothesis (UCH) holds that language performance involving different skills and in different contexts draws on the same set of sources. Language ability could consequently be assessed as a whole, using integrative tests, such as cloze and dictation tests.

In opposition to a multidivisible view of reading, a substantial number of studies have found that it is not possible to differentiate between reading components, either through empirical demonstration of the separate functioning of such components when these are operationalized in language test items, or through the judgment of experts on what the focus of such test items actually is. Lunzer et al. (1979) find that there is no evidence that distinct separate skills exist and that, instead, reading consists of one single, integrated aptitude. A recent investigation conducted by Rost (1993) again finds strong evidence of unidimensionality, leading Rost to warn against different skill component interpretations for all available reading comprehension tests.

In a much quoted study (Alderson, 1990a, 1990b), Alderson investigated the reading component question through the judgment of experts on what reading test items actually tested. The judges could not agree on assigning particular skills and strategies to particular test items, they could not agree on what an item was testing, and even whether an item was testing a higher or lower level component.

Though the view that reading is multidivisible lacks empirical support, the unidimensionality which considers reading as a unitary skill is not without its problem. The above-mentioned Unitary Competence Hypothesis was rejected by Oller himself (Oller, 1983). Weir (1994, cited in Alderson, 2000), after reviewing the testing literature, reanalyzes the results of Alderson (1990a), and analyzes some test-based results of his own for EFL reading tests, he concludes that there is clear evidence that vocabulary should be seen as a component separate from reading comprehension in general. He says that if vocabulary is to be considered part of reading, then a bi-divisible approach might be more appropriate. There are other evidences which seem to suggest a bi-divisible view of reading, at least as far as word meanings and reading comprehension in general are concerned. It has become common in the research literature that reading is essentially divided into two components: decoding (word recognition) and comprehension (Alderson, 2000).

It might be the case that subskills are more readily identifiable in test for beginning, weak or dyslexic readers, but not for more advanced readers. But as described earlier in this section, no matter what theoretical position the test developer takes, the need to construct individual test items will exert strong influence on attempts to measure individual reading components or skills.

2.2 Reading Strategies

The 1970s and 1980s saw considerable interest in learner strategies in language learning, at the same time, more emphasis was put on the process of reading in reading literature. Both of these led to the thriving of reading strategies research in the 1980s. But much of the research fails to distinguish between strategies as defined more generally in the strategy literature, and skills as often used in the reading literature. Olshavsky (1977) defines a strategy as “a purposeful means of comprehending the author’s message”. Pritchard (1990, cited in Urquhart & Weir, 1998) argues that a strategy is “a deliberate action that readers take voluntarily to develop an understanding of what they read”. Though there is confusion in the literature as to what distinguishes a skill from a strategy, some distinctions are generally accepted (Urquhart & Weir, 1998):

- a. Strategies are reader-oriented, skills are text-oriented.
- b. Strategies represent conscious decisions taken by the reader, skills are deployed unconsciously.
- c. Strategies, unlike skills, represent a response to a problem.

In summary, a skill is an ability which has been automatized and operates largely subconsciously, whereas a strategy is a conscious procedure carried out in order to solve a problem (Williams & Moran, 1989, cited in Urquhart & Weir, 1998).

Olshavsky (1977) categorizes three strategies: word related, clause related and story related. Hosenfeld (1977, 1979, 1984) lists a number of effective reading strategies. Block (1986) distinguishes between general strategies (comprehension gathering and comprehension monitoring) and local strategies (attempts to understand specific linguistic units). Sarig (1987) classifies the reading moves or strategies into four types. Undoubtedly, the number and complexity of reading strategies is just overwhelming. Given the fact that strategies are frequently utilized in combination with each other and that individual readers use different terminology to explain the strategies they are using, a conclusion list may not be possible.

3. Different Kinds of Reading

All the models of reading that have been looked at so far have been designed with careful reading in mind. Many of the models of reading that have surfaced in the literature to date have been mainly concerned with careful reading at the local level. Weir (1993) proposes four types or levels of reading:

- A. Reading expeditiously for global comprehension
- B. Reading expeditiously for local comprehension
- C. Reading carefully for global comprehension
- D. Reading carefully for local comprehension

Urquhart & weir (1998) distinguish between five kinds of reading: scanning, skimming, search reading, careful reading and browsing, though they claim that the list is not exhaustive. These terms for different types of reading are often used in the literature, yet they often appear to be used in different ways. These will be discussed in detail.

Skimming: reading for gist, it is a type of rapid reading which is used when the reader wants to get the main idea or ideas from a passage (Richards et al., 1992).

Scanning: reading selectively to achieve very specific reading goals, e.g. finding a number, date. It is used when the reader wants to locate a particular piece of information without necessarily understanding the rest of a text or passage. The main feature of scanning is that any part of the text which does not contain the pre-selected piece of information is dismissed.

Search reading: locating information on predetermined topics. The reader wants information to answer set questions or to provide data. Search reading differs from scanning in that in search reading, certain key ideas will be sought while there is no such attempt in scanning. It also differs from skimming in that the search for information is guided by predetermined topics so the reader does not necessarily have to get the gist of the whole text.

Careful reading: this is the kind of reading favored by many educationists and psychologists to the exclusion of all other types. It is associated with reading to learn, hence with the reading of textbooks. Urquhart & Weir (1998) note the defining features of careful reading are: (a) that the reader attempts to handle the majority of information in the text, that is, the process is not selective, (b) that the reader adopts a submissive role, and accepts the writer's organization, and (c) that the reader attempts to build up a macrostructure. They also distinguish between careful reading at local level and at global level.

Browsing: is a sort of reading where goals are not well defined, parts of a text may be skipped fairly randomly, and there is little attempt to integrate the information into a macrostructure.

There is no necessary correlation between a particular reading behavior and a particular genre of text. And readers may switch from one kind of reading to another during reading, they are under no obligation to maintain a particular reading behavior throughout the length.

In language teaching, reading activities are sometimes classified as extensive and intensive. The distinction is largely a pedagogical one, extensive reading means reading in quantity in order to gain a general understanding of what is read. It is intended to develop good reading habits, to build up knowledge of vocabulary and structure, and to encourage a liking for reading. Intensive reading is generally at a slower speed, and requires a higher degree of understanding than extensive reading.

4. First Language Reading and Second or Foreign Language Reading

Questions comparing first and second/foreign language reading generally revolve around two interrelated but separate issues: the reading process and reading skills. Some researchers investigate whether first and second language reading processes are similar or whether there is a universal reading process. Others wonder whether individuals' reading skills transfer from their first language to a second. Researchers also ask whether good first language readers are also good second language readers.

Although little consensus has been reached among researchers attempting to analyze and compare first and second language reading processes, their individual and sometimes specialized conclusions provoke examination. Devine (1981, cited in Barnet, 1989) concludes that first and second/foreign language reading processes resemble each other. Kern (1988, cited in Barnet, 1989) finds that some difficulties in reading are common to both types of reading.

Researchers, who argue that first and second/foreign language reading processes differ, commonly declare

subjects' language proficiency level to be a determining factor. In general, the reading process of the advanced second /foreign language learner proves analogous with first language reading process, whereas that of the beginning second/foreign language learner contrasts with both. Mcleod and McLaughlin (1986, cited in Barnet, 1989) argue that advanced second/foreign language readers differ not only from beginning second/foreign language readers but also from native readers. But in general, experienced second /foreign language readers read more like proficient first language readers than do beginning second/foreign language readers.

Singhal (1998) elaborates the similarities and differences in L1 and L2 reading processes. Reading in both contexts is a meaning making process involving an interaction between the reader and the text. Readers use mental activities in order to construct meaning from text. These activities are generally referred to as reading strategies or reading skills. Successful L1 and L2 readers will consciously or unconsciously engage in specific behaviors to enhance their comprehension of texts. Both top-down and bottom-up strategies are used by effective readers as they read. As they read, they sample from the text, predict what will come next, test and confirm predictions, and so on. They use their background knowledge and various strategies to facilitate comprehension. To this extent one can say reading in L1 and L2 are similar.

However, L2 reading also differs greatly from L1 reading, Singhal examines factors of cultural differences: content (background knowledge) schema, formal (textual) schema, and linguistic (language) schema. It is evident that schema plays an important role in text comprehension. An L2 reader who is not familiar with culturally based knowledge or content schema, or a reader who does not possess the same linguistic base as the L1 reader, will encounter difficulties in reading, such difficulties may be greater when there is a greater difference between L1 and L2.

There are two widely known hypotheses concerning the relationship between first language and second languages abilities: the linguistic interdependence hypothesis and the linguistic threshold hypothesis. The linguistic interdependence hypothesis, in its simple form proposes that L1 reading ability transfers to L2. It assumes that there is a common underlying cognitive ability between L1 and L2, and it implies that we do not need to learn reading in L2 if we have a certain level of L1 reading ability. According to this hypothesis, transfer happens automatically. The linguistic threshold hypothesis proposes, on the other hand, that a threshold level of L2 language ability is necessary before L1 reading ability transfers to L2. This implies that L2 learners need to acquire some basic linguistic knowledge before they are able to read in L2.

Alderson (1984) integrates the two hypotheses mentioned above into a question: "Reading in a foreign language: A reading problem or a language problem?". Here "language problem" refers to a weakness in the knowledge and skills required for processing L2 linguistic properties, i.e. orthographic, phonological, lexical, syntactic, and discursal knowledge specific to L2, while "reading problem" refers to a weakness in what is called higher level mental operations such as predicting, analyzing, synthesizing, inferencing and retrieving relevant background knowledge, which are assumed to operate universally across languages.

In this classic article, Alderson broadly reviews research which contains implication for this question and proposes a tentative conclusion: The difficulties in L2 reading derive both from a language problem and a reading problem; L2 reading is more like a language problem at the lower levels of L2 proficiency and is more a reading problem at the higher levels of L2 proficiency. He concludes that there is likely to be a language threshold beyond which second language readers have to progress before their first language reading abilities can transfer to the second language situation.

After the publication of Alderson (1984), much research has been carried out to examine this topic. Though most of the research supports the linguistic threshold hypothesis, the concept of the linguistic threshold has not been elaborated enough.

After reviewing several studies, Yamashita (1999) proposes a model of the linguistic threshold. He hypothesizes three levels of the linguistic threshold to explain the contribution of both L1 reading ability and L2 language ability: the fundamental level, the minimum level, and the maximum level. Before readers reach the fundamental level, L2 language ability is very low and can not contribute to explaining the variation of L2 reading, there is no systematic relationship between their L2 language ability and their L2 reading comprehension. When the readers' L2 language ability has reached the fundamental level, L2 language ability starts to make a contribution to L2 reading, but L1 reading ability can not be transferred yet. The variation in L2 reading ability of the readers between the fundamental and the minimum levels is explained by L2 language ability only. When readers have reached the minimum level, L1 reading ability starts to transfer. When the readers' L2 proficiency develops towards the maximum level, the contribution of L1 reading ability increases and L2 language ability loses its power in explaining the variation of L2 reading ability. And last, when readers have reached the maximum level,

the L2 ability has developed so fully that it does not cause problems for L2 reading, therefore, variation of L2 reading comprehension is explained solely by L1 reading ability. In other words, L2 readers read in L2 as well as in L1, so this maximum threshold level must be very high.

But just as Yamashita himself notes, some researchers have pointed out that the level of the linguistic threshold is not absolute, depending on the reading tasks and readers' L1 reading ability. Future research is needed to further the understanding of the linguistic threshold.

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Vocabulary Learning Strategies and ELT Materials

A Study of the Extent to Which VLS Research Informs Local Coursebooks in Iran

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Abstract

Lexical competence is now regarded to be at the heart of communicative competence. This is endorsed by psycholinguistic research and corpus linguistics which show more use of prefabricated chunks than rule-based constructions. The change has been embraced in ELT. But lexical needs are unique to the individuals, personally, professionally and academically. Research demonstrates that vocabulary learning strategies make learning more self-directed and transferrable to new situations but there is a need for training learners in the use of VLS. ELT coursebooks are agenda for classroom practices; hence a good place to incorporate learner training. This study analyzed local ELT materials to study to what extent insights from VLS research and learner training have informed the sampled coursebooks. The results show the new edition of Pre-University coursebook is a significant step in incorporating such insights however there is a long way before the treatment is adequate in the whole series.

Keywords: Vocabulary learning strategies (VLS), Learner training, ELT materials, Lexical needs

1. Introduction

A good knowledge of vocabulary is essential for communication. Although grammar and vocabulary are complementary, with a bit of negligence Wilkins (1972) asserts that "without grammar, very little can be conveyed, without vocabulary, nothing can be conveyed." In many instances, people deal with a particular situation by learning specific words related to that context while they have hardly any mastery of grammatical structures e.g. airport taxi drivers in EFL countries. These people have concluded that words have more communicative value considering the amount of time, attention and energy spent to learn. The common experience of teachers and learners also demonstrates that lack of a specific word cannot be compensated by circumlocution. In an example, a student remembers being caught in a situation where he had forgotten the word 'CHARGE'. The person was shopping from a hotel supermarket in an Asian country. He did not have cash on him so wanted to ask the cashier to 'charge' his room account. He fell back on different words and sentences to fill the gap but with no success. Finally, he decided to show his room card and make the context more relevant. This simple example testifies to the importance of the knowledge of vocabulary. Words are not merely slot-fillers which simply fill in the pre-assigned function slots determined by structures of language. Rather, they are building blocks of a successful communication.

All through the history of ELT, it has never been doubted that a typical language learner has to build up an efficient knowledge of vocabulary to construct sentences conveying his meanings. Nevertheless, in earlier periods of ELT, vocabulary teaching was overshadowed by a focus on grammar because it was thought that vocabulary could simply be left to take care of itself. The wave of change came along with the body of research which demonstrated the necessity of including vocabulary instruction in ELT programs. There is now general agreement that lexical competence is at the heart of communicative competence and learners must systematically build up an efficient knowledge of vocabulary (Coady and Huckin, 1997, as cited in Decarrico, 2001). Evidence from psycholinguistic research and corpus linguistics suggests that prefabricated chunks are the foundation of fluency and account for more of the choices speakers make than do novel constructions based on the application of grammatical rules (Decarrico, 2001; Ranalli, 2003).

Ranalli (2003) observes that a look at the practices in ELT suggests the field has resonated to this change and has tried to account for the new tendency by modifying its approaches and methodologies. The movement has gone so far as a controversial call for a lexical approach (Lewis, 1993; 1997). According to this view, words and their collocations, not the rules, will be the foundation for language learning (Willis, 1990). Lewis (1993) believed that language is composed of words connected by rules of language not of grammatical rules filled in by words. Thus, vocabulary was no longer a victim of discrimination in language teaching which, after decades of neglect, recognized lexis as central to any language learning process (Laufer, 1997). The change in the status of vocabulary in language learning has affected teaching and learning practices, as well as materials writing which has become more selective about what vocabulary to include (O'Dell, 1997). However it is truism that a typical instructional program for language learning is unable to provide all the lexis a learner will need (Lewis, 1993; Willis, 1990) since lexical needs are largely unique to the individuals, personally, professionally and academically (Rivers, 1983; Nation, 2001). The question is whether this is an insolvable dilemma in language teaching? A bulk of research on learning strategies continues to grow which can show us a way out. Thus, accompanied with the resurgence of interest in vocabulary, there has been recognition of the importance of equipping learners with how to acquire vocabulary on their own (Ranalli, 2003). This made the studies in the field of LLS relevant to vocabulary learning.

A subcategory of general learning strategies is called language learning strategies which in turn include vocabulary learning strategies (Nation, 2001). Language learning strategies are certain skills, techniques and actions used by the learner to facilitate the learning and recall of one or several components of proficiency (Wenden and Rubin, 1987). A subset of these strategies, called vocabulary learning strategies, is strongly linked to successful vocabulary learning. The success implies making the process of learning more effective, more self-directed, and more transferrable to new situations. In fact, instead of or in addition to giving a few fish to a person we can teach him fishing. The LLS research, and VLS research by the same token, is linked to studies which show that more successful learners, in contrast to less successful learners, employ a group of specific strategies which are related to their success. Research tradition on learning strategies dates back to the 1970s studies which were involved with identifying the characteristics of good language learners. Thus, as LLS have been defined as "the special thoughts or behaviors that individuals use to help them comprehend, learn or retain new information" (O'Malley and Chamot, 1990), VLS have been characterized as any strategy which affects the process by which words are obtained, stored, retrieved and used (Schmitt, 1997).

Although research endorses the benefits of using these strategies, there is evidence to the effect that learners need training to use them efficiently with the ultimate result of improving their vocabulary learning. Left on their own, learners are mostly inclined to use basic vocabulary learning strategies but they "may be willing to try new strategies if they are introduced to them and instructed in them" (Schmitt, 1997). Nation (2001) also asserts that since "learners differ greatly in the skill with which they use strategies, it is important to make training in strategy use a planned part of a vocabulary development program". Thus, presenting vocabulary learning strategies should be the prime concern for coursebook writers, materials developers, syllabus designers, decision-makers and finally teachers. While it may be unimaginable to expect all teachers to unexceptionally include training learners to use VLS in their activities, it is more feasible to incorporate such training in ELT coursebooks as they are agenda for classroom practices for teachers and learners alike. Having this in mind, the necessity of attention to and incorporation of vocabulary learning strategies and training to use them in ELT coursebooks becomes clearer. This concern is even more important than developing a set of principles for selecting a collection of words to be included in a specific language program or coursebook. As a logical result of such discussions, the following questions arise: what measures have been taken in ELT coursebooks to present vocabulary learning strategies and training to use them? Are these attempts realized in the books as they are? These questions boil down to a basic question: have insights from VLS research "filtered down" (Schmitt, 1997) into the ELT materials? This study aims to delve into the research on vocabulary learning strategies and extract insights which can enrich ELT coursebooks. Then an attempt is made to gauge advances in treating VLS in ELT coursebooks. For this purpose, local ELT materials are analyzed to study to what extent insights from VLS research have informed the sampled coursebooks.

2. Taxonomies of Vocabulary Learning Strategies

Empirical research based mostly on learners' self-report of their strategy use is the cornerstone of VLS studies. Among the many studies that have been carried out to determine which strategies learners use and to figure out relationships between strategy use and success in language learning, there have been attempts to develop taxonomies of vocabulary learning strategies. On the whole, the taxonomies proposed by Gu and Johnson (1996), Lawson and Hogben (1996), Schmitt (1997) and Nation (2001) are always cited in the literature on vocabulary

learning strategies. It should be mentioned that other researchers' works should not be downgraded as they have been very influential in giving strategy researchers, including those who have developed the taxonomies, increasingly clearer views of the thoughts, behaviors and tendencies of learners. The studies carried out include but are not restricted to the following: Ahmed (1989), Sanaoui (1995), Stoffer (1995), Moir (1996), Gu and Johnson (1996), Lawson and Hogben (1996), Schmitt (1997), Porte (1988), Kudo (1999), Kojic-Sabo and Lightbown (1999), Lin (2001), Catalan (2003), Fan (2003). Thus, most of these studies resulted in the accumulation of an organized body of knowledge about VLS and allowed a few others to extract a taxonomy based on the existing research and their own empirical study. Nation's (2001) taxonomy is, however, an exception in that it does not derive from empirical research but is purely theoretical. The four taxonomies together with Sanaoui's (1995) general classification of the structured and unstructured approach to vocabulary learning and Nielsen's (2003) contextualized/decontextualized distinction will be dealt with in the following.

Sanaoui (1995) identified two distinctive approaches to vocabulary learning of adult learners: those who structured their vocabulary learning and those who did not. Structured learners engaged in independent study, did self-initiated learning activities and recorded the lexical items they were learning, reviewed such records, and practiced using vocabulary items outside the classroom. Structured Learners were shown to be more successful than those who followed an unstructured approach.

Gu and Johnson (1996) identified six types of strategy - guessing, dictionary, note-taking, rehearsal, encoding, and activation - together with two other factors: beliefs about vocabulary learning and metacognitive regulation. Metacognitive regulation consists of strategies for selective attention and self-initiation. The former allow learners to know which words are important for them to learn and are essential for adequate comprehension of a passage. The latter make the meaning of vocabulary items clear through the use of a variety of means. Guessing strategies, skillful use of dictionaries and note-taking strategies are labeled as cognitive strategies. Rehearsal and encoding categories are classified under memory strategies. Word lists and repetition are instances of rehearsal strategies. Encoding strategies include strategies such as association, imagery, visual, auditory, semantic, and contextual encoding as well as word-structure. Activation strategies include those strategies through which learners actually use new words in different contexts.

Lawson and Hogben (1996), in a classification which is more a reflection of the strategies actually exploited during one particular word-learning task than an overview of all vocabulary learning strategies at learners' disposal, distinguish four categories of strategies: repetition, word feature analysis, simple elaboration and complex elaboration. Repetition includes reading of related words, simple rehearsal, writing of word and meaning, cumulative rehearsal and testing. Word feature analysis contains spelling, word classification and suffix. Simple elaboration consists of sentence translation, simple use of context, appearance similarity, sound link and complex elaboration includes complex use of context, paraphrase and mnemonic. They found that learners who had used a greater range of learning strategies recalled more of the learned words later. However, all the learners alike tended to favor simple repetition strategies over more complex elaboration strategies, despite the fact that the latter yielded higher recall. Hence the researchers concluded that there is a need to present strategies more directly during language teaching since students are not aware of the advantages of these procedures.

Schmitt (1997) devised his taxonomy, self-reportedly, in response to the lack of a comprehensive list of vocabulary learning strategies. He organized 58 strategies under five types: determination, social, memory, cognitive and metacognitive. His categories were inspired by Oxford's (1990) inventory of general language learning strategies but included some modifications. Thus, social, memory, cognitive and metacognitive strategies have been adopted from Oxford (1990). The modification was that he made a distinction between discovery and consolidation strategies. The former helps learners to find out the meaning of new words when encountered for the first time, and the latter allows them to memorize, practice and retain the word after it has been introduced. The categories adopted from Oxford are included within consolidation strategies while discovery strategies contain determination and social strategies. Determination strategies are used when "learners are faced with discovering a new word's meaning without recourse to another person's experience" (Schmitt, 1997). For example, learners try to discover the meaning of a new word by guessing it with the help of context, structural knowledge of language, and reference materials. It is also possible to discover the meaning of a word through asking someone for help. Schmitt includes social strategies in both categories since they can be used for both purposes.

Nation's (2001) theoretically-oriented taxonomy makes a basic distinction between the aspects of vocabulary knowledge from the sources of vocabulary knowledge and from learning processes; hence, three general classes: planning, sources, and processes, each covering a subset of key strategies. 'Planning' involves choosing where

and how to focus attention on the vocabulary item and contains strategies for choosing words, choosing aspects of word knowledge and choosing strategies as well as planning repetition. 'Sources' involves finding information about the word from the word form itself, from the context, from a reference source like dictionaries or glossaries and from analogies and connections with other languages. Process means establishing word knowledge through noticing, retrieving and generating strategies.

In his review of research into vocabulary learning, Nielsen (2003) makes a distinction between contextualized and decontextualized vocabulary learning strategies which is inspired by the debate concerning learning words in context versus learning words out of context. Within the decontextualized vocabulary memorization strategies, he distinguishes between mnemonic and non-mnemonic elaboration techniques. Mnemonic techniques involve the use of both visual and verbal mental imagery to relate a word to be memorized with some previously learned knowledge; an example is the keyword method. Non-mnemonic elaboration techniques, such as semantic mapping and ordering, encourage learners to process target words in terms of their semantic properties. There are two versions of the keyword method, one based on the construction of visual images and the other based on the construction of sentences. 'Semantic mapping' involves brainstorming associations that a word has and diagrammatically displaying the results. 'Ordering' is a technique that asks learners to organize scrambled lists of words, forcing them to distinguish differences in meaning during the arrangement process. His contextualized VLS category includes learning words through reading and sentence writing method (Sentence Generate Method) which involves having learners construct a sentence containing the target word to be memorized.

3. Training in Vocabulary Learning Strategies

Learner training helps learners discover the learning strategies that suit them best (Ellis and Sinclair, 1989). It creates awareness of the choices available in language learning and facilitates learning and practice of strategies that encourage independence and enable self-directed learning (Oxford, 1990). Wenden (1991) considers learning strategies, metacognitive knowledge, and attitude as components of learner training. According to Chamot (1999) "learning strategies instruction can help students of English become better learners" since it assists them in becoming independent, confident learners. He continues to say that as learners begin to understand the relationship between their use of strategies and success in learning English they become more motivated. Lotfi (2007) reports Cohen and Apeh (1981) who taught students of Hebrew to remember vocabulary items by making paired mnemonic associations and found that those who made associations remembered vocabulary more effectively than those who did not. Stoffer (1995, as cited in Renalli, 2003) claims that strategy instruction is the single best predictor of use of VLS. Nation (2001) believes that since "learners differ greatly in the skill with which they use strategies, it is important to make training in strategy use a planned part of a vocabulary development program". He basically includes the element of training in the definition of a strategy when he says, to deserve attention from a teacher, a strategy must involve choice, be complex, require knowledge and benefit from training, and increase the efficiency of vocabulary learning and vocabulary use. Lawson and Hogben (1996) concluded that there is a need to present strategies more directly during language teaching since students are not aware of their advantages. However, O'Malley and Chamot (1990) make us aware of the fact that strategy training is a complex process which requires committed and informed teachers who spend an extended period of time working with learners.

Chamot (2004) asserts that strategy instruction should be explicit, that is, the teacher should inform students about the value and applications of the strategies either within regular language course or as a separate course. O'Malley and Chamot (1990) show that an explicit (vs. embedded or implicit) focus on metacognitive knowledge about learning processes is necessary to make them transferable to new learning tasks. Chamot (2004) believes that culture and context influence LLS by determining the demands of the task and the kind of learning strategies deemed effective. Thus, language teachers should help their students use the learning strategies that will best accomplish their instructional goals. This involves taking into account students' level of L2 (English) proficiency (which can affect their ability to understand metacognitive explanations for how and why to use strategies), learning context, learners' cultural backgrounds, previous educational experiences, learning styles, etc (Renalli, 2003). Training must also include opportunities for learners to monitor and evaluate their use of learning strategies (Sinclair and Ellis 1992). This necessitates pairing metacognitive and cognitive (direct) strategies to give students "direction or opportunity to plan their learning, monitor their progress, or review their accomplishments and future learning directions" (O'Malley and Chamot, 1990). On the basis of the findings of research the following results can be extracted:

- Vocabulary learning strategies have a wide variety and a typical learner is aware of and uses only a small fraction of them which may not be the most efficient ones.

- Learners need instruction to widen their range of strategies and use them. This training has the role of changing knowledge into skill. It is the independent use of these strategies which is the ultimate goal of strategy instruction.
- In earlier stages of language learning, decontextualized strategies are necessary and a greater proportion of them is recommended. With progress, the proportion is balanced.
- Since students in earlier stages lack metalinguistic information for explicit VLS training, it is better to rely more on presenting VLS implicitly, that is, embedded within other activities and introduce explicit VLS gradually.
- Metacognitive strategies should be included in instruction along with the direct strategies.
- Learners may show indifference or resistance to strategy training because of their previous learning experience, educational or cultural background, learning style or other factors. So the goals of strategy instruction should be explained and their motivation in terms of positive affective factors should be stimulated and involved.
- Explicit instruction is more effective. So, use of L1, that is, the learner's mother tongue or the language which the learner uses for his general academic needs, is better unless learners are advanced.

4. The Role of Materials

Tomlinson (2001) reports that coursebook is the most convenient form of presenting materials; it produces consistency and continuation, gives learners a sense of system, cohesion and progress, and helps teachers prepare and learners revise. Littlejohn (1992) believes that coursebooks today are more influential than ever before in terms of the extent to which they structure what happens in language classrooms. Most of the times, changes in policy are implemented through coursebook revision or change since coursebooks are agenda for classroom teaching and learning practices. While it is possible alternatively to fall back on teacher training and professional development programs to implement a procedure in language teaching, it is more practicable to count on coursebooks. This is the case with presenting VLS and training learners to use them in their activities and is the rationale behind the present study as will be explained presently.

5. The Study

This study attempts to apply criteria extracted from VLS research on local ELT materials to evaluate their treatment of VLS. The purpose is to analyze the specified coursebooks based on the insights gained from VLS research to gauge the extent to which the sampled coursebooks have incorporated VLS and training in using them. Thus, this study can be considered as a micro-evaluation in that a particular teaching task is selected and is subjected to a detailed empirical evaluation (Ellis, 1997). In a similar undertaking, Schmitt (1997) concluded that insights from research and scholarly discussion have been “filtering down” into recently published vocabulary-learning materials. However, a focused and comparative work can be more insightful.

The method of analysis and evaluation was that a set of criteria were derived from the research history on both vocabulary learning strategies and learner training in VLS. Lake's (1997) evaluative framework of learner training was adopted with major modifications according to the goals of the study. The criteria are presented in Table 1. The degree of correspondence of each coursebook with the criteria were recorded in terms of a subjective rating scheme with four points (0-3) to provide the reader with a mental framework and to facilitate comparisons among the coursebooks in this study. The zero (0) in this scheme means that the book in question has not dealt with the specified strategies or it has dealt with them in a disorganized manner and sporadically; it also represents a lack of correspondence with the criteria. One (1) means dealing with strategies in small scale and weak correspondence. Two (2) means moderate dealing with strategies and correspondence. And three (3) means almost perfect treatment. The rating was repeated independently by the researcher's colleague on two coursebooks chosen randomly from among the coursebooks under analysis in order to ensure inter-reliability.

The coursebooks analyzed and evaluated in this study were coursebook series used to teach English in local General Education in Iran. The series include seven coursebooks. Three books belong to Guidance School level of General Education which has three levels and begins after primary school. This is where English is introduced for the first time in local General Education. All students have to study Guidance School to be qualified to enter High School. Thus, they take three English courses during the three-year period of the Guidance School. High School has three levels and takes three years. Here again students have to take one English course each year. After students finish High School, they have to continue studying for another one year to be qualified to take University Entrance Exam to enter university. This one-year period is called Pre-University. So every Iranian student takes seven English courses before he enters university. The English coursebooks used in these levels have been arranged as a series and they claim to have one ultimate goal which is the improvement of students'

English proficiency. The three Guidance School books have mostly a structural basis sporadically interspersed with some dialogues and functions which are always misused through treating them as Grammar-Translation activities. The three High School books are reading-oriented but the structural basis of the books is in evidence. However, they are a relative improvement compared to the three former ones. This being said, it is very interesting that the new edition of English coursebook of Pre-University level proves to be a quite different attempt in developing local English coursebooks. However, the efficiency of learning English in local General Education is notoriously low. One reason for this among many other reasons is the structural basis of the coursebooks. Even the overemphasis on reading skill in these coursebooks has been overshadowed by being structurally-oriented (Jahangard 2007). This being known, no study has ever tried to realize the status of vocabulary learning strategies in these books, specifically the new edition of Pre-University coursebook. This study is an attempt to gain an understanding in this regard.

6. Results and Discussion

The final scores in table 2 show the degree to which each coursebook within this series has incorporated the criteria. While the six coursebooks all through the Guidance School and High School levels show a weak attention to research base, there is a considerable gain in the case of Pre-University coursebook. This is because the new edition of the book has moved a long way in incorporating vocabulary learning strategies and the elements of learner training. Not only has the book changed the long established direction of the earlier books in the series, but also it has introduced elements which were sort of taboo in General Education coursebooks. An important difference is that earlier books did not address learners all through the book; rather they addressed the teacher by including regular recommendation notes on how to teach various parts of the book. This is quite against the aims and methods of learner training. Catering for self-directed learning and independence entails trusting in the learner as a person who can take the responsibility of his learning and providing a system of necessary notes for him/her which make for increasingly independent learning. This is embodied in the inclusion of an informative nine-page preface as well as regular notes through the new edition of the book which draw students' attention to strategies and give them practice in using the strategies. It should, however, be pointed out that even in Pre-University book the treatment of vocabulary learning strategies is not adequate when a comparison is made to the treatment of other kinds of strategies, e.g. reading strategies. This shows a general tendency in General Education English coursebooks to place more emphasis on specific components and skills of language, that is, grammar and reading. Nevertheless, inadequate treatment of VLS is a general deficiency which most coursebooks suffer from. What is noticeable in all books of this series is a widespread lack of attention to metacognitive strategies including strategies providing both for self-direction and self-assessment and monitoring. This is not a minor problem as strategies and learner training can be realized only when cognitive strategies are complemented with metacognitive ones as organizing factor. Even in the case of direct (cognitive) strategies, as the rating for 'Breadth' shows, not a wide range of vocabulary learning strategies have been presented all through the series. On the whole, the analysis shows that although the Pre-University coursebook is a significant step in absorbing the insights from research on VLS, the entire series suffer from a widespread lack of attention to VLS presentation and learner training. There is no explicit teaching of cognitive and metacognitive strategies, a problem which undermines a systematic approach to vocabulary. The range of VLS which are presented, of course implicitly, is so limited that important strategies such as resource use and note-taking are not dealt with. There is no extended and long-term plan for generalizable and personalized vocabulary construction and strategy instruction, instead single and isolated activities are used. Metacognitive strategies are neglected and there is scarce attention to learner attitude. On the whole, the Pre-University book has taken good steps in incorporating VLS but there is a long way before we can evaluate the treatment of VLS in the entire series as efficient and adequate.

7. Conclusion

The new edition of Pre-University book proved to obtain higher scores with regard to vocabulary learning strategies and learner training. This is rewarding since by improving General Education coursebooks it is possible to exert a positive influence on students' proficiency. Because of their wide range of audience, General Education coursebooks can be a suitable point of departure to launch innovations and implement improvements in ELT. One more advantage that local coursebooks have is the possibility of using L1 to present VLS explicitly and metacognitive knowledge about them. The research recommends use of L1 when students' level of proficiency is not high enough to understand metalanguage. It can also summon the element of attitude which is a very important factor in VLS training.

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Table 1. Criteria derived from VLS and learner training research adopted and adapted from Lake (1997)

Criteria	Definition
Scope of Learner Training	Presenting learning strategies, metacognitive knowledge and attitude altogether
Type of VLS Training	Awareness-raising activities, one-off activities, or long-term training; the latter is preferred
Language of VLS Presentation	L1 (the learner's mother tongue or the language which the learner uses for his general academic needs), L2 (English) or a combination of the two is used for presenting strategies and learner training; the latter is preferred
Presentation of Metacognitive Strategies	Self-direction: opportunities for individual choice of activities, the method of completing the activity, and the mode in which it is done
	Self-assessment and Monitoring: to enable students to assess and evaluate their performance and progress
Method of Presentation of Metacognitive Strategies	Explicit (using explanation, teacher modeling and separate work for strategy instruction) or implicit (integrating the instruction into regular work); the former is preferred
Presentation of Direct (Cognitive) Strategies	Explicit
	Implicit
	Contextualized
	Decontextualized
Balancing	The extent to which Metacognitive and Direct (cognitive) Strategies are balanced
Breadth	Range and Combination of different strategies
Suitability	The extent to which activities are suitable to the Academic Level of the students
Motivation	Variety and Flexibility: range of approaches and activity types to suit different interests and learning styles
	Balance of Psychological and Technical Preparation
Feedback	Providing explanations for tests

Table 2. The results of applying criteria on local general education coursebook series

Criteria/Values		GS1	GS2	GS3	HS1	HS2	HS3	PU
Scope of Learner Training		1	1	1	1	1	1	2
Type of VLS Training		1	1	1	2	2	2	3
Language of VLS Presentation		0	0	0	0	0	0	3
Presentation of Metacognitive Strategies	Self-direction	0	0	0	0	0	0	0
	Self-assessment and Monitoring	1	2	2	2	2	2	1
Method of Presentation of Metacognitive Strategies		1	1	1	1	1	1	2
Presentation of Direct Strategies	Explicit	0	0	0	0	0	0	3
	Implicit	1	1	1	2	2	2	2
	Contextualized	0	1	2	2	2	2	3
	Decontextualized	1	1	1	2	2	2	2
Balancing Metacognitive and Direct Strategies		1	1	1	1	1	1	1
Breadth		1	1	1	1	1	1	2
Suitability of Activities to Level		2	1	1	2	1	1	3
Motivation	Variety and Flexibility	0	1	1	1	1	1	2
	Balance of Psychological and Technical Preparation	0	0	0	1	1	1	2
Feedback		1	1	1	0	0	0	0
Total		11	13	14	18	17	17	31

GS= Guidance School

HS= High School

PU=Pre-University

Teaching Reform and Practice of the Provincial-level Quality Course: Quantum Mechanics

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Abstract

According to the actuality of Dezhou University, some useful reforms in teaching content, teaching method, and teaching measure are introduced, combining with the characteristics of the course of quantum mechanism in this article.

Keywords: Quantum mechanics, Teaching reform, Teaching content, Teaching strategy

The quantum mechanics is one of two backbones of the modern physics, and it is the most important required major course in the physics specialty. It is deeply applied not only in many branches of physics, but also quickly and extensively in many important domains such as chemistry, biology, material science, and information science. By the studying of this course, students could masterly grasp the basic concepts and theories of the quantum mechanics, and have the basic theories of quantum mechanics to analyze the solve problems. The course of "quantum mechanics" of the department of physics of Dezhou University was appraised as the Shandong Provincial provincial-level quality course, and by virtue of this chance, the teaching content and method of quantum mechanics are reformed, and primary results have been obtained.

1. Main ideas of the teaching reform

In the traditional teaching, teacher is authority and students must accept the knowledge taught by the teacher without any condition. In the new term, this traditional concept should be changed, because the traditional concept would gradually cultivate students' dependence on teacher to be habits accordingly. Students dare not doubt their teachers, not to speak of the authority, so students' individuality and creation would be killed. To cultivate the innovational talents and implement new teaching concepts, and advocate the people-oriented concept, both students' principal function and teacher's domain function should be exerted, and the quality education should be carried out. Some reforms in the teaching content, teaching method, and teaching measure in quantum mechanics could really enhance the quality of talent cultivation.

2. Reform of teaching contents

Teaching content is the most basic factor in the teaching activity, and it would directly influence the teaching effect. When explaining the basic concepts and the basic computation method, the mathematical knowledge would be used inevitably, and students are not required to grasp complex mathematical deduction process, so the physical contents should not be submerged in the complex mathematical form. Proper teaching method could make students not only to grasp the application of mathematics in the course, but avoid complex mathematics, and centralize their energies to understand the physical concepts of the quantum mechanics, and grasp the basic concepts of the quantum mechanics. For example, for the one-dimensional harmonic oscillator and hydrogen atom, only the idea, method, and conclusions should be mainly introduced, and the detailed deduction is not necessary.

Students should be instructed to study the classic literatures, which could not only enhance students' level of foreign language, and cultivate their ability to primarily read professional literatures, but also let students to listen on the masters' voice, study the masters' thinking and expression mode, and enhance their studying interests.

In the instruction of basic theories, the "interface" between the teaching content and the frontier development of physics should be set up to make students to know the development trend of physics and expand their views. At the same time, the special lectures about the frontier knowledge of physics should be added (Zhao, 2001, P.78 & Lei, 2005, P.39 & Fan, 2005, P.47). Some special lectures about the quantum mechanism such as the quantum information theory, the application of quantum mechanics in the nanotechnology, and the application of quantum mechanics in the biological technology should be developed to expand student's knowledge.

Some exploring works could be given to students, for example, deeply developing certain problem of quantum mechanics, or surveying the relative frontier problem of quantum mechanics, to primarily cultivate part students' research ability.

3. Reforms of teaching measure and method

Traditional cultivation mode and teaching concept make against students' development in their innovational thinking and ability (Li, 2001, P.14). Effective teaching method and measure are the guarantee to realize the target of the education, and in the teaching activity, the educational psychology rule should be followed, and the teaching should start not only from the requirements of the teaching subject and teaching content, but from the psychological development rule of college students, and colleges should establish effective teaching strategy, reform the teaching method, adopt multiple teaching measures, and flexibly apply above measures in the teaching, and make the teaching achieve the requirements of knowledge and ability, quality and method, and present the teaching form according with students' learning characteristics.

3.1 Changing traditional teaching method and cultivating students' scientific quality

Traditional teaching method is the "force-feed duck" instruction, and this method makes students in the passive state in the teaching, and goes against the acquirement of knowledge and the cultivation of innovational ability. Aiming at this situation, the teaching method is improved, and the "research-type teaching" is adopted (Lu, 2004) in Dezhou University, which could fully utilize the teaching resource and advantages, and enhance the teaching quality, and cultivate students' science quality and research ability, and establish the base for their higher learning and work. The concrete method can be described as follows. Teachers first require students to prepare the course, and create the question situation in the teaching to lead students to discuss and research. Teachers should certainly explain the physical essential and ideas clearly, so students could not only acquire physical knowledge and learn something in the scientific thinking and methodology. By creating the question situations such as the multiple solutions of one question, or selecting some hotspots and difficult points in the teaching, teachers and students could communicate each other, which could largely enhance students' learning interests, and for the problems which could not be solved in the classroom, teachers should encourage students to solve it after school by other resources such as internet.

The form of the course paper could train students' ability of scientific research, and some incomplete solutions of the problems, and the interfaces of quantum mechanics with other subjects all can be the topics for students' paper, and some students could take them as their own projects. Up to now, students have studied the quantum entanglement and decoherence, the potential function and spectrum constant, the experiments about the quantum mechanics, and the quantum mechanics and biological physics. This method could not only establish the base for the training of scientific research, but more deeply understand and grasp the knowledge. At the same time, students also could study the scientific criterions to offer firm knowledge base, innovational consciousness, and skill training for future research. In the concrete implementation, students' papers are not required to appear, but the topic, content, format, literature reference of the papers should use the writing criterions of academic thesis.

3.2 Enriching the classroom teaching measures

The classroom teaching measure should gradually be changed from the single electric courseware to the combination of electric teaching plan, writing on blackboard, video, CAI courseware, demonstrated experiment, and network, for achieving the best teaching effect.

(1) As an effective assistant measure of modern teaching, the multimedia technology is more and more welcomed by most teaching staffs. The appearance of the multimedia teaching brings the vital force in the classroom education, and its powerful demonstration function is unmatched for traditional teaching measures. By using multiple modes such as projection, animation, and sound to transfer information, teachers could optimize the teaching process, and change the formalistic teaching classroom to be lively teaching place. Students' enthusiasm and innovation would be inspired largely, and the dual-communication between "teaching" and "learning" is fully embodied, so the efficiency of the classroom teaching will be largely enhanced.

(2) Physics is an experiment science, and to observe the experiment phenomena is an important measure to obtain physical knowledge. The university also established the lab of quantum mechanics, and set up 12 experiments including the electron spin resonance, the laser Raman spectroscopy, and the optical pumped magnetic resonance. After several years' teaching practice, students' study interests have been largely enhanced.

(3) The university developed the digital software in the teaching. The quantum effect, quantum model, quantum principle, quantum computation, quantum experiment, and quantum application in the quantum mechanics are very abstract and difficult, and the teaching effect is not significant for a long term, but the development of

software by the digital technology could fully utilize the computation and simulation technology, and display visually the difficult knowledge before students, and change the abstract knowledge into the intuitionistic knowledge, and the good teaching effect has proved this method.

(4) The university has established cubic quantum mechanics course digital teaching source base for students' learning after school. The characteristic of college students' learning is to combine the classroom learning with the learning after school. But many learning resource after school in many colleges only includes the teaching plan and exercises answer of teachers, which could not effectively help students' learning. Since the digitization of education information occurred in the middle term of 1990s, it continually pushed the reform and innovation of traditional electric education and CAE. At present, large numbers of good digital resources about the course of quantum mechanics in the domestic and foreign network teaching resource are very abundant, the colleges could establish the cubic quantum mechanic digital resource base, assistant teaching software, management software, information consultation and network teaching resource base by fully collecting good teaching resources, combining teachers' teaching practice and teaching researches, selecting, integrating, and creating existing digital teaching resources by virtue of modern information technology and new teaching concepts. Especially, the colleges should establish the multiple-information courseware base according to the modern courseware idea, and utilize the combination of courseware to teaching on the internet. The colleges should provide a self-educated cubic space for the learning after school.

Above contents are the primary practice and experience in the construction of the course. The reform and innovation of teaching is the powerful drive to implement the college education, and in the teaching process, the colleges should combine with students' actual situation and the situation of the modern education, and continually reform the teaching content, teaching method, and teaching measures. Only in this way, high-quality talents required by the country could be cultivated really.

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Struggles for Modern Education: Egalitarian Liberalism and Its Quest for Equal Access to Opportunity

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Abstract

Egalitarian liberalism strives for equal access to opportunity and can achieve it. Every individual must be granted the chance to live his or her own life (Rawls, 1971). Our society must offer all citizens their own autonomy and live up to the egalitarian promises giving them respect. This paper disagrees with the notion that children raised in unequal conditions are unequally prepared for life's challenges. It is asserted here that modern education must be egalitarian in order to level the playing field between rich and poor children. It is an infringement on parent's liberty to raise their own children (Duncan, 1997). The liberal state can achieve equality of opportunity for each new generation and the liberal promise will then be fulfilled. It can only be achieved through education since diverse parenting styles will get in the way.

Keywords: Egalitarian, Education, Parenting Styles

1. Introduction

Annette Lareau's sociological study entitled, *Unequal Childhoods* describes two very distinct types of parenting styles and roles. Lareau characterizes them as *concerted cultivation* and *accomplishment of natural growth*. The study documents how middle-class children are directed toward achievement at early ages and this is called *concerted cultivation* (Lareau, 2003.) The study details how middle-class children gain a significant advantage over other children because of their parents' economic resources (Lareau, 2003). Using their economic prowess, middle-class parents foster their children's skills and talents through this process Lareau called *concerted cultivation* (Lareau, 2003). Middle-class parents develop their children through after-school activities and verbal communication with their children (Lareau, 2003). Also, these parents tend to have more interactions with school officials and teachers. Therefore, communication plays a larger role within this paradigm, as Lareau states, "discussions between parents and children are the hallmark of middle-class child rearing. Like many middle-class parents, Ms. Williams and her husband see themselves as *developing* Alexander to cultivate his talents in a concerted fashion" (Lareau, 2003).

Lareau finds that this middle-class parenting style is superior to any other. It is superior because parents need to talk with their children so that their children can understand the world's complexities. Thus, parents are supposed to act like teachers and draw questions and answers out of their children, in order to elicit a deeper understanding of life. Beyond that, parents must take a special interest in their children, cultivating them like a household plant that is watered and nurtured through speech. For Lareau, this is the only true path to rearing children that are destined to be economically successful. Of course, this is the goal of every American parent, or at least, we are led to think it is the goal of every American parent, regardless of race or economic class. Every parent wants their child to do better or accomplish more than they ever did, so to speak.

1.1 A Middle-Class Parenting Style

This middle-class parenting style features dominance and strict control by parents but it does have some major drawbacks to it, though. For one, this parenting model will result in children that are more dependent on their parents for every little thing. These children find it difficult to hear criticism from others outside the family home. They are often raised and spoiled and think that everything they do is superior. Parents cultivate these children to an extreme, raising their self-esteem levels, artificially high. I use the terms artificially high because parents praise children for insignificant things. While, in the real world, as opposed to the middle-class familial home, self-esteem is raised based on some truly meaningful accomplishment. I am talking about making the honor roll through hard work or athletic prowess in school sporting events. These are the ways to legitimately raise self-esteem levels in children. Middle-class parents tend to baby and coddle their children, sheltering them from the harshness and severity, of the real world. In the real world, not everyone will think that these middle-class are so wonderful. Praise will have to be earned and criticisms will come from teachers and from other children. This is a burden that must be shouldered and middle-class parents are doing their children a disservice, shielding them and artificially inflating, their self-esteem levels.

Another problem with this parenting style, that Lareau describes as more desirable than any other, is that children do not have much independence. Their parents guide and control them, as if they were, mere interactive toys. How can these children develop into individuals that are free from such parental control? Children do have the right of self-determination and should be free to choose their own occupations and life interests. There is parental pressure to pursue specific after-school activities that these parents feel will result in success, later in life. This parenting framework also results in children that are more competitive with their siblings. Naturally, there is fierce competition amongst siblings for parental admiration and attention under this type of framework.

1.2 Accomplishment of Natural Growth

Contrarily, working-class and poor children do not gain as much attention from parents and there is no real parenting plan to cultivate them. This is largely due to a marked lack of time and money, but the type of parenting, also plays a role. Lareau (2003) notes that working-class and poor children focus on giving their children freedom to develop on their own. This process is called the *accomplishment of natural growth* since it provides for less parental influence on the child (Lareau, 2003). Working-class and poor children tend to spend more time without any adult supervision and less direction and shaping is done, as a result. Lareau (2003) asserts the following regarding working-class parenting style. She feels it is inferior to the middle-class parenting style, and states, “for them, the crucial responsibilities of parenthood do not lie in eliciting their children’s feelings, opinions, and thoughts. Rather, they see a clear boundary between adults and children. Parents tend to use directives: they tell their children what to do rather than persuading them with reasoning. This is contrary to the middle-class parents, who provide a steady regimen of adult organized activities. Lareau (2003) finds “the working-class and poor children have more control over the character of their leisure activities” (Lareau, 2003). Here, we see that working class and poor children have more freedom to develop apart from excessive parental control that hinders their identity development. One positive aspect of this parental paradigm that Lareau does not consider is working-class and poor children are less likely to grow up as miniature versions of their parents. It is less likely that working-class children will be used as vehicles for their parents, to live their own lives through. It can be hard to resist the temptation to do that, since later generations can often achieve, more than the current generation. In the case of middle-class parents, they often super-impose their own unfulfilled goals onto their children. For example, If I did not get accepted to Harvard Law School then I would instill that hope, and that particular goal, in my own child. I can live vicariously through my child, in that regard.

As a middle-class parent, I can develop and cultivate my selfish interest, in my child, which is really unfair to the child. The child should be free to make her own choice without my harmful interference. My harmful interference would inhibit my child from developing her own identity and life goals. This harmful interference is only realized later in life, when the child reaches her thirties and begins to question how she was raised. Far worse, the child becomes an adult and realizes that she never wanted a certain career but was unfairly influenced by such obsessive and meddling parents, to pursue what they felt was right, for her. This problem does not occur within the working-class and poor parental model. Therefore, we do need to figure out what the correct balance is in order to avoid, the harmful effects that stem from both models.

2. Parental Roles, Economics, and Concerted Cultivation

Concerted Cultivation, according to Lareau, address the issue of responsibility. Therefore, the child’s development becomes a key parental responsibility. Under this framework or parenting style, parents would conduct conversations with their children and treat them as young adults. These parents tend to challenge their children and to foster the development of critical thinking skills early on. These rigorous academic activities serve as a form of parental nurturing. Whereas, Lareau calls for the supremacy of the one model over the other, advocating that all parents, regardless of income, need to follow the middle-class parental role because it is superior. Lareau muses, “Although middle-class children miss out on kin relationships and leisure time, they appear to (at least potentially) gain important institutional advantages. It is from the experience of *concerted cultivation*, that skills are developed preparing them for the future, when they enter the job market (Lareau, 2003). Here, this view is problematic because it only takes economics into account and it does not consider issues about individuality and identity formation. I disagree with Lareau that children are better prepared for the working world under the middle-class parenting paradigm, since these children, more so, than the working-class or poor children, tend to find themselves in careers their parents chose for them. Also, middle-class parents often solve problems for their children, rendering their children, less enabled to tackle some of difficulties in the real world. Most employers prefer workers that can work with little or no supervision, since that increases productivity saving time and money. The middle-class parenting paradigm features significant parental supervision and arguably, these children will need that throughout their lives. Middle-class parenting frameworks even penetrate the middle-class children’s social lives as parents try to influence who or whom the

children marry. Issues about sexual identity also creep in, and many gay children hide their sexuality from their parents for fear of disapproval and alienation. Providing a home life that encourages independence and freedom, for individual identities to develop, is truly more consistent with an egalitarian liberal framework. There seems to be a tension between raising independent decision makers versus raising children who are cultivated to achieve greatness.

2.1 Poor Children and Authority Figures

Lareau's study argues that working-class children, poor children, and their parents were less comfortable with authority figures (Lareau, 2003). This can lead to parents not seeking help for their children when it comes to education, in general. While, they may be less comfortable, they are not completely adverse to it. Whereas, the middle-class parenting style features an extreme response coupled with an entitlement mentality, as they view school officials, as impediments to their son or daughter becoming the next President of the United States. This is especially true if a teacher criticizes a child when that is never done by parents at home. The middle-class parent often calls school officials and teachers to intervene on the child's behalf. One problem with that is the child never learns to deal with problems on her own. The parent is always there to handle controversies for her. This is problematic when you consider how the real world works, as problems are always cropping up. It is important for children to learn problem solving skills, as early as possible, and for children to begin taking responsibility for their own lives. Parents, like good teachers, would be there to shed light and not to master, so to speak. Next, I shall move into the solutions and some recommendations for the future.

2.2 Recommendations for the Future

There is a version of liberalism that features a mixture of diversity and freedom in family life with equal opportunity designed for children. The family unit will coexist with equality of opportunity even as it stands opposed to liberal ideals that are contested within liberalism. The specific issues that are contested are: the meaning of equality of opportunity, the duties that are part of the liberal family, the nature and scope of parents' autonomy. It is generally not accepted within liberalism that equality for children is possible if we have parental liberty (Dwyer, 2006). It is an uphill battle but it is entirely possible to align the family with this notion of equality. The expensive governmental programs needed to equalize a child's living standard will not lead to discord between equality and families. Rather, families do not have to be totally economically self-sufficient to provide children with food and shelter.

2.3 An Egalitarian Approach

An egalitarian state does support parental care with its inclusion of additional quality-based educational programs that feature student-based extracurricular tasks. The egalitarian state also has paid leave for families, drug rehabilitation, parental counseling and many other parental support resources (Blustein, 1983). Our current legal system tends to prefer parental rights over the rights of children (Barnett & Belfield, 2006). The judiciary has endowed parents with complete control to take over their child's life. We walk a fine and narrow line when we tinker with First Amendment issues and with limiting parental rights over their offspring.

3. Egalitarian Liberalism

Egalitarian liberalism rejects libertarian theory that presupposes extreme autonomy and individual freedoms without any burdens imposed by the state. It consists of just doing anything that you want without any governmental restrictions. It is characterized by calling for equal freedom for all people. This requires the state to control the dissemination of resources such as food and water to all. Every individual can basically live their own lives as long as they do not interfere with another's freedom. There is a conflict inherent in this theory as it relates to parents and children (Lareau, 2003). Can parents let their children do anything that they want to do? Therefore, in this instance the family is a negative aspect and one that is hard for liberalism to reconcile. It seems that everything is fine as long as we are talking about adults but the problem surfaces when we mention children. The familial unit is usually the first place where children experience societal inequality (Lareau, 2003). We tend to differentiate and vary our treatment of children depending on whether they have siblings and based on birth order.

3.1 A Dilemma for Liberal Ideas

Family life is hampered by injustices that affect a child's life. It is rich children who claim inheritances and benefit from a distinct class advantage. Impoverished children suffer from poor health, unproductive schools, and less choice in terms of social and financial opportunities. Families diverge in other ways and this may lead to unequal life chances for children (Lareau, 2003). Of course, the parents' religious activities can affect a child's development. These differences led liberal scholars to conclude that any wish for equality for children will

conflict with the idea about parental liberty. Children cannot be free from parental influence over them especially concerning religion.

4. Developing a Conceptual Model for Liberalism

Scholars find that the dilemma within liberalism concerns the merit principle, family autonomy, and equal life chances (Mayer, 1997). Children cannot choose how their lives will be shaped and they are dependent on their parents. They lack the ability to make informed choices due to their tender ages and limited resources. The choices that their parents make for them dictate what their futures will be like. The problem is that family background tends to lead children into predestined slots within our society's hierarchy. Parental autonomy refers to the protective zone whereby parents determine and carry out their own choices how to live their own lives (Mayer, 1997). Any attempts by the government to equalize the conditions in which children are raised will not infringe on parental ability to structure family life. Families will be able to structure the details of family life including religious and cultural practices.

5. Implications

Liberal theory rests on education and redistribution as programs to redistribute resources can encourage more equality by allowing greater access to food and shelter (Dworkin, 2000). Education helps to promote equality since it can try to account or adjust for differences in family background. It is true that a liberal education must prepare children to learn to make informed choices. It must teach them to reason and expose them to lifestyles and cultures that differ from their own. These are not incomplete solutions for family equality. The state must create material equality by redistributing resources to give suffering children a chance to be like other children who have enough access to food and shelter.

5.1 Education Can Mitigate Inequities

Liberal education models can reduce the harm from the inequities children experience but they can never be truly eradicated. There are numerous ways that educational institutions can make up for inequalities in terms of the child's social class. A cookie-cutter approach to education that stresses equal involvement in the learning and assessment processes should help to ensure academic success for all. Academic success may be analogous with success in life in terms of having more career choices apart from parental influence. It is necessary for improvements in public schools to account for the disparity between students of rich and poor families.

5.2 Class Inequality and Multiculturalism

Wealthier children tend to do better in school because they have access to more resources and can pay for tutoring help. Their families tend to encourage them to participate more in extra-curricular activities. This involvement leads to greater involvement in school and higher learning outcomes. At this point, we must ask about the role of multiculturalism, as a factor in academic success. Multiculturalism refers to the problems between religious and ethnic groups as they struggle to exist together (Gutman, 1992). The ethnic values and their competing truth claims take a toll on children as they struggle to make sense of these divergent interests. Surely, this struggle to find their own identities competes with their abilities to focus on school work. They have to deal with academic challenges and pressures from multiculturalism. The challenge for multiculturalism is how to provide equality for all. It is concerned with representation for all divergent interests.

Can there be an educational system that takes multiculturalism into account? Liberalism dictates that each group should be able to freely and equally choose the pursuit of their shared needs. These children must lead a life that is decidedly good, according to their notions, of what that means. It is important for educational institutions to focus on the politics of equality (Taylor, 1992), if all students are meant to succeed, academically. This is contrary to Rousseau who did not advocate for any special recognition of particular cultural identities (Rousseau, 1950). Since we live in a culture whereby the majority rules, the way that we educate our students is a directly influenced by the majority leaving out the minority.

6. Conclusion

In conclusion, there is always a danger that parents would object to the implementation of more egalitarian educational programs. The fear of losing control over their children would outweigh any goodwill. Certainly, middle-class parents would tend to feel that only they can shape their child the best way. We must remember that individual liberty and equality are the most important values. It is important for individuals to discover their own identities uninfluenced by their parents. Liberty can only be truly meaningful for everyone if these children are free to choose their own lives. The liberal state must support families even if they object to a liberal education.

Clearly, there are many obstacles to implementing a liberal egalitarian approach but this is a course worth pursuing as the world becomes more diverse and education even more important. Education's importance cannot be underscored enough, since it is through education, that we receive the means necessary to execute our life plans. Our life plans should reflect our tastes and talents. If a mismatch occurs in an individual's talents and opportunities, then unhappiness will likely result. If there is too much parental influence and aspects of children's identities were suppressed in childhood, in order to please parents, then their true life plan will not be fulfilled. Education should help students figure out what their life plan will be. It should also expose students to a variety of experiences so that students can figure out where their aptitude and interests lie. It is the role of an educational system to do this rather than parents. Parents are just too subjective to help their children develop their life plans. There is just too much at stake for the parents and the parents do not have the resources that educational institutions have.

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An Investigation on Moving Rural Secondary Schools to Town in New Countryside Construction: Taking Ling County in Shandong Province as An Example

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Abstract

Based on some problems lying in current rural secondary education taking Ling County as an example, this paper proves the necessity and feasibility of moving rural secondary schools to town in the current condition: it is an objective demand by the changes in students; it is a necessary demand to optimize resource allocation and to improve educational quality as well as to improve teachers' welfare and to optimize staff quality; it is a necessary demand to narrow the disparity between the urban and rural areas and to realize education equality; preferential national policies have offered guarantee for moving rural secondary schools to town; the improved rural conditions has provided it with basic guarantee; the physical and psychological characteristics of students in secondary schools have also provided precondition for it and the development of rural economics has also provided financial support.

Keywords: Rural secondary schools, Going to town, Investigation

For a long time, a three-level pattern including village-run primary school, county-run secondary school and senior high school has been adopted in China's rural educational administration system. It has made undeniable contributions for popularizing nine-year compulsory education as well as improving Chinese nation's quality in the recent decades especially after the reform and opening policy. In the recent years, with the construction of new countryside and the development of rural economy, rural parents have developed increasingly higher expectation for education and hope their children will enjoy the same excellent educational resources as those in cities and have brighter future. However, the lacking resources in countryside fail to satisfy such demands fundamentally. It is the key to this problem to integrate resources and adjust structure. Therefore, it seems quite necessary to explore how to adjust the current structure of rural secondary schools and try moving them to town in order to make it an effective pattern to solve the disparity between urban and rural education in developing areas.

1. Major Problems in Current Rural Secondary Education

1.1 Its Structure with Multi Points, Long Line and Wide Range

According to the survey on Ling County conducted by the author, there are only over ten middle schools all over the county, among which two are located in the central county while the others are in the suburban areas. Such a layout helps to popularize rural compulsory education since it offers great convenience for students in different counties due to the short distance to school. However, with the profound development of economy and educational reform, such a structure disperses the input in education and disturbs the systematic distribution of educational resources between urban and rural areas as well as schools, hence restricting the improvement of rural educational quality.

1.2 The Lack of Excellent Teaching Staff Leading to Poor Educational Quality

Due to some historical and realistic reasons, there is still a large disparity between urban teachers' treatment and that of rural ones, from which the imbalance and flow of teaching resources have resulted. At present, rural teachers going to town has become a trend. Those choosing to stay in countryside cannot keep up with the times in knowledge reserve and therefore are isolated from new ideas, methods and contents because they have no access to information. It is shown in some materials that 87.3% of the informants claim that teachers in rural secondary schools haven't established advanced educational ideas and still have a long way to go to satisfy the new curriculum requirements; 78.8% of the informants think that their poor teaching ability and aging structure make it inadaptable to new curriculum. According to some class surveys, a majority of teachers are snowed under with the burden of learning new curriculum, have quite limited studies on its curriculum system and have great difficulty in innovating the current teaching methods, hence producing poor teaching effect.

1.3 Great Disparity in School Running Conditions between Urban and Rural Areas

It is shown in our survey that the imbalance in educational resources allocation still restricts the development of

China's basic education. For instance, in Ling County of Shandong Province, excellent educational resources are located in the central part, such as Ling County Experimental Middle School which has three comprehensive buildings covering over 30000 m² used for teaching, experiment and administration as well, equipped with languages labs, computer labs, multi-media classrooms and so on. However, most rural secondary schools have poor conditions, in which their computer labs, libraries, electro-chemical equipments and labs were bought to go through the examination of "popularizing nine-year compulsory education" and have low end equipment and suffer from severe damages.

1.4 Severe Loss of Rural Secondary Students

There are two major causes for the loss of students: first, more parents transfer their children to the schools in central county or city with the improvement of their income and increased emphasis on education; second, influenced by the currently severe employment situation, "uselessness of study" becomes popular again and some parents ask their children to drop out of school to find a job in central county or city. For example, in a village of Ling County, there were 230 secondary graduates in 2007, 153 fewer than those in 2003 and reaching a loss rate of 40%. Such a severe loss has badly influenced the scale of rural secondary schools.

1.5 Problems of the Children of Rural Migrant Workers

Chinese population is in large-scale flow now with the speed-up of urbanization construction. During the course, the minor children of those rural migrant workers cannot go to town with their parents due to economic reasons or the restrictions of census registration system, hence producing such a special group which keeps expanded nowadays. These children, taken care of by their grandparents who care more for their daily life than their study, have poor behavioral habits especially learning habits. In addition, lacking in effective supervision from their families and parents, these children often infringe upon others or are infringed upon. In the author's investigation in three county middle schools, there are 45 empty nest families or skipped generation families, taking up 7% of the total. According to the statistics of China Supreme People's Court, this special group of children has committed 20% to 30% of the adolescents' crimes and its proportion is increasing every year (Liu, 2001).

2. The Necessity of Moving Rural Secondary Schools to Town

It is a necessary demand by the dynamic development of a variety of subjective and objective conditions to move rural secondary schools to town.

2.1 An Objective Demand by the Changes in Students

Education serves students, therefore, the structure of school should be adjusted according to the changes in the number of students. It is shown in our survey that many schools have smaller scale and some even fail to reach the standard issued by the Ministry of Education about class scale due to the reduced number of students. In Ling County, there are two major reasons for this current situation: first, the implementation of the birth control policy has cut down the number of rural students; second, more rural students go to town with the speed-up of urbanization. It is estimated by Jingmei Qi, an advanced economist in Department of Economic Prediction of National Information Center, that China's urbanization level will remain an annual increase of 1.3%, its rate of urbanization will reach 49.8% and its urban population will reach 670,000,000 and will be equal to its rural population for some time to come (Li, 2003). Influenced by the macro environment, Ling County's urbanization level will be improved constantly in the following few years. As a result, more people will pour into cities, promoting more rural students to go to school there.

2.2 A Necessary Demand to Optimize Resources Allocation and Improve Educational Quality

It is the fundamental purpose of structure adjustment to optimize resources allocation and improve educational quality. With the development of social economy, the current small-scale and resources-dispersed school structure is leading to the disintegration of educational resources, excessive input and poor school-running profit, hence restricting the reform and development of the whole county's education. According to modern economic theories, the expansion of production scale and the reasonable allocation of resources will reduce production cost and increase profit in certain conditions. We should learn from this market rule to exert the advantage of integrated educational resources and improve educational quality and profit by optimizing educational structure and reasonably allocating educational resources. To be more specific, on one hand, the adjustment of school structure will achieve maximized profit of educational resources by reasonably allocating hard resources; on the other hand, it will effectively save soft resources and therefore lessen financial burden. In addition, such adjustment will integrate educational resources to form a concentrated educational resources group, which helps the transmission of educational information and the conduction of scientific and technological activities as well as the improvement of school-running conditions and the overall school-running level.

2.3 A Necessary Demand to Improve Teachers' Welfare and Optimize Teaching Staff's Quality

Currently, although all teachers get paid by the county's financial authority, those teaching in villages have a salary over 100 yuan or even 200 and 300 yuan less than that of those teaching in county. Due to the differences in salary, life and work condition, some village teachers are dissatisfied with the current situation. Many excellent teachers are not willing to stay in rural areas, nor are newly-graduating college students, leaving rural education in a dilemma. With rural teachers moving to town along with their schools, the disparity between urban teachers and rural teachers' salary, work condition and so on are narrowed and therefore the man-oriented principle will be really realized and teachers' enthusiasm will be encouraged. Meanwhile, with teaching staff adjusted, substitute teachers can be removed, hence saving money and improving the overall quality of teaching staff a lot.

2.4 A Necessary Demand to Narrow the Urban-Rural Gap and Realize Educational Equality

Educational equality has long been regarded as a symbol of social harmony. In some sense, there is no social harmony without educational equality. However, there is no doubt that the resources the rural students have are incomparable to those of the urban students. Due to the shortage of resources, most rural secondary schools have a low rate of enrolment, hence encouraging more students to go to better schools in town. As a result, the number of students, especially excellent students going to rural secondary schools, is reduced gradually and so is the enrolment rate, hence producing a vicious cycle. As for spontaneous transfer, it hits the pockets of students and asks more for school's educational resources. With secondary schools moved to town, urban and rural students will enjoy the same educational conditions and resources, hence promoting educational equality and social harmony.

3. The Feasibility of Moving Rural Secondary Schools to Town

Many provinces and cities have conducted some beneficial explorations on reasonably adjusting rural secondary schools' structure, such as Tianjin, Zhejiang, Jiangxi and so on who have integrated some schools and therefore improved their school-running scale and benefit. According to the current situation of Ling County of Shandong Province, it is not only necessary but feasible to move rural secondary schools to town.

3.1 National Preferential Policies on Compulsory Education Offering Policy Guarantee

It is pointed out in China's Eleventh Five-Year Plan that greater emphasis should be attached to rural compulsory education, government's guarantee for compulsory education should be enhanced, central and provincial governments' transfer payments for compulsory education in those counties suffering from financial difficulty should be increased and government should be fully responsible for compulsory education (R & D Center of Shanghai Academy of Educational Science, 2003). Obviously, China plans to increase its input in rural compulsory education and the transfer payments by central and provincial governments will offer powerful financial support for the construction of county secondary schools. In addition, it was issued in 2007 that the fees for compulsory education would be cancelled and in 2009 that the accommodation fees of the rural students would be cancelled as well. As a result, poor students will have less difficulty in going to school in town and will gain preferential support for their compulsory education.

3.2 The Improvement of Rural Hard and Soft Conditions Offering Basic Guarantee

Ever since the reform and opening, especially the recent years, China's rural economy has achieved rapid development. In 2005, the per capita GDP of Shandong exceeded 20000 yuan; peasants' per capita net income was 3930.6 yuan; the per capita GDP of Ling County exceeded 13000 yuan and the per capita net income of its peasants was increased to 3800 yuan compared with the sum of over 2000 yuan at the end of the Ninth Five-Year Plan, making it possible to increase the input in education. Ever since 2003, Shandong has conducted projects to construct roads and add buses which connect villages into a net. By the end of 2005, there had been buses among 98% of the villages in Ling County, creating quite convenient transportation. For example, it only takes half an hour to reach the central county from the most remote village. Therefore, it is quite convenient for students to go to school in town.

3.3 Secondary Students' Physical and Psychological Characteristics Offering Preconditions

In spite of their similarity, there are fundamental differences between secondary and primary schools. Ranging from 12 to 15 years old, most secondary students have got certain abilities of taking care of themselves and are adapted to their group life. In a phase of "the second birth of their personality", their sense of group and teamwork spirit will be cultivated and their independent abilities in life and learning can be improved through their group life, hence helping their healthy development.

3.4 Advanced Educational Administration in Central County Offering Powerful Support

According to the learning theory of Constructivism, it is quite positive for the development of students to directly indulge students into urban new civilization and environment, new facilities and technologies. With the simple and laggard buildings, computer labs and experiment labs in their former rural schools, these students deeply experience the development of science, technology and the times when coming to the county middle school which is equipped with multi-media classrooms, language labs and electronic reading rooms. The constant improvement of teaching facilities helps to develop students' strong suits. In addition, when in rural schools, students are often distracted from their study due to the irregular management in school and at home. However, in county schools, with the universal boarding system and regular management, students' behavior, time arrangement, life and study are managed according to strict rules, helping them to develop good habits and to improve their comprehensive quality.

3.5 The Development of County Economy Providing Financial Support

Pingyuan County, next to Ling County, began to move its secondary schools to town in 2004. It expanded the junior section of Pingyuan No.1 Middle Schools with a scale of 10000 students and established a foreign language school, containing over 10000 secondary students in town. Having the total of 19000 secondary students and over 7400 ones in town now, Ling County needs to expand its secondary school scale to contain 12000 more students. With the similar geographical location and development in Ling County and Pingyuan County, they should have similar investment intensity. With its rapid-developing private economy with over 200 private businesses, Ling County has got quite solid financial basis for it input in education.

To sum up, it is an important measure to conduct Three Represents Theory, to improve rural educational quality and school-running benefit and to promote urbanization as well as a necessary choice to reasonably allocate educational resources, to promote educational modernization and even rural modernization. However, as a long-term and complicated systematic project, it will certainly involve a lot of restricting elements and difficulties which need to be considered and solved step by step, such as the split-flow of surplus teachers, the layout of urban secondary schools, the optimization of educational resources, how to support rural poor students and so on.

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Multidimensional Parents' Action on Adolescents Academic Achievement in Malaysia

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Abstract

This paper is an initial examination of the norm activities of what parents do at home to their adolescence school-going children and eventually how these factors contribute to their academic achievement. The notion that parental involvement was crucial to their children academic achievement and well being was reinvestigated by utilizing a different approach – parents' actions. The end product of the research was a reliable and valid instrument SPAQ1 (Students' Parents Actions Questionnaire I). SPAQ1 also exhibited a good model fit. Recommendations for future research were forwarded.

Keywords: Confirmatory Factor Analysis, Measurement model, Parents Actions Questionnaire

1. Parents and Adolescent

The parenting process is linked to children behavior. Though this may be seen as an inclination towards 'Skinnerian' epistemology but what parents do with their children may have psychologically affected them to react differently. Many researchers had investigated the relationship of parental involvement with their children academic achievement through isolated independent variables such as helping out with homework or motivation with academic achievement. Thus, coverage of more global dimensions of parental involvement in academic achievement may provide a better picture. Hence, this article describes the development of an instrument (SPAQ1) to tap into more comprehensive dimensions of parental actions at home that relate to adolescents' academic achievement. Briefly, the construction of SPAQ1 scale comprised of three phases. In the first phase, the dimensions of SPAQ1 were delineated through in depth literature reviews based on various theories. A hypothetical measurement model set up from the review was then subjected to content evaluation by selected experts. Items were revised based on inputs of experts. SPAQ1 was then translated to Malay language by employing the committee approach method (Vijver & Leung, 1997).

Finally, two pilot studies were carried out to ensure good psychometric properties of the scale. The first pilot study was to obtain information regarding the suitability and readability of the items while the second one was to collect data for use in statistical tools to provide reliable and valid evidence of the instrument

The purposes of this article are therefore (1) to report the reliability and validity evidence for SPAQ1, and (2) to formulate recommendations for future research.

2. Literature Review Stage

An enormous number of literatures available were related to parental involvement. Many have reported and discussed the importance of parental involvement for early childhood and adolescents' development. Two pertinent aspects which were of interest were academic achievement and discipline in school. Various researches had looked at constructs such as parents' aspiration (McLaughlin, 2006), assisting in homework (Cooper, Lindsay & Nye, 2000), attending schools' activities (Epstein, Simon & Salinas, 1997) in relation with academic achievement and discipline. Most of these studies relied on parents' responses of their involvement with their children. Responses elicited from parents may be biased as they might have the tendency to give only universally accepted responses. Hence, the alternative of using a questionnaire like SPAQ1 that source responses from students on their parents' actions may be able to elicit more concrete evidence regarding parental actions. The accuracy of self-report response by children older than 11 years of age has been recognized as acceptable (Fallon

& Bowles, 1997).

2.1 Conceptual and Theoretical Framework

Based on the literature reviewed, eight independent latent variables were conceptualized to represent the parental actions' dimensions or constructs. These dimensions were based on the ecological system theory (Bronfenbrenner, 1977), social learning theory (Bandura, 1977) and social cognitive theory (Bandura, 1989), attachment theory (Bowlby, 1969/1997), social bonding theory (Hirschi, 1969) and overlapping spheres of influence (Epstein, Simon & Salinas, 1997).

Bronfenbrenner (1977) had forwarded the idea that the surrounding or ecological circle which was the closest to the entity (in this case, student) would exert the most influence on the entity. In the Asian context, particularly Malaysia, parents continues to play a very important role in adolescence's lives. Certainly, the changing society diminishes their influence on the child. Nevertheless, an insightful empirical investigation on the parents' actions towards children academic achievement in Malaysia would be of interest to the public. As implied in Hong & Ho (2005), Asian parents tend to support strongly but quietly from home on motivating their children to excel. The theoretical framework for this study was shown in Figure 1.

[Insert Figure 1 here]

2.2 Generating Item Pool

An initial item pool of 57 items was synergized and created to measure the eight underlying hypothesized dimensions. These items were subjected to evaluation by seven experts. The experts were selected based on their field of expertise in their research and published articles. They were asked to judge and evaluate the accuracy of the items in measuring the constructs through email correspondence in early February 2009. Six sets of ratings (by six judges) were returned with the final feedback received in May 2009.

Based on the feedback received, double-barreled items were split into two separate items. E.g., Item W1 for the Warmth (WARM) construct, "My parents discuss with me at least once a week about the daily issue and about my study at school" was split into Item W1, "How often do your parents discuss with you about the daily issues?" and Item W2, "How often do your parents discuss with you about your study at school?" Four items were added to the questionnaire. Two items were added to the Homework (HWK) construct; Item H6, "My parents insist that I finish all my homework first before enjoying the time with family or friends" and Item H7, "My parents encourage me to give the best in doing my homework". The other two items were for the Religiosity (REL) construct; R6, "My parents want me to practice my religion" and R7, "How often do your parents discuss religious matters with you?"

In addition, some scales were converted to the five point frequency type Likert scale. All items were mapped to the eight hypothesized operational constructs as shown in Figure 2. The items were then translated to the Malay language using the committee approach method (Vijver & Leung, 1997). The procedures were explained briefly in the following section.

[Insert Figure 2 here]

2.3 Translation of SPAQ1

SPAQ1 was translated to the Malay language by a six members committee consisting of bilingual teachers cum parents. During the translation, the researcher first read aloud the definition of the construct. Each of the 62 items was then given and translation was done by individual members. Agreement among members was negotiated before the final translation was accepted. The SPAQ1 BM version was finalized after two group discussion sessions with all the committee members.

The first pilot study was carried out using the SPAQ1 BM to test the readability, suitability and understandability of the items with 26 Form Four students which will be the target sample of this study. Some corrections were needed for a few items as the students found them confusing.

3. Second Pilot study

For this stage of the study, empirical data were needed to carry out item analysis. Convenience sampling was used to administer the questionnaire. A total of 477 Form Four secondary students (Grade 10) participated with the permission granted by the schools administrator. The characteristics of the sample used were shown in Table 1. The grade point average (GPA) of '1' in the public examination ('*Penilaian Menengah Rendah*') indicates highest academic achievement. The GPA ranged from '1' to '5' with '5' as the weakest or very low achiever.

[Insert Table 1 here]

3.1 Data Preparation and Data Screening

After data preparation and data screening, only 400 set of responses were usable. The students' responses were manually scanned for scoring errors, acquiescent effect (Cronbach, 1946), missing values, and unsuitable samples. Acquiescence is defined as the tendency to agree (or disagree) with items regardless of their content (Couch & Keniston, 1960). Hence, acquiescence was also a threat to the analysis as it may produce extreme outliers. Responses with one scale answer throughout the whole questionnaire were omitted manually. Thirty five students who were not staying with their biological parents were not given the questionnaire. Eight sets of responses were taken out for acquiescent effect, 31 incomplete responses and eight irrelevant sample (they were not staying with their biological parents) were not included in the analysis. With 15 students absent from school, the number of usable response sets was further reduced to 380. Hence the initial usable rate was 79.66% of the total respondents.

Next, univariate outliers, multivariate outliers, skewness and kurtosis, linearity, singularity and multicollinearity were checked in order to fulfill the normality assumption of most statistical analysis including structural equation modeling (SEM). Seven multivariate outliers were detected using Mahalanobis coefficient $D^2(\chi^2 > 26.124, df = 8, p < 0.001)$. Finally 373 response sets were used in the analyses. The reliability and validity evidence were provided from statistical analysis using SPSS 15.0 and AMOS 16.0.

3.2 Reliability and Validity Analysis of SPAQI

Reliability was established by calculating alpha coefficients, inter-item correlation and item-total correlation, using SPSS 15.0. Items that did not meet the set criteria of $\alpha > 0.60$, inter-item correlations which have about the same magnitude within 0.20-0.70, standard deviation $\sigma > 1.10$ (on a 5 point Likert scale), item-total correlations of > 0.30 and standardized residual covariance $> |2.00|$ were eliminated. The summarized results were as shown in Table 2.

[Insert Table 2 here]

With reference to Table 2, Aspiration (ASP) dimension consisted of seven items initially. Two items were deleted as the standard deviation (SD) did not meet the cut off value of $SD > 1.10$ implicating a small spread of variance and the factor loading for A2 and A6 were below the set criteria of $\lambda > 0.60$. The standardized residual covariance (δ) between A2 and A6 as shown in the standardized residual covariance column in Table 2 indicated the highest value within the dimension. This added evidence to support items deletion. The internal consistency of the ASP dimension was regarded as high with $\alpha = 0.86$. The values of the inter-item correlations (r_{i-j}) ranged from 0.30 to 0.62 which implied that the items were amply associated. The item-total correlations (r_{i-t}) ranged from 0.51 to 0.72, indicating that these items were mainly measuring the same underlying construct.

For the Homework (HWK) dimension, Item H3 and H7 were problematic as shown in Table 2. Item H7 violated both the SD and factor loading criteria. The standardized residual covariance between H7 and H1 was $\delta = 2.34$ (slightly exceeding the criteria of $\delta < |2.00|$). The factor loading of Item H3 was $\lambda = 0.33$ which was below the set criteria of $\lambda > 0.60$. The value of $SD = 1.03$ for H7 was below the cut off value of $SD > 1.10$. The inter-item correlations ranged between 0.21-0.71, indicating well related items. The item-total correlations for HWK ranged from 0.32 to 0.64 which met the cut off value of > 0.30 . The overall internal consistency of HWK was $\alpha = 0.84$.

The third dimension, Conduciveness (COND) with $\alpha = 0.71$, showed four items CD2, CD4, CD5 and CD7 which were probable items for deletion. Item CD2 exhibited $SD = 1.04$, $\lambda = 0.49$, whereas CD4 yielded a low factor loading of $\lambda = 0.40$. Item CD5 had the lowest factor loading, $\lambda = 0.30$ and CD7, $\lambda = 0.44$. CD5 also exhibited the lowest item-total correlation which was labeled as $(CD5)_t = 0.24$. All these λ values were less than 0.60. However, the inter-item correlations ranged from 0.04-0.45, which was lower than the criteria of between 0.20-0.60. The standardized residual covariance did not show any anomaly. However, Item CD2 was retained for further investigation with AMOS 16.0 as a minimum of four to six items were needed for identification using structural equation modeling in AMOS 16.0. Deleting CD2 from this dimension would result in under-identification due to insufficient items. Since CD2 exhibited the least violation, it was retained. This decision was made based on the recommendation that, if necessary, a poor performing item can still be retained to satisfy statistical analysis requirement (Hair, Black, Cabin, Anderson & Tatham, 2006).

The fourth dimension of Religiosity (REL) has a coefficient alpha, $\alpha = 0.91$. The factor loadings of the seven individual items ranged from $\lambda = 0.71$ to $\lambda = 0.87$, hence all the items fulfilled the factor loadings criteria of $\lambda > 0.60$. Based on the SD value, R4 yielded $SD = 1.14$ which was the lowest among all the items. The standardized residuals covariance of Item R4 and R2 was $\delta = 1.53$ which was the highest though still within the cut off value of

$\delta < |2.00|$. Hence, item R4 was considered for exclusion. The inter-item correlations were 0.47-0.73 and the item-total correlations ranged from 0.67 to 0.83. This construct exhibited a strong association among the seven items.

The Control (CONT) dimension consisted of 12 items has an overall coefficient alpha, $\alpha=0.86$. Factor loadings ranged from $\lambda=0.46$ to $\lambda=0.72$, inter-item correlations ranged from 0.16-0.65 and item-total correlation ranged from 0.42 to 0.67 indicating a fair association among the items which were measuring the underlying construct. However, items C1, C2, C3, C6, C7, C8, and C12 were considered for deletion as each of the items has factor loading lower than 0.60. The standardized residuals covariance exceeded the value of $\delta=|2.00|$ in five pairs of items. Item C1 and C2 recorded a value of $|\delta|=3.28$, between C1 and C4, $|\delta|=3.57$, between C4 and C12, $|\delta|=3.03$, between C6 and C12, $|\delta|=3.91$ and lastly between C7 and C8 with a value of $|\delta|=3.29$ (refer Table 2).

Overall internal consistency for the Motivation (MOV) dimension was $\alpha=0.86$. There were eight items measuring this construct with factor loadings ranging from $\lambda=0.43$ to $\lambda=0.81$. The item-total correlations ranged from 0.41 to 0.71 and the inter-item correlations ranged from 0.15-0.75. Item M3, M5 and M6 were considered for deletion as the factor loadings were below the criteria of $\lambda=0.60$. Item M3 recorded a $\lambda=0.55$, M5 with $\lambda=0.43$ and finally M6 with $\lambda=0.51$. Furthermore, for M6 the SD=0.94 which was below the set criteria of >1.10 . The standardized residual covariance between M3 and M6 was $|\delta|=3.23$. This clearly supported the deletion of items M3, M5 and M6.

The Warmness (WARM) dimension consisted of eight items with an overall internal consistency of $\alpha = 0.83$. The factor loadings of W5 ($\lambda=0.57$), W6 ($\lambda=0.58$) and W8 ($\lambda=0.41$) were all below the set criteria of $\lambda > 0.60$. The SD of W5, W6, and W8 were 1.08, 0.77 and 1.06 respectively which were below the SD criteria set at the value of 1.10. Meanwhile the standardized residual covariance between W1 and W2 was $|\delta|=3.14$, W6 and W8 was $|\delta|=2.28$, W5 and W6 was $|\delta|=1.77$, W5 and W2 was $|\delta|=1.47$. Though W1 and W2 yielded $|\delta|=3.14$ which violated the cut off value, the other properties were within the specified ranges. Hence, these two items were retained for further analyses.

The Conflict (CONF) dimension recorded the lowest Cronbach's alpha value, $\alpha=0.56$. It consisted of six items and the factor loadings ranged from $\lambda=0.30$ to $\lambda=0.53$. Due to the fact that all the factor loadings in this dimension were below the set criteria of $\lambda>0.60$, only the item with the lowest factor loading, Item X4 ($\lambda=0.30$) was considered for deletion. The standardized residual covariance between X4 and X6 was $|\delta|=2.11$, had violated the specified value and this supported the deletion of item X4 as well. Further item deletion was reassessed with confirmatory factor analysis (CFA) using AMOS 16.0.

The standardized residual covariance for each dimensions ranged from $|0.00|$ to a maximum of $|3.91|$. Residuals of items more than $|2.00|$ will be considered for deletion (Joreskog & Sorbom, 1984). Based on the analyses results, the combination of the various statistical measures were taken into consideration in item elimination decision making. A large enough standard deviation ($\sigma > 1.10$), factor loadings ($\lambda > 0.6$), inter-item correlations ($0.2 < r_{i-i} < 0.6$), item-total correlations ($r_{i-t} > 0.3$), standardized residual covariance ($\delta < |2.00|$), and goodness of fit indices were considered when making the decision for item elimination. Due to space constraint, only the standardized residual covariances which exceeded the set criteria were presented in Table 2. The items which were listed in the table were items considered for deletion.

Negative item was not used in this instrument. As suggested by Blunch (2008), negation in items should be avoided. This was because negated items may cause confusion to the respondents and on the other hand, researcher might forget to reverse the item scores before doing an analysis. There was also possibility that the respondents tend to miss or failed to see the negation in the item. Item having positive and negative correlations to other items within the construct should be discarded as well.

Internal consistency for each constructs was assessed using Cronbach's alpha. A second estimation of the internal consistency of the solution was the squared multiple correlations (SMC) of the factor scores predicted from scores on the observed variables. High SMC indicates stability of factor in that the observed variables account for a substantial variance in the factor scores and is considered a viable assessment of internal consistency (Bollen, 1989; Tabachnick & Fidell, 2001). Further assessment using confirmatory factor analysis was utilized to validate convergent validity of each item to its related construct. This was explained in the following section.

3.3 Item Deletion Decision using Structural Equation Modeling

The pool of items selected was further assessed for their goodness of fit using AMOS 16.0 (Arbuckle, 2007). Each of the constructs and their related items were evaluated individually. Figure 3 illustrated an example of the

graphical analysis interface using AMOS for the ASP construct. This was done in lieu with what was suggested by Lee (2007) which claimed that model fit had become a compulsory criterion that researchers will have to cope with in order to make variable selection or scale construction more appropriate. Item A2 and A6 were deleted based on the factor loading ($\lambda < 0.60$), R^2 (SMC) which were below 0.40 and an inspection of the standardized residual covariance showed quite a substantial error involved ($\delta=2.47$). The smaller the values of the standard deviation ($SD < 1.10$) also indicated that the variance spread of the items were not sufficient. By using CFA assessment on the individual model, it clearly showed a good fit when the three items were deleted. The indices were as follow.

[Insert Figure 3 here]

A chi-square over the degree of freedom value, $\chi^2/df = 1.956$ shows a good fit. All the other indices such as the Adjusted Goodness of fit index (AGFI=0.976), Bollen's Incremental Fit Index (IFI=0.997), Tucker Lewis Index (TLI=0.990), Bentler's Comparative Fit Index (CFI=0.997) were well above the criteria value of > 0.90 (Hair, et al., 2006). The Root Mean Residual (RMR=0.021) which was far below the criteria of < 0.05 and Parsimony Normed Fit Index (PNFI=0.331) was also good as the value was around 0.5. The root mean square error of approximation (RMSEA=0.049) which was far below the criteria < 0.05 to indicate a good fit. Table 3 showed the comparison of the initial goodness of fit indices (GOF) before item deletion and the final GOF after the deletion processes were carried out.

Factor loadings of item H3 ($\lambda=0.33$) and H7 ($\lambda=0.58$) were below the criteria of $\lambda > 0.60$. The SMC of H3($R^2=0.11$) and H7($R^2=0.34$) were below the set criteria of > 0.40 . The SD of H7 was 1.03 which was below the cutting point of 1.10 set by the researcher. Though H6 fulfilled all the criteria except for its SMC ($R^2=0.37$), further assessment using CFA suggested its deletion. The Homework (HWK) construct exhibited a good fit with $\chi^2/df = 2.127$, AGFI=0.975, IFI=0.996, TLI=0.988, CFI=0.996, all were well above the criteria value of > 0.90 . The RMR=0.025 and PNFI=0.331 which were good as the values were around 0.5. The RMSEA=0.053 which was near the criteria < 0.05 indicated a good fit too. Four items in the Conducive (COND) construct exhibited poor item characteristics, hence CD2 ($\lambda=0.49$, $SD=1.04$, $R^2=0.24$), CD4 ($\lambda=0.40$, $R^2=0.16$), CD5 ($\lambda=0.30$, $R^2=0.09$) and CD7 ($\lambda=0.44$, $R^2=0.19$) were considered for deletion. However, when CD2 was included in the CFA, it exhibited an overall good fit, with $\chi^2/df = 0.072$, AGFI=0.999, IFI=1.000, TLI=1.000, CFI=1.000) were well above the criteria value of > 0.90 and RMR=0.005 which was far below the criteria of < 0.05 and PNFI=0.333 which was good as the value was around 0.5. The RMSEA=0.000 was far below the criteria < 0.05 to indicate an excellent fit too. Therefore, Item CD2 was retained in the measurement model.

Though none of the seven items in Religiosity (REL) showed any inferiority in its reliability analysis (refer Table 2), item R2 had the lowest $\lambda=0.71$ and the highest $|\delta|=1.53$ comparatively. Hence, it can be considered for deletion. In order to minimize the number of indicators as to make the instrument more feasible in term of practicality, weaker items were deleted based on CFA. Finally item R2, R4 and R5 were eliminated and the model exhibited $\chi^2/df=3.457$, AGFI=0.957, IFI=0.994, TLI=0.983, CFI=0.994 which were well above the criteria value of > 0.90 , RMR=0.025 which was far below the criteria of < 0.05 and PNFI=0.331 which was good as the value was near to 0.5. The RMSEA=0.078 which was still within the criteria < 0.10 to indicate an acceptable fit.

Control or supervision by parents (CONT) had the most number of indicators in the item pool (a total of 12 items). An early probe into the factor loadings, indicated seven probable items for deletion (refer Table 2). Items C1, C2, C3, C6, C7, C8 and C12, all with $\lambda < 0.60$ and $R^2 < 0.40$. Besides, the standardized residuals covariance, $\delta > |2.00|$ were seen in items C1, C2, C4, C6, C7, C8 and C12. A stepwise deletion was executed to find a good fit. Finally, C1, C9, C10, C11 and C12 were maintained in the pool. Deletion of one item from a pair of items which exhibited high residual correlation was carried out one after another and the results of GOF compared. The best model fit was selected. The individual construct exhibited $\chi^2/df = 1.953$, AGFI=0.973, IFI=0.991, TLI=0.985, CFI=0.991 were well above the criteria value of > 0.90 and RMR=0.046 which was far below the criteria of < 0.05 and PNFI=0.58 was around 0.50. The RMSEA=0.049 which was still within the criteria < 0.05 , indicated a good fit.

The items in Motivation (MOV) particularly, M3 ($\lambda=0.55$, $\delta=-3.23$ and $R^2=0.30$), M5 ($\lambda=0.43$, $R^2=0.19$), M6 ($\lambda=0.51$, $SD=0.94$, $\delta=-3.23$ and $R^2=0.26$) and M7 ($R^2=0.39$) were considered low performing items. However, MOV exhibited a good fit after a modification was executed based on the suggestions in the Modification Indices (MI) of AMOS, using a threshold value of four. The initial goodness of fit indices after items deletion were $\chi^2/df=8.637$, AGFI=0.892, IFI=0.976, TLI=0.926 and CFI=0.975. The RMR=0.051, PNFI=0.324 and the value of RMSEA=0.138 which did not exhibit a good fit. After correlating the error terms of e8 from the item

M8 “My parents are very enthusiastic about my education” and e4 from the item M4 “When I do not get good grades, my parents will encourage me to try harder” which logically were related as suggested by the MI, the goodness of fit indices were transformed to $\chi^2/df=1.048$, AGFI=0.987, IFI=1.000, TLI=1.000, CFI=1.000 were excellent fit and RMR=0.009 which was far below the criteria of < 0.05 and PNFI=0.166 which was good and RMSEA=0.011 which was far below the criteria < 0.05 to indicate an excellent fit. From a substantive meaningfulness, it could be expected that enthusiastic parents would always be concerned of their child’s academic achievement and would encourage them to do their best in their examinations.

For the Warmness (WARM) construct, items W1($\delta=3.14$, $R^2=0.17$), W2($\delta=3.14$), W5($\lambda=0.57$, $SD=1.08$), W6($\lambda=0.58$, $SD=0.77$ and $R^2=0.32$), W7($R^2=0.34$) and W8($SD=1.06$) showed some out of range values and were considered as probable items for deletion. However, due to the fact that at least four items were needed in CFA using AMOS, stepwise deletion was carried out to obtain a better composition of the items. This was also in accordance with recommendations in the literature suggesting that, if necessary, a poor performing item should be retained to satisfy statistical identification requirements or to meet the minimum numbered of items necessary per construct consideration (Hair et al., 2006). Finally, items W1, W2, W3 and W4 were retained.

Consequently, WARM yielded $\chi^2/df=1.092$, AGFI=0.986, IFI=1.000, TLI=0.999, CFI=1.000 were well above the criteria value of > 0.90 and RMR=0.010 which was far below the criteria of < 0.05 and PNFI=0.166. The RMSEA=0.015 indicated an excellent fit. A modification was carried out as suggested by the MI for the WARM construct. The error, e3 of item W3 “How often do you watch television or play together (telling jokes, jogging, games etc.) with your family including your parents?” and the error, e4 of item W4 “I always inform my parents at home of any incidents, events or happenings in school.” This showed some overlapping of errors as both items implied that the parent-child relationship was very good logically. However, this needs to be interpreted cautiously.

Lastly, the Conflict construct (CONF) exhibited poor factor loadings and five out of six of its item-total correlations were < 0.30 cut off point. Since this was a new instrument, the researcher intended to keep some of the items for further investigation. Hence, a stepwise deletion beginning with the lowest factor loading was executed through CFA procedure and the best model that could be salvaged yielded the following indices, $\chi^2/df=4.353$, AGFI=0.968, IFI=0.955, TLI=0.909 and CFI=0.954. AGFI and TLI were above the cutoff value of > 0.90 . The RMR=0.047 was below the criteria of < 0.05 and PNFI=0.471. The RMSEA=0.064 indicated an acceptable fit. All the items were accepted except X4.

Overall, good fit was exhibited by all the constructs except CONF which was moderate in some of its goodness of fit indices. Twenty eight items were deleted in the process. Finally, a combination of 34 items was retained from the initial version of SPAQ1. This instrument is in its pupa stage of development and may need to further work in order to confirm the constructs stability and validity with proper norming.

All the eight constructs and items were subjected to the same procedure of item analysis processes. Confirmatory factor analysis (CFA) was used as a mean of scale reduction by showing which items can be trimmed from the scale (Netemeyer, Bearden & Sharma, 2003). The summary of the GOF indices for the eight hypothetical constructs was summarized in Table 3.

[Insert Table 3 here]

3.4 Convergent and Discriminant Validity Evidence of SPAQ1

Standardized factor loadings of > 0.60 and Cronbach’s Alpha of > 0.70 were considered in assessing the convergent validity of the individual scales and the inter-factor canonical correlations were used to assess discriminant validity of the eight constructs as per recommendations in the literature (Hair et al., 2006). Items with standardized factor loadings $\lambda < 0.60$ were identified easily from the graphics output from AMOS 16.0. Each of the improvised dimensions and its factor loadings were explained as follow.

All the standardized factor loadings of ASP (refer to Figure 3) were well above the 0.60 criteria, hence implicating convergent validity of the items towards the ASP construct. In other words, all the different items in one way or another assessed the construct they intended to measure (Sarafino, 2005). Simultaneously, the GOF measures such as the AGFI, IFI, TLI, CFI, RMR, PNFI and RMSEA were in the acceptable range. The Cronbach’s Alpha, $\alpha=0.83$ met the criteria. Hence, it was concluded that the construct ASP supported convergent validity.

The CFA results for HWK were summarized in Table 3 as well. As shown, all the factor loadings were above $\lambda=0.60$ except item H1 which was marginally low. But this was still indicative of convergent validity as suggested in Kline (2005) and Sarafino (2005) that the value of $\lambda=0.50$ was also considered sufficient. The rest

of the GOF measures were fairly good and the Cronbach's Alpha value for HWK construct was 0.81. In short, the Homework construct supported convergent validity as well.

Overall, the COND construct exhibited a good fit and convergent validity was shown. The AGFI, IFI, TLI and CFI indices were all closed to 1.00 indicating a good fit. RMSEA was less than 0.05, hence indicating an excellent fit of the model. The reliability coefficient, Cronbach's Alpha $\alpha=0.71$ which was slightly above the 0.70 and it fulfilled the criteria set for newly developed instrument recommended by Nunnally (1978). Therefore, convergent validity evidence was indicated from the statistics obtained.

The REL construct showed strong convergent validity. The factor loadings for each items was fairly good in strength. All were above 0.70 though the criteria set was only 0.60. The GOF values showed good fit while the RMSEA fell within the range of below 0.80. The α -value for the subscale of REL was 0.89. It can be concluded that these items and the construct indicated convergent validity. Results were summarized in Table 3.

The number of items in the CONT construct was revised to five items to achieve a good fit as shown in Table 3. Though Item C1 did not achieve the criteria of $\lambda > 0.60$, it was maintained as the researcher deemed it an important item and further investigation may need to be carried out. Item C1 says "How often do your parents ask you about your friends in school and after school?" The reliability alpha coefficient was $\alpha=0.76$. It can be concluded that this dimension exhibited convergent validity as well.

The MOV construct as shown in Figure 4 earlier, had fulfilled all the prerequisites GOF as well. The Cronbach's Alpha, 0.84 also implicated a high reliability value. Hence, convergent validity was supported.

The WARMNESS construct (in Table 3) needed to be modified as to improve its model fit. A correlation between the errors e4 and e5 was made based on the recommendation in the Modification Indices of AMOS. A review of the two items showed that there was possible overlapping as item W3 which states "How often do you watch television or play together (telling jokes, jogging, games etc.) with your family including your parents?" and W4 "I always inform my parents at home of any incidents, events or happenings in school. However, this interpretation has to be view cautiously. The Cronbach's Alpha value was $\alpha=0.77$. Overall, the above seven dimensions or constructs had exhibited convergent validity.

The final dimension was the CONFLICT (CONF) construct, drew a low reliability coefficient of $\alpha=0.52$. Though the GOF indices indicated a good fit but all the factor loadings were below the critical value of $\lambda > 0.50$ except for item X1 ($\lambda=0.54$). Hence, it can be concluded that this construct showed marginal convergent validity. This suggests further revision of this dimension is needed. This was tested stepwise by the researcher and the summarized results obtained were shown in Table 3. This was the best solution obtainable. Further investigation needs to be carried out to further test the suitability of the items.

Discriminant validity was determined by examining the canonical correlations between the dimensions. As suggested by Kline (2005), correlations less than 0.85 were considered not significant. In short it was assumed that items under the factors correlated were not duplicating. Based on the cutoff point of correlation $r < 0.85$ (Kline, 2005), there was a high correlation between WARM and MOV constructs. The correlation value between the WARM and MOV constructs was $r=0.88$ which exceeded the cut off value of $r < 0.85$. This suggested that the items from the different dimensions were actually measuring the same thing, hence duplication might occurred. In order to overcome this problem, re-specification of the model was carried out.

The two dimensions, WARM and MOV were consolidated and renamed as CLOSENESS (CLOS). Consolidation of the two factors was done due to the fact that item deletion procedure was not feasible for the two constructs as the number of indicators or items left were the minimum needed for model identification using AMOS software application.

Comparatively, the re-specified model has a better model fit. As a comparison, Table 4 showed the GOF from the CFA of the two measurement models. Results in Table 4 showed the re-specified model AGFI had increased from 0.799 to 0.818 which still cannot be classified to be in the range of good fit (> 0.900), The RMR value had decreased, which was a sign of improvement as it was getting nearer to the range bound around 0.05 to be considered good. The IFI had also improved from 0.869 to 0.905. PNFI had also decreased from 0.750 to 0.726 which was an indication of parsimonious. The CFI too had achieved better fit after the re-specification. The TLI had also improved from 0.869 to 0.893. The RMSEA which was already within the fit range in the original model improved further to a value of 0.056.

[Insert Table 4 here]

Overall, the re-specified model exhibited convergent validity evidence for all its indicators to the related dimensions. The re-specified model provided better discriminant validity indices.

3.5 Model fit of the re-specified SPAQ1

In order to assess the overall model fit of the 34 items instrument, the seven dimensions were assessed using the second order measurement model. The parents' actions was assumed to be multidimensional and this was shown to be acceptable through the overall model fit assessment (refer to Figure 4). The $\chi^2/df = 2.322$, AGFI=0.805, RMR=0.090, CFI=0.889, TLI=0.879 and RMSEA=0.06 (with the 90% confidence interval from 0.055 to 0.064). Maximum likelihood was used as the method of estimation. The graphical results were as shown in Figure. 4.

[Insert Figure 4 here]

Though the overall GOF did not show a good fit as most of the indices indicated slight missed from the standard cutoff values, one have to bear in mind that this may be due to the marginal sample size of this study. A larger sample size may be needed in order to obtain a more stable result.

[Insert Table 5 here]

The unstandardized regression weights of all the parameters were significant at $p < 0.001$ (refer to Table 5). Hence, it can be concluded that all the seven constructs under investigation were relevant to parental actions. The beta weight (β) for each of the construct were $\beta_{ASP}=0.84$, $\beta_{HWK}=0.91$, $\beta_{COND}=0.77$, $\beta_{REL}=0.84$, $\beta_{CONT}=0.81$, $\beta_{CLOS}=0.88$ and finally $\beta_{CONF}=0.57$. By referring to the squared multiple correlations in Table 6, it is estimated that the predictors of **CLOS** explain 77.3 percent of its variance. In other words, the error variance of **CLOS** is approximately 22.7 percent. Briefly, the variance explained for the seven constructs ranged from 32.7% to 83%.

4. Conclusion

The results obtained from this study showed that parents' actions towards their children are multidimensional in nature. The multidimensional parents' actions consisted of Aspiration, Homework, Conduciveness, Religiosity, Control, Conflict and Closeness, were operationalized by SPAQ1. The Malay version of the SPAQ1 consisted 34 items was able to tap the multidimensional structure of parental action as it exhibited acceptable psychometric properties of measurement.

Further investigations and replications would be necessary to provide a standard norm for the instrument. The validation of the measurement model of SPAQ1 had led to the accessibility of information on parental actions towards their adolescent school going children with the use of students' self-report questionnaire. More importantly, the analyses clearly implied that parents' actions towards their children were of multidimensional structure and SPAQ1 can be further explored for its utility.

5. Limitations of the study

The boundaries and limitations of this study were basically due to time, financial and feasibility constraints. The proposed hypothesized conceptual model was a priori model based on literatures and theories and the understanding of the researcher. This model was synergized after a thorough review of vast related literature based on parental involvement with school children overseas since literature was scarcely found locally in Malaysia.

Due to the fact that SPAQ1 was meant to be administered in schools and classrooms which would take up most of the students and teachers' lesson time, the researcher tried to ensure that the length of the questionnaire was acceptable and practical to be implemented. Therefore the indicators used could not be fully representative of all the dimensions in SPAQ1. This may limits the insight of the dimensional structure of parents' actions towards students' academic achievement.

Another limitation was the sample size used and limitation of geographical area. The research was carried out in the district of Southern Penang, Malaysia. Only six schools were selected based on convenience sampling for this study. Hence, inferential result may not be applicable and the power of the statistical analysis may be affected as well.

6. Suggestions for further research

Based on the results of this study, the following recommendations for future research could be formulated. Firstly, the final model of SPAQ1 should be tested. Further validation of the model will enhance the definition of the parents' actions dimensions towards their teenage children – adolescent academic outcomes in school. The newly developed instrument should be further investigated empirically in a larger scale. This serves to verify the scale reliability and further establish scale validity. Utilization of SPAQ1 in determining the relationships of the various dimensions of parents' actions and students' academic achievement and discipline can now be expedited. This will examine the congruency of the instrument and its function. It is also important that a study of the

instrument invariance be carried out in a multi-ethnic society in Malaysia.

SPAQ1 could also be adapted to measure its influence over students' self concept and may become a useful quantitative tool in investigating parental involvement with adolescence students. Lastly, SPAQ1 should be applied in other geographical areas and sample populations to test for its stability and validity over time.

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Table 1. Samples ethnics, gender, GPA and age

Ethnic	Freq	Gender						Age (years)
		Male			Female			
GPA		High	Low	Total	High	Low	Total	Average
MLY	142	7	43	50	29	63	92	16.36
CHI	153	24	53	77	27	49	76	16.31
IND	85	10	27	37	10	38	48	16.34
Total	380	41	123	164	66	150	216	16.41

Note. Freq=frequency, GPA=grade point average, MLY=Malay ethnic, CHI=Chinese, IND = Indian. High GPA refers to GPA<2.5 and Low refers to GPA > 2.5. GPA is the Grade Point Average of the PMR examination. N=380

Table 2. Reliability, factor loadings, item-total correlations, and standardized residual covariances

Constructs	Items		Item with $\lambda < 0.60$	α if item deleted	r_{i-i}	r_{i-t}	δ
	SD>1.10	SD<1.10					
Aspirations(ASP) 7 items, A1-A7 $\alpha = 0.86$	A1,A3, A4,A5, A7	A2=0.096 A6=0.083	A2=0.54 A6=0.54	A2=0.84 A6=0.84	0.30-0. 62	0.51- 0.72	A6 & A2=2.47
Homework(HWK) 7 items, H1-H7 $\alpha = 0.84$	H1,H2, H3,H4, H5,H6	H7=1.03	H3=0.33 H7=0.58	H3=0.83 H7=0.80	0.21-0. 71	0.32- 0.64	H7 & H1=2.34
Conductive(COND) 7 items, CD1-CD7 $\alpha = 0.71$	CD1,CD3, CD4,CD5, CD6,CD7	CD2=1.04	CD2=0.49 CD4=0.40 CD5=0.30 CD7=0.44	CD2=0.67 CD4=0.70 CD5=0.72 CD7=0.68	0.04-0. 45	0.24- 0.57 (CD5) _L =0.24	-
Religiosity(REL) 7 items R1-R7 $\alpha = 0.91$	R1,R2, R3,R4, R5,R6 R7 (R4=1.14) _L	-	-	R4=0.90	0.47-0. 73	0.67- 0.83	R4 & R2=1.53
Control(CONT) 12 items C1-C12 $\alpha = 0.86$	C1,C3, C4,C5, C6,C7, C8,C9, C10,C11, C12	C2=1.05	C1=0.57 C2=0.58 C3=0.56 C6=0.54 C7=0.46 C8=0.54 C12=0.53	C1=0.85 C2=0.85 C3=0.85 C6=0.86 C7=0.86 C8=0.85 C12=0.86	0.16-0. 65	0.42- 0.67	C1 & C2=3.28 C1 & C4=3.57 C4 & C12=3.03 C6 & C12=3.91 C7 & C8=3.29
Motivation(MOV) 8 items M1-M8 $\alpha = 0.86$	M1,M2, M3,M4, M5,M7, M8	M6=0.94	M3=0.55 M5=0.43 M6=0.51	M3=0.84 M5=0.85 M6=0.84	0.15-0. 75	0.41- 0.71	M3 & M6=3.23
Warm(WARM) 8 items W1-W8 $\alpha = 0.83$	W1, W3, W4	W5=1.08 W6=0.77 W8=1.06	W5=0.57 W6=0.58 W8=0.41	W5=0.79 W6=0.80 W7=0.79 W8=0.81	0.25-0. 64	0.37- 0.59	W1 & W2=3.14 W6 & W8=2.28
Conflict(CONF) 6 items X1-X6 $\alpha = 0.56$	X1,X2, X4,X5, X6	X3=1.05	X4=0.30 X2=0.33 X3=0.37 X6=0.39 X5=0.47 X1=0.59	X4=0.53 X2=0.52 X3=0.51 X6=0.53 X5=0.49 X1=0.46	0.009- 0.29	0.21- 0.39	X4 & X6=2.11

Note. SD = standard deviation, α = Cronbach's alpha coefficient, λ = factor loading, r_{i-i} = inter-item correlations, r_{i-t} = item-total correlations, δ = standardized residual covariances, ()_L indicates the lowest value of the parameter.

Table 3. Summary of Confirmatory Factor Analysis results for each individual constructs before and after item analysis.

Constr	Item	Initial Goodness of Fit Indices (GOF)	Constr	Item	λ	Final GOF after item deletion
ASP $\alpha=0.86$	A1-A7 $\lambda=0.54$ -0.79	$\chi^2/df=4.507$, AGFI=0.900, RMR=0.050, IFI=0.951, TLI=0.925, PNFI=0.625, CFI=0.950, RMSEA=0.097	ASP $\alpha=0.85$	A1	0.760	$\chi^2/df=1.956$, AGFI=0.976, RMR=0.021, IFI=0.997, TLI=0.990, PNFI=0.331, CFI=0.997, RMSEA=0.049
				A3	0.670	
				A4	0.800	
				A5	0.750	
HWK $\alpha=0.84$	H1-H7 $\lambda=0.35$ -0.78	$\chi^2/df=9.892$, AGFI=0.787, RMR=0.085, IFI=0.878, TLI=0.815, PNFI=0.577, CFI=0.877, RMSEA=0.155	HWK $\alpha=0.83$	H1	0.520	$\chi^2/df=2.127$, AGFI=0.975, RMR=0.025, IFI=0.996, TLI=0.988, PNFI=0.331, CFI=0.996, RMSEA=0.053
				H2	0.770	
				H4	0.870	
				H5	0.710	
COND $\alpha=0.71$	CD1 -CD7 $\lambda=0.27-0$.67	$\chi^2/df=0.844$, AGFI=0.982, RMR=0.037, IFI=1.000, TLI=1.000, PNFI=0.648, CFI=1.000, RMSEA=0.000	COND $\alpha=0.72$	CD1	0.660	$\chi^2/df=0.072$, AGFI=0.999, RMR=0.005, IFI=1.000, TLI=1.000, PNFI=0.333, CFI=1.000, RMSEA=0.000
				CD2	0.510	
				CD3	0.660	
				CD6	0.620	
REL $\alpha=0.91$	R1-R6 $\lambda=0.70-0$.87	$\chi^2/df=5.556$, AGFI=0.881, RMR=0.057, IFI=0.960, TLI=0.940, PNFI=0.634, CFI=0.960, RMSEA=0.111	REL $\alpha=0.89$	R1	0.830	$\chi^2/df=3.457$, AGFI=0.952, RMR=0.025, IFI=0.994, TLI=0.983, PNFI=0.331, CFI=0.994, RMSEA=0.078
				R3	0.860	
				R6	0.740	
				R7	0.810	
CONT $\alpha=0.86$	C1-C12 $\lambda=0.43-0$.77	$\chi^2/df=5.434$, AGFI=0.817, RMR=0.096, IFI=0.851, TLI=0.817, PNFI=0.674, CFI=0.850, RMSEA=0.109	CONT $\alpha=0.84$	C1	0.559	$\chi^2/df=1.953$, AGFI=0.973 RMR=0.046, IFI=0.991, TLI=0.985, PNFI=0.589, CFI=0.991, RMSEA=0.049
				C9	0.775	
				C10	0.843	
				C11	0.752	
MOV $\alpha=0.86$	M1-M8 $\lambda=0.43-0$.82	$\chi^2/df=6.496$, AGFI=0.835, RMR=0.071, IFI=0.906, TLI=0.867, PNFI=0.636, CFI=0.905, RMSEA=0.122	MOV $\alpha=0.84$	M1	0.810	$\chi^2/df=1.048$, AGFI=0.987, RMR=0.009, IFI=1.000, TLI=1.000, PNFI=0.166, CFI=1.000, RMSEA=0.011
				M2	0.890	
				M4	0.620	
				M8	0.600	
WARM $\alpha=0.83$	W1-W8 $\lambda=0.47-0$.68	$\chi^2/df=5.679$, AGFI=0.872, RMR=0.061, IFI=0.895, TLI=0.852, PNFI=0.626, CFI=0.894, RMSEA=0.112	WARM $\alpha=0.77$	W1	0.880	$\chi^2/df=1.092$, AGFI=0.986 RMR=0.010, IFI=1.000, TLI=0.999, PNFI=0.166, CFI=1.000, RMSEA=0.015
				W2	0.680	
				W3	0.480	
				W4	0.530	
CONF $\alpha=0.56$	X1-X6 $\lambda=0.31-0$.59	$\chi^2/df=2.581$, AGFI=0.946 RMR=0.065, IFI=0.892, TLI=0.812, PNFI=0.506, CFI=0.887, RMSEA=0.071	CONF $\alpha=0.52$	X1	0.540	$\chi^2/df=2.092$, AGFI=0.965 RMR=0.056, IFI=0.938, TLI=0.893, PNFI=0.533, CFI=0.936, RMSEA=0.054
				X2	0.470	
				X3	0.480	
				X5	0.490	
				X6	0.450	

Note. Constr=Construct, λ =factor loading, χ^2/df = chisquare upon degree of freedom

Table 4. Comparison of Goodness of fit indices

GOF	Original model	Re-specified model
χ^2/df	2.431	2.176
AGFI	0.799	0.818
RMR	0.088	0.084
CFI	0.884	0.904
TLI	0.869	0.893
RMSEA	0.062	0.056

Table 5. Regression Weights of SPAQ1 first order measurement model

Construct			Est.	S.E.	C.R.	P
COND	<---	PA	0.581	0.055	10.551	***
REL	<---	PA	1.046	0.067	15.532	***
CONT	<---	PA	0.557	0.060	9.366	***
CLOS	<---	PA	0.708	0.045	15.869	***
CONF	<---	PA	0.491	0.062	7.924	***
HWK	<---	PA	0.722	0.056	12.816	***
ASP	<---	PA	0.891	0.060	14.756	***

Note. PA=parents' actions, COND=conductiveness, REL=religiosity, CONT=control, CLOS=closeness, CONF=conflict, HWK=homework, ASP=aspiration, *** indicates significance at $p < 0.001$

Table 6. Squared multiple correlations of the related constructs

Construct	CLOSE	ASP	COND	REL	HWK	CONF	CONT
Estimate	0.773	0.704	0.597	0.706	0.830	0.327	0.658

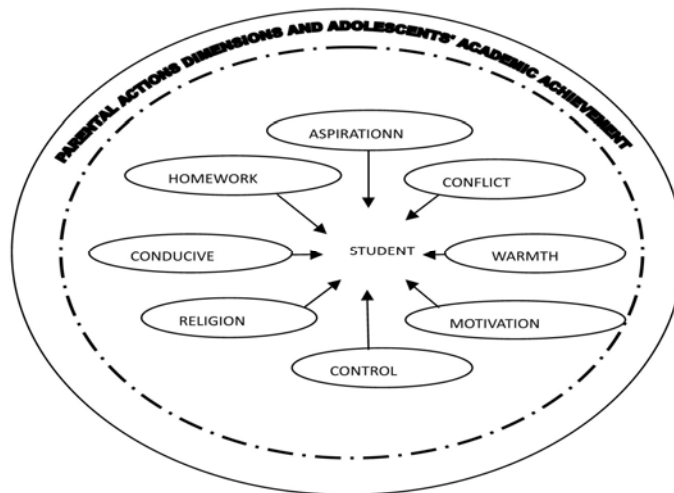


Figure 1. Theoretical framework of parents' action dimensions

Dimension	Brief definition
Aspirations(ASP) (7 items -coded A1 to A7)	Parents' expectation or hope for their children academic achievement and success.
Homework (HWK) (7 items- coded H1 to H7)	Parents' involvement related to completing school work at home.
Conduciveness(COND) (7 items-coded CD1 to CD7)	Parents' action in providing suitable home environment for children to do revision and other academic or school related activities.
Religious Practice (REL) (6 items-coded R1 to R6)	Parents' religious practice and encouragement for their children to do the same. In the eastern culture, it is believed that one's success is granted by GOD.
Control and monitoring(CON) (12 items-coded C1 to C12)	Parents supervision of their children's activities such as who they befriended, their whereabouts after school and setting certain rules that have to be adhered to.
Motivation(MOV) (8 items-coded M1 to M8)	Actions that parents do to encourage and motivate their child to be successful in academic achievement
Warmth(WARM) 8 items-coded W1 to W8)	Relationship between parents and their children. Frequent casual communication, togetherness in carrying out certain activities and the confidence of the child towards their parents.
Conflict (CONF) (7 items-coded X1 to X7)	Child's disagreement or unhappiness with parents' action

Figure 2. The eight hypothetical constructs operationalized for SPAQ1 measurement instrument.

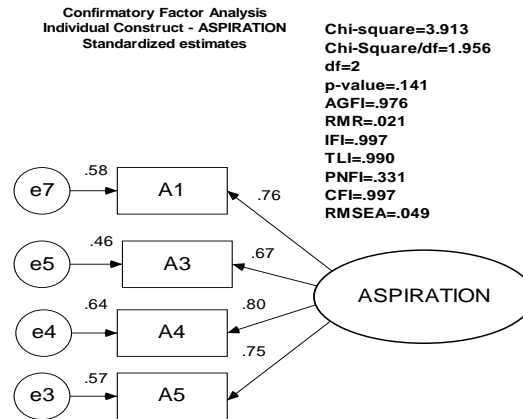


Figure 3. The ASPIRATION construct and the items after revision was carried out

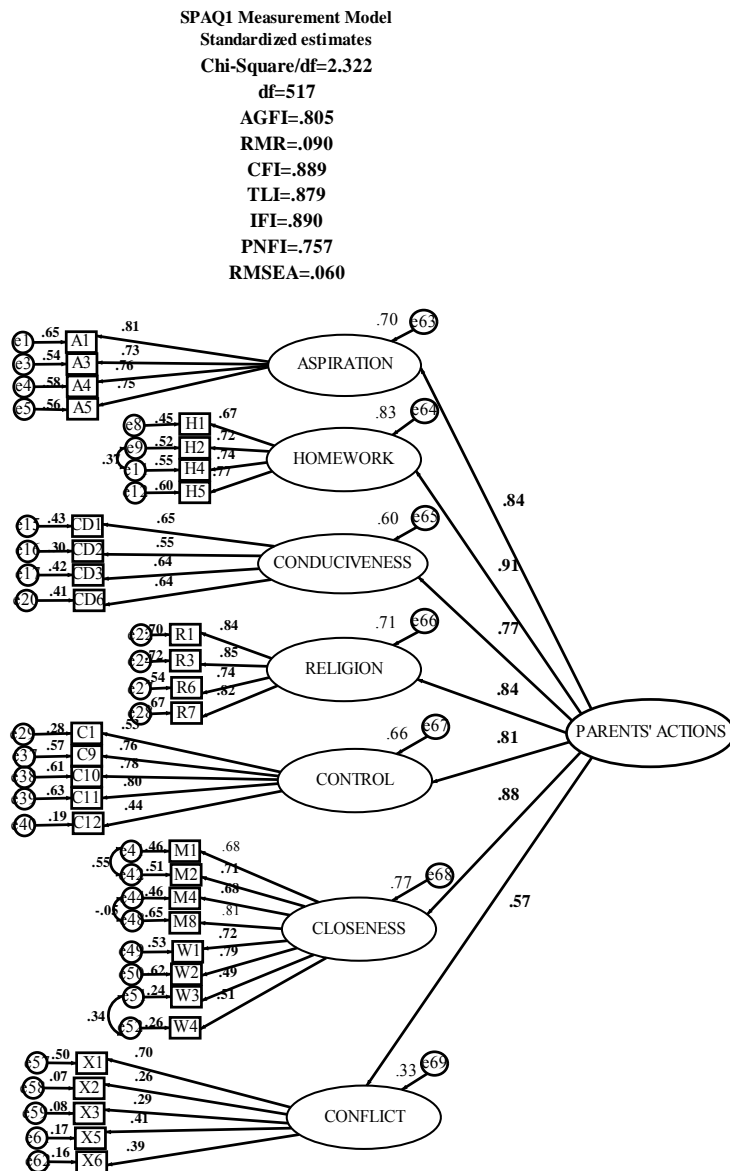


Figure 4. SPAQ1 second order measurement model.

The Role of Teachers in College English Classroom

— From the Perspective of Affect

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Abstract

Modern college English classroom has seen a gradual shift from teacher-dominated to student-centered one and therefore affective factors plays a crucial part of the bidirectional communication between teachers and students. This thesis attempts to investigate the roles teachers should perform at class and then give some advice of affective strategies in college English teaching.

Keywords: Affective factors, College English, Teachers' role

Introduction

College English teaching in China has been paid great attention since the language of English, as a world-wide one, is of great importance in international communication. Following the traditional teaching strategy, most people regard language learning as a result of imitating and practicing. However, more and more teachers and researchers emphasize that affective factors of students in English learning should be concerned in the college English classroom. Teachers should develop students' positive affection to learn English, make sure full participation of students. Since then, the teaching strategy is changed from teacher-instructing to student-centered teaching. After taking research of previous studies and practical teaching, this paper points out affective factors, language teaching methodology, and teacher's task to boost college English teaching in China.

1. Rationale of Affective Factors

1.1 The Definition of Affect

Actually, it is hard to give an accurate definition of affect as Fehr and Russell (1984) once noted "Everyone knows what an emotion is, until asked to give a definition". Affect refers to emotion or feeling (H.D. Brown, 1987). Dickinson (1987) describes it as being concerned with the learner's attitude towards the target language and users of it, and with his/her emotional responses. Damasio(1994) differentiates the term emotions as "changes in body state in response to a positive or negative situation" from the term feelings as "perceptions of these changes. Arnold (1999) defines affect as "aspects of emotion, feeling, mood or attitude which condition behavior". It can be seen that the term "affect" sometimes replaced by "emotions", "feelings" or "affectivity" was defined from several perspectives such as educational one, psychological one. However, from the aspect of language teaching, Walter Apelt and Heike Koering (1997) demonstrate that affectivity is the totality of all components of foreign-language instruction that influence the emotional attitude toward learning a foreign language and toward using it, as well as the foreign language atmosphere in general and the success of the learning and teaching process in particular. Not only those components that promote intensive and language-activating emotions, but also those that inhibit or evoke negative emotions, should be given special consideration. This definition is more reasonable, because it covers both learning and teaching, clarifies positive affect and negative one and connects affect with cognition.

1.2 Affective Factors

Though affect cannot be separated as a complex system in some sense, studies tend to name different aspects of affect in order to carry out specific research of each aspect. In general, emotions which affect language acquisition can be classified as personality factors and factors between learners themselves and their relationship with teachers. Personality factors involve self-esteem, motivation, anxiety, and inhibition while the other involves empathy, classroom transactions and cross-cultural processes. Among these factors there are positive ones which can encourage learners and negative ones as well which will be hindrance to English learning such as anxiety, sadness.

2. The Role of Teachers in College English Classroom

As Pine and Boy (1997) express "pupils feel the personal emotional structure of the teacher long before they feel

the impact of the intellectual content offered by that teacher". It is evident that teachers' performance at class will give an influence for their students. A teacher who lacks self-esteem will find it difficult to make self-esteem of his students. A teacher who does not lead a warm atmosphere at class will find low spirits of students to learn. So the teachers' role is very critical in language teaching. According to Yan & Zhang (2002), there are three basic roles for teachers: "lecturer", "teacher", and "facilitator". They made distinctions among the three based on the theory of affective factors. "Lecturers" are those who solely consider their professional skills but neglect teaching methodology. "Teachers" here refer to those who possess professional skills and teaching methodology but seldom care students' affective experience. "Facilitators" are like those who not only take characters of the former two but also care students' affective state and learning process to help them in language learning by self-consciousness-raising. Through comparison, it reflects that lecturers lack flexibility during their teaching and there are less interaction between students and lecturers as if there exists an invisible wall. It is better for teachers to realize how to turn burdensome language class into dynamic one but they pay less attention to the students' involvement or do not perform enough to release the capacity of students because of individual differences. As facilitators, they try to break the invisible wall and communicate with students in time so that the previous opposite two sides can be changed into a harmonious group. Both learning and teaching go on smoothly without tension. It is no doubt that such facilitators can be successful ones for they explore attentively students' psychological feelings, skillfully manipulate students from loving language classes and attract students to participate actively.

3. How-tos for Being Facilitators in the classroom

3.1 Being a Humanistic Teacher

To be a humanistic teacher means a teacher's behavior should be democratic and his teaching aims at student-centered classroom in which a teacher acts as an organizer, encourager, and guide. Rogers (1969) argued that learning that combines intelligence and affection would promote the whole-person development. He regarded himself as a facilitator and asserted that significant learning can be facilitated by establishing an interpersonal relationship between the facilitator and the learner. Teachers should treat their learners as individuals with specific needs to be met and provide them with trust and emphatic understanding. Through the understanding and promotion of inner factors, students' learning strategies and even their learning outcomes would be of much distinction compared with what they did before. According to Gage and Berliner (1991), feelings are as important as facts. Much work from the humanistic view seems to validate this point and is one area where humanistically-oriented educators are making significant contributions to our knowledge base.

3.2 Motivating in English Teaching Process

It is well acknowledged that motivation is very crucial in language learning as Dornyei (1998) mentioned that motivation has been widely accepted by both teachers and researchers as one of the key factors that influence the rate and success of second foreign language learning. Motivation provides the primary impetus to initiate learning the foreign language and later the driving force to sustain the long and often tedious learning process. Therefore, at class teachers should give their priority to motivation. Students will learn from their experience and keep collecting to develop their full potential. Otherwise, classroom realities increasingly ask awareness to an overlooked aspect, i.e., the motivational needs from teachers, since teachers' motivation has direct influence to students' language learning efficiency. However, ways to motivate language teachers take little amount of research but it will broaden the research area.

3.3 Designing affective course

Affective course requires teachers' large amount of time and energy contributed to make a good arrangement of class which not only develop students' academic skills but also stimulate their inner motivation. Two activities are taken from Moskowitz's illustration here:

Activity 1: I like you; you're different

For homework, students write three positive and unique things about themselves on a card provided by the teacher, e.g.: 1. I am a good cook; 2. I was on TV when I was eight; & 3. I was a tennis champion in my hometown. The teacher reads each card aloud. Students suggest three possible student identities and the whole class votes on the one most likely. The mystery students reveal themselves and answer a few questions from classmates related to the card. This activity helps students learn about each other and promotes self-esteem.

Activity 2: Fortune cookies

In groups of four, each student writes a positive fortune for another group member, folds it with the student's name on the outside of the paper and puts it in the center of the group. In turn, each student takes the designated

fortune, reads it aloud and reacts to it. To end, each group chooses one fortune to read to the class. Laughter and good feelings toward classmates ensue from these positive wishes. (Moskowitz, 1982)

By these activities the whole class integrates together with each member shows his self-esteem and empathy instead of anxiety. Sometimes teachers can arrange interesting programs, like group-discussion, role-playing and video-watching, to make full practice of students and at the same time the ability of speaking, writing, listening and reading can be developed.

3.4 Creating a Psychologically Secure Learning Environment for the Students

In the process of English teaching, teachers should pay more attention to establishing certain relationship with their students. A harmonious and pleasant climate in the classroom can help to reduce the anxiety of students, ask the focus of students when learning English and form emotional bonds between students and teachers at the same time. Teachers can create the classroom a welcoming and relaxing place where psychological needs are met and language anxiety is kept to a minimum. (Oxford & Shearin, 1994) According to Gage and Berliner (1991), students learn best in a non-threatening environment. This is one area where humanistic educators have had an impact on current educational practice. The orientation espoused today is that the environment should be psychologically and emotionally, as well as physically, non-threatening.

Conclusion

To summarize, affective factors cannot be neglected in English language teaching. Among the three basic roles, “facilitators” are the most ideal one the responsibility of which is to organize effective and efficient teaching strategies for arousing students’ awareness of affect and take their needs into consideration in order to equip them to learn with self-consciousness and efficiency. As Pine & Boy (1997) mentioned: the more the teacher humanizes his teaching, the more teaching humanizes him. The more the teacher cares for his students, the more they will care for him. The more the teacher frees his students to grow, the more he frees himself to grow.

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Linking Reading and Writing in An English-As-A-Second-Language (ESL) Classroom for National Reorientation and Reconstruction

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Abstract

How developed, integrated and focused a nation has been is partly a function of her level of literacy. Hence, every nation desires full literacy that involves the two skills of reading and writing. Both skills are as elusive as they are rewarding, especially if they have to be acquired from a Second position, such as occupied by English in Nigeria. Over the years in the country, learner performance in the language has been a source of worry to the school system and other stakeholders. Nevertheless, the mutual, complementary teaching of the skills could make them fairly easy to acquire. This paper canvases that reading and writing be taught interactively in the English as the Second Language (ESL) context for effective learning.

Keywords: Reading, Writing, Reorientation, Reconstruction

Introduction

Reading and writing are the literacy skills, distinct from, but mutual with speaking and listening – the oral skills. Without the guide of a teacher, learning to read and write can be difficult (Olajide, 2000; Griffiths & Parr, 2001). Quite a number of commentators and researchers have complained that all categories of learners of English as a Second Language (ESL) displayed difficulty in learning to read and write. For example, in Nigeria, Adegbiya and Ofuya (1998) lamented poor reading and writing skills among a group of learners in a university, while Olajide (1991) found that, whatever their specializations, Nigerian university undergraduates showed difficulty with reading. Along the same line, and alluding to the findings by the Ford Foundations, Alebiosu (1997) asserted that most of the students in Nigerian tertiary institutions could not write well. James (1984) also reported that low motivation accounted for poor reading and writing skills among the undergraduates of Nigerian universities. Yet, as observed by Goodman (1967), Unoh (1985), Olajide (1991, 2009), Rose (1991) and Adegbiya and Ofuya (1996), reading and writing are fundamental to intellectual and national development.

Reading and writing are structured and purposive arts. How a text is written affects how it will be read. As found by Olajide (1998) and Weber (2001), different disciplines are expressed in different ways, and learning each of the disciplines depends on the ability to suit reading to the type of text presented. May (1986) and Brent (1992) observed that a learner that cannot adopt the right approach to confronting a text may never be able to fully extract the information buried behind the print. In like manner, if he cannot identify, assess and sequence ideas back into print by way of writing, particularly at the higher level of learning, he would not achieve much.

Incidentally, adult learners that can read to write, and write to read efficiently in English is the dream of the Federal Government of Nigeria, a country that is in dire need of development and progress in all ramifications. The country believes that education is an invaluable instrument of all forms of development and growth. She also believes that if majority of the citizens are efficient at English language skills, they will attain all round education. Consequently, the Government places a high premium on English in Education (Federal Republic of Nigeria, 2007). The entire world has become a global village undergoing re-ordering, and any country whose citizens cannot read and write well in a universal language may not compete well.

Thus, relying on the Nigerian experience, it may be counseled that teachers of English as a Second language should imbibe the methods and techniques that can ensure that learners read and write desirably. Apart from understanding the subject matters, the teachers must be abreast of socio-economic, cultural, political, and scientific developments around the larger world. When classroom activities on reading and writing successfully reflect such developments, learners are being prepared for international living (Stempleski, 1993; Griffiths & Parr, 2001).

Some Psycholinguistic Considerations of Reading and Writing

One possibly strong assumption is that reading cannot lead to understanding (comprehension) unless it involves the mental processing of the linguistic units and punctuation features of text. The reader must also appreciate the personality and attitude of the writer of the text (May, 1986; Brent, 1992). However, this assumption would not apply to reading beyond the written text; reading can actually take place far outside. Indeed, one can read the sky and predict that there would be rain or sun, or read a picture in order to write more than million words. What probably makes textual reading significant is that it is predominant in the school system and places far greater psycholinguistic thrust on the learner than any other form of reading.

Stressing the relationship between reading and writing, Pica (1986) suggested that the advanced learner of ESL may not do well in either without being sufficiently sensitized to the syntactic and rhetorical features of the text. Brent (1992) not only corroborated Pica, but added that the personal attributes of a writer as revealed from the target text could influence the reader's life, even long after reading the text. Thus, reading and writing, when carefully integrated, can become a means of promoting personal and collective ideals.

Goodman (1967) and Unoh (1985) emphasized the role of reading in intellectual development, and asserted that comprehension has a psycholinguistic foundation. In the same vein, Adegbija and Ofuya (1997) and Olajide (1999) reiterated the contributions of the punctuation and grammatical elements to effective writing. A poorly punctuated text is like tea without sugar; it would not attract the reader, as he or she would find it difficult to make textual as well as extra-textual meaning from the text. A writer with weak vocabulary and bad syntactic control will not be of help to his reader because good vocabulary helps to call up specific images in the reader's mind, while syntactic focus imposes rhythmic balance on the text and propels reading towards the desired meaning. Through effective paragraphing, the writer sequences ideas which the reader identifies, synthesizes, and applies in solving life's problem. The more complex the linguistic texture to of the written text, the higher the psychological thrust it places on the reader (Olajide, 1996); and any reading done is expected to improve the reader's ability.

It has been suggested that reading is less demanding than writing (Ashe, 1979; Olajide, 1999). However, it appears that the writer is his/ her own best teacher as no one can teach any one else how to write: the more individualized practice the learner-writer has the more refined his/her writing becomes. Hilgard, Atkinson and Atkinson (1971) and Landy (1976) observed that the ability to write well is a mark of advance learning. Ironically, year in year out, there have been complaints from English Departments of universities in the ESL context, worldwide that students do not write effectively. For example, Tinuoye (1993) complained that the students had problems with the correct uses of articles and prepositions. In order to develop effectively the learner's reading and writing skills, researchers in psycholinguistics have advocated that the-learning of both skills should be regularly examined (Brent, 1992, Borra, 1993, and Qiyi, 1993).

Suiting Reading and Writing Instruction in the ESL Context to National Reorientation and Reconstruction Needs

Now that the psycholinguistic underpinnings of reading and writing have been explained, it may be expedient to examine the need to suit instructions in both skills in English to the national reconstruction drives of Nigeria. That English is one language with a significant role to play in the life of the country is never an overstatement. After several decades of misrule by the military, Nigeria needs re-entrenchment among serious nations who had treated her as a pariah. She also needs to address the issues of marginalization raised by her various ethnic components. The need to diversify the economy is equally urgent. The unconditional development of English education is one of the things the country needs to encourage in order to attain the national reconstruction and international integration she badly desires. Most Nigerians do not like the ascendancy English enjoys in Nigeria education. However, language educators and linguists appreciate that it may not be easy to replace the language with a native language. While explaining the inadequacy of English as the country's lingua franca, Lawal (1989) cautioned that '... there are ... problems which are closely associated with language planning and policy which are considered as the most primordial and fundamental issues with which it is dangerous to tamper' (p.33). A very important question arises: even if Nigerians unanimously agree to evolve a native national language, which of the so many languages would be acceptable to all the citizens? Akinbobola (1998) reported the case of a Yoruba Director General and a Commissioner for Education in a Yoruba speaking State in the country, "who, by virtue of their offices, pronounced Yoruba as an elective subject both at the J.S.S and S.S.S. levels in the State" (p.41), contrary to the expectations of the people. This illustrates that speakers of the same language may not necessarily maintain the same attitude to the language.

Thus, English seems to have come to stay in Nigeria. It may even be safe to assume that it already is a Nigerian language. According to Balatunde (2001), 'The language is caught between maintaining its native structure, texture and components and surrendering to the nature of the terrain on which it is moving' (p. iv). In the permanent contact existing between English and its host Nigerian environment, the language offers unique experiences. The situation can hardly be different as the entire world waxes into a global village owed to technological advancement. On the tendency of English to become a Nigerian language, Bobda (1995) maintained:

The fact that a national standard accent of English transcending ethnic boundaries is emerging in Nigeria is evidenced by the phenomenon where a given ethnic group may have a sound distinction like that of RP in their language and yet neutralize this in their English production (p.253).

If properly taught at all levels of education, English can be an extremely useful tool for enhancing the re-orientation and re-construction efforts of the country. Current national problems like poverty, identity, scientific and technological backwardness, revenue derivation and sharing, corruption, drug abuse, religious intolerance, pollution, and illiteracy can be tackled through reading and writing-related classroom activities in English, particularly at the advanced level of learning. The activities might influence the learners' views on such problems and mobilize them for appropriate action. It should be noted that one's command of language reflects the quality of one's thought and action. There are research evidences that reading and writing are genetically related to thinking (Olajide, 1996).

The model developed by the present writer and presented at the end of this paper (APPENDIX 1) may help to explain the assumption that reading and writing in English can be taught together to promote national reconstruction efforts. The model, informed by but different from Pica (1986) and Glassman (2002), seeks to integrate reading and writing in the context of national experiences where English is a second language. It tries to depict that both language skills are schematic and elastic, guaranteeing the inter-flow of relevant facts among the different. The clockwise movement of the national and English language boundary is intended to underscore the spatial, socio-cultural, linguistic and political determinants of reading and writing activities. Pica (1986) and Glassman (2002) were not directly concerned with reading and writing in ESL. While the one examined the cognitive dimensions of writing, the other advocated an inter-disciplinary approach to the development of language curriculum. However, both scholars have provided further insight into the fluid and perpetually interactive nature of the language arts which the present model seeks to elucidate.

Obstacles to Integrative Development of Reading and Writing in the ESL Classroom

Desirable as the integrative approach to the teaching of reading and writing may appear, it can be beset with a number of obstacles. Apart from that teachers of English, especially at the secondary school level in the ESL context restrict themselves to basal materials for the teaching of the skills, they hardly encourage their learners to engage in individualized reading and writing using self-selected materials. Playful drill on basal materials is a good way of teaching the language arts to young learners (May, 1986; Hills and Dubbyn, 1979), but how much of such a technique the teachers have mastered is not known. Also Anderson and Freebody (1981) found that conducive learning of oral skills leads to improved reading and writing. Yet, not all the basal materials used in the schools emphasize speaking and listening. The implication is that the teachers of English in Nigeria should adopt the integrative (language arts) approach to the teaching of reading and writing, so that learners can also speak and listen as they read and write in the classroom.

Besides, language teaching and learning is ever dynamic. Information provided by applied linguists about the nature of language and the way it is learnt often leads to pedagogical shifts. For instance, whereas it was fashionable in the western world in 1950's to stress imitation as a means of language learning (Christophersen, 1956), it is now believed that the learner's powers of observation (as to how people react to use) and creativity (by attempts at over-extension) guarantee language learning better (Weber, 2001). The teachers need to be exposed to the current theory and practices of English Language Teaching (ELT).

Home environment factors also affect language learning. The number of adults and siblings present in the home, how frequently and well they use English in conversations, the birth order or spacing of the children, the interest and affection shown by the surrounding adults, and communication facilities present in the home have implications for learner performance in the language. The learner that enjoys access to the radio, television, telephone, magazines, newspapers, and family library is likely to speak, listen, read and write better than the one who does not. The latter would only rely on the limited opportunities given in the school to learn the skills. Hence, the dynamic English teacher has a way of improvising in his class, so that learner individual differences do not work against the less privileged.

Even when they have relevant linguistic experiences, learners require an environment where they can build on what they have already learnt. They need pragmatic, semantic-syntactic and morphological reinforcements. Every young learner wishes to be able to influence his peers' behaviour with commands requests, questions, refusals; he desires to keep track of conversations (within and outside the classroom), and interpret tones correctly as he engages others in discussions. He also wants to give additional meaning to the words he has already learnt at home. Olajide (1998) argued that patterns of classroom discourse affect learning in the ESL situation. This implies that the teacher should pay attention to the social arrangements and preferences of learners, and that classroom activities should be as interactive as practicable.

Another serious obstacle is that many language teachers are insensitive to issues of the Nigerian environment. They probably feel that socio-political and economic problems should be left for the social scientists to address. The teachers hardly appreciate that if they imbibe democratic ideas in the organization and control of classroom activities, learning would be effective. An autocratic teacher will kill the instinct of his learners, while the democratic one would strive to develop such instinct. The latter always arranges his class very well, and links classroom activities with national and international issues, without failing to apply reward for good learner performance. Even when a learner fails to perform up to expectation, the teacher does not have to give him outright condemnation.

In the spirit of integration or holism, ESL classroom activities should enable the learners to speak, listen, read, write and engage in critical thinking desirably. The literature is replete with materials related to the techniques of teaching English language and literature (Lawal, 1995; Olajide, 2000 & 2007). The efficient teacher should be mindful of the linguistic and psychological variables/characteristics of the learners while improving and developing adjunct materials for the class. Effort must also be made to sensitize the learners to their ecosystem. The closer the learners are to the environment, the better they appreciate nature and acquire the experiences they would need in their day-to-day communication tasks.

Conclusion

Reading and writing in the ESL context need to be developed and promoted in the educational system because they have implications for national reconstruction, integration, and progress. Available literature suggests that both skills are hardly linked effectively in the context. Nigeria is one example of such context: whereas she hopes to conquer poverty, attain balanced development and retain access to the global community using the English language, most of her citizens have not been able to read and write the language very well. In the country, university students who are expected to be models in English usage have been observed to be greatly deficient. Paradoxically, such students are expected to graduate to man the nation's economy which has been badly damaged by corruption and misrule. Government, teachers, parents, general lovers of education, and the learners themselves have great roles in the developing of the skills. The Nigerian experience suggests that the ESL teacher should have good knowledge of the subject matter, and be able to appreciate and reflect, where necessary, the reorientation and reconstruction needs of learners in selecting and implementing reading - writing activities in the classroom. In so doing, he should be abreast of the various techniques of teaching reading and writing interactively, without abandoning the other language skills of speaking and listening.

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APPENDIX 1

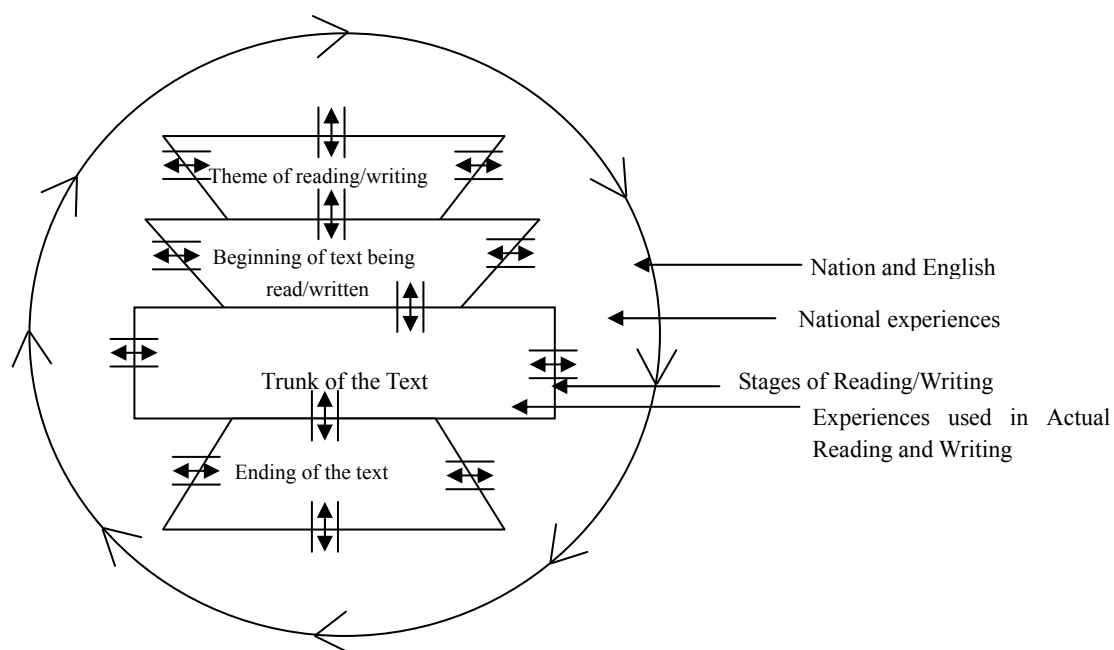


Figure 1. An integrative model of reading and writing in the ESL Context, developed by the present author for this paper.

Affirmation to Editor

I wish to affirm that the model (Appendix 1) in this paper is entirely my creation, although I have benefited from the theoretical views of some scholars that I have acknowledged in the body of the paper. Thus, the model can be published by your Journal without legal implication. The paper has not been published anywhere before now.

Thank you, Sir/Madam.

(Signed)

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The Survey and Analysis of Excellent Senior High School Physics Teachers' Professional Growth Actuality

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Abstract

Excellent senior high school physics teachers are the backbone power in the new course reform of physics in China. The excellent senior high school physics teachers' professional growth actuality in Shandong is surveyed in this article by the self-made "Questionnaire of Excellent Senior High School Physics Teachers' Professional Growth", and by the survey, the total status and the professional growth of excellent senior high school physics teachers could be grasped.

Keywords: Excellent senior high school physics teachers, Professional growth, Questionnaire survey

1. Introduction

In the day that the basic education course reform is deep increasingly, teachers' education is becoming the focus noticed by people, and the growth of excellent teachers is the core topic in the focus. Excellent teachers means those teachers who could comprehensively utilize creative thinking ability and creative practice ability to labor creatively, explore new suppose, make new products, and make great contributions in the development of the education domain, and can be confirmed by the experts in the same vocation (Lai, 2004).

As the backbone power in the physics teachers, excellent physics teachers are the powerful guarantee to obtain the success of the new physics course reform. To study the growth rule of excellent physics teachers could promote the professional development of the physics teacher group, and enhance the quality of the physics teacher group of China. About the growth stage of excellent teachers, Shen Yan et al thought that the growth of excellent teachers should experience four stages including the working adaption term, the target orientation term, the self-exploring term, and the matured creation term (Shen, 2009), and Chu Huiling thought that the physics teachers' growth to the expert-type teachers should include four stages such as the adaption term, the competence term, the accumulation term, and the matured term (Chu, 2007, P.252), and Meng Zhaohui thought that the excellent physics teachers' growth course could be divide into four stages, i.e. the attention stage of physics knowledge, the attention stage of self-behaviors, the attention stage of students' behaviors, and the comprehensive attention stage of the teaching situation (Meng, 2005, P.242). According to these scholars' theoretical opinions and the teaching practice, the excellent senior high school physics teachers' growth stage could be divided into five stages including the term of adapting the physics teaching, the term of stable teaching skills, the term of enhancing the teaching level, the term of matured teaching style, and the term of becoming expert teachers in this article.

To grasp the status of excellent senior high school physics teachers' professional growth of Shandong Province and know the rule of their professional growth, and establish the base for the practice strategy promoting senior high school physics teachers' professional development purposely, the self-made "Questionnaire of Excellent Senior High School Physics Teachers' Professional Growth" is used in the survey and research (in this research, excellent senior high school physics teachers are those physical teachers with above county-level teaching honor). The questionnaire design is mainly started from the basic situation, professional activity, and professional growth of excellent physics teachers. The survey was implemented in 12 senior high schools in the Tai'an City, the Qingdao City, and the Linyi City in Shandong Province, and the survey objects are excellent senior high school teachers, and the questionnaire survey didn't note the names of investigated objects. In 80 questionnaires, all of them are returned, and 74 of them are effective, and the efficiency rate is 92.5%.

2. Result and analysis of excellent senior high school physics teachers' professional growth questionnaire survey

2.1 Basic introduction of excellent senior high school physics teachers

In the surveyed excellent senior high school physics teachers, 64.9% of them are male, and 35.1% of them are female, and the phenomenon of sex mismatch is obvious. From Table 1, teachers from 36 to 45 years old are

45.9% of the total amount and 81.1% of teachers have been in this vocation above ten years, and the teachers with the graduate education level occupy 97.3%, and the teachers with the senior profession title occupy 43.3%. The survey result shows that most of excellent physics teachers are young and middle-aged, and the proportion of the teachers with senior profession title is high, and they generally have long teaching time, which indicates that it needs long-term teaching practice to be the excellent teachers. The survey shows that 96.3% of excellent senior high school physics teachers were graduated from the normal colleges, which indicates that the normal colleges exerted important functions in the cultivation of teachers. In the survey objects, 5.4% of them are national level backbone teachers, 8.1% of them are Shandong provincial special teachers, 2.7% of them are provincial-level teaching experts, and 21.6% of them are county-level excellent teachers (specialty top talents, academic leaders, backbone teachers, and teaching experts). These honors could reflect that excellent senior high school physics teachers have good ability of physics education and teaching recognized by the society.

2.2 Actuality of professional development

About the work pressure in the survey, the proportions that excellent senior high school physics teachers thought it is higher and high respectively are 40.5% and 40.5%, and only 16.2% of teachers thought that the work pressure is proper. 18.9% excellent physics teachers thought that the teaching workload is “very heavy”, and 51.4% of them thought that the workload is “heavy”, and 29.7% of them thought that the workload is “general”. All excellent senior high school teachers’ satisfaction about the career of physics education is higher, and 13.5% of them show “very satisfactory”, and 64.9% of them show “satisfactory”, and 18.9% of them show “general”, and only 2.7% of them show “not satisfactory”. About the stability of the education teaching work, 29.7% of them thought it is “very stable”, and 59.5% of them thought it is “stable”, which indicate that though the workload and work pressure of physics teacher are large, but most physics teachers love their vocation, and they have good teaching manner, strong identification to the education, and good professional sentiment.

78.4% excellent senior high school physics teachers undertook or participated in various teaching research projects, and 83.8% of physics teachers published teaching research papers in various magazines such as “Physics Teaching”, “Physics Teachers”, “Middle School Physics”, “Shandong Education”, “Qingdao Education”, “Teaching Reference of Middle School Physics”, “Physics Bulletin”, and “Physical Experiment”. That indicates that excellent senior high school physics teachers could research and summarize various problems in the physical teaching, and have strong ability of educational scientific research.

The proportions that excellent senior high school physics teachers showed “very adaptive” and “adaptive” for the new course reform respective were 13.5% and 67.6%. That shows that the excellent senior high school physics teachers have strong adaptive ability to adapt the requirements of the new physics course reform. 62.2% of excellent senior high school physics teachers made “profession learning” in their off hours, and the main channels that they got the knowledge include network learning (62.2%), reading books (51.4%), communication in colleagues (43.2%), and profession training (40.5%). That shows the excellent senior high school physics teachers have good learning habit, pay more attention to the learning of professional knowledge, and often communicate with their colleagues, and with the development of internet, the network has been the important approach for them to obtain the professional knowledge.

2.3 Course of professional growth

The survey shows that the teaching events which could largely influence excellent senior high school physics teachers’ professional growth mainly include the large opening lesson (70.3%), the excellent graduates’ achievements (48.6%), the teaching basic skill competition (43.2%), and the teaching expert selection (36.1%). And they thought the effective teaching research activities included the collective lesson preparation (75.5%) and the lesson case discussion (51.4%).

The survey shows that the times that excellent senior high school physics teachers enhance their teaching level in various growth stages respectively are the term of adapting the physics teaching (1-3 years), the term of stable teaching skill (4-6 years), the term of enhancing the teaching level (7-10 years), the term of matured teaching style (11-15 years), and the term becoming the expert teachers (above 16 years). 62.2% of excellent senior high school physics teachers thought that they were in the stable matured term of professional growth, and 16.2 % of excellent senior high school physics teachers thought that they were in the quick development term of professional growth, and a few of them could be the scholar or expert teachers. That indicates that it needs a series of development stage to become an excellent physics teachers, and different excellent physics teachers have different development starts, and different speeds in various stages.

The survey shows that in different growth stages, the teaching emphases noticed by excellent physics teachers are different (seen in Table 2). And in the term of adapting the physics teaching, the main task of physics

teachers is to know well the contents of physical teaching materials and the effect of classroom teaching, in order to adapt the education and teaching environment of the college as soon as possible. In the term of stable teaching skills, physics teachers begin to accumulate the teaching experiences, and form relatively stable teaching skills, and they mainly pay attention to the specialty knowledge of physics, the classroom teaching effect, and students' examination achievements. In the term of enhancing the teaching level, physics teachers could expertly undertake their physics teaching, and they mainly pay attention to the improvement of the education concept and the their teaching skills, and their investments in teaching research increase gradually, and begin to seek the advanced education concepts to instruct the teaching behaviors of physics education, and promote the enhancement of the teaching level of physics education. In the term of matured teaching style, excellent physics teachers have completely been competent for the works of physics teaching, and possessed good physical cognition structure, and accumulated deep teaching base, and possessed abundant teaching experiences and strong scientific research ability of education, and gradually formed their own teaching styles, and they mainly notice the research of teaching concepts and the enhancement of the teaching skills. In the term of becoming the expert and scholar teachers, excellent physics teachers have advanced and special education concepts, and their teaching ability is more and more mature, and their ability of teaching reflection and the course resource development are strong. In addition, in different growth stages, excellent physics teachers all could reflect their teachings in time.

About the survey item of "according to your physics teaching experiences, what are the functions of following factors for your professional growth?", five options including "very useful, useful, little useful, less useful, without use" are designed, and they are be endowed respectively by "4, 3, 2, 1, 0" in the data processing, and the statics result is seen in Table 3. After statics, the average score of this item is 217. If taking the average score as the boundary, many factors such as "reflecting his teaching, self-learning, education concept and faith, students' identification, colleague/accompanier cooperation, old teachers' instruction, teaching conflict and frustration, family support, and leaders' support" could better promote excellent senior high school physics teachers' professional growth, and the promotion function of "reflecting his teaching, and self-studying" is more obvious, and these factors are not only interior but also exterior. The factors of "teaching research and expert leading" have not promoted senior high school physics teachers' professional growth enough. This result is basically consistent with result of the questionnaire, which shows that senior high school physics teachers' professional growth has certain commonness (Sun, 2010).

3. Conclusions

At present, the group of Shandong provincial excellent senior high school physics teachers mainly is young and middle-aged, and the attainment rate of undergraduate education level is high, and the proportion of senior profession tile is higher, and to be the excellent teachers from general teachers needs long-term teaching practice. Normal colleges still are the main places to cultivate the teachers of physics.

Though the workload and work pressure of physics teacher are large, but most physics teachers love their vocation, and they have good teaching manner, strong identification to the education, and good professional sentiment. Excellent senior high school physics teachers could better adapt the requirements of the new course reform, and they have possessed good teaching ability of physics teaching and good scientific research ability.

The excellent senior high school physics teachers' growth stage could be divided into five stages including the term of adapting the physics teaching, the term of stable teaching skills, the term of enhancing the teaching level, the term of matured teaching style, and the term of becoming expert teachers. In different growth stages, excellent physics teachers' attentions are different, but they all could reflect their teachings in different stages. Not only the interior factors, but also the exterior factors could promote the excellent senior high school physics teachers' professional growth, and many factors such as "reflecting his teaching, self-learning, education concept and faith, students' identification, colleague/accompanier cooperation, old teachers' instruction, teaching conflict and frustration, family support, and leaders' support" could better promote excellent senior high school physics teachers' professional growth. The large opening lesson, the excellent college entrance exam achievement, and the teaching base competition could significantly promote physics teachers' professional growth, and the collective lesson preparation and the lesson case discussion are effective forms for the physics teaching and research.

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Table 1. Status of excellent senior high school physics teachers

	Age				School age				Top educated level		Profession tile		
	<26	26-35	36-45	>45	<5	6-10	11-15	>15	Undergraduate	Post graduate	Junior	Middle	Senior
%	2.7	32.4	45.9	19.0	8.1	10.8	32.5	48.6	97.3	2.7	10.8	45.9	43.3

Table 2. Excellent senior high school physics teachers' teaching emphases

	Term of adapting the physics teaching	Term of stable teaching skills	Term of enhancing teaching level	Term of matured teaching style	Term of becoming scholar/expert teachers
Content of physics teaching materials	94.6%	13.5%	2.7%	2.7%	5.4%
Effect of classroom teaching	43.2%	62.2%	13.5%	10.8%	2.7%
Professional knowledge of physics	35.1%	43.2%	27.0%	18.9%	2.7%
Education concepts	16.2%	37.8%	51.4%	38.8%	16.2%
Students examination scores	35.1%	40.5%	16.2%	5.4%	5.4%
Students' behaviors	16.2%	32.4%	27.0%	27.0%	10.8%
Teachers' teaching skills	24.3%	29.7%	30.4%	32.4%	13.5%
Teaching research	5.4%	18.9%	35.1%	37.8%	35.1%
Development of course resources	5.4%	5.4%	21.6%	29.7%	37.8%
Teaching reflection	29.7%	21.6%	24.3%	32.4%	43.2%

Table 3. Score statistics of factors influencing excellent senior high school physics teachers' professional growth

Reflecting his teaching	250	Family support	220
Self-studying	242	Leaders' support	218
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Academic Procrastination in Mathematics: Causes, Dangers and Implications of Counselling for Effective Learning

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Abstract

This paper focused on causes and dangers of academic procrastination (a behavioural problem that involves delaying a task which needs to be accomplished) in mathematics and the need for counseling students who are procrastinators especially of mathematics. Thus, in order to have a comprehensive understanding of the topic, the meaning, causes and its debilitating effects on student's mathematics achievement were discussed after which the counsellor's role in helping students get out of this behavioural problem in order to ensure a sustainable educational system were discussed.

Keywords: Academic procrastination, Academic performance, Mathematics, Counselling

1. Introduction

Procrastination, which is a frequent failure at doing what ought to be done to reach one's goals is now a common phenomenon among students particularly those preparing for their final examination and this is doing more harm to their academic achievement than good. For instance, in a study carried out by Akinsola, Tella and Tella (2007) on 150 part 3 and 4 students from the department of mathematics and mathematics education of the University of Ibadan and University of Lagos, it was discovered that there is a significant correlation between academic procrastination and mathematics academic achievement. This implies that the more the subjects procrastinate, the more their achievement in mathematics decreased. The study carried out by Besinck, Rothblum and Mann (1986) also found out that procrastination was correlated with low self-esteem and anxiety in high school students. Tice and Bauneister (1997) also reported that students who have strong tendencies to procrastinate tend to have low examination grades than non-procrastinators. Also, the report by Beck, Koons and Migram (2000) Tuckman, Abry and Smith (2000) and Popoola (2005) show that procrastination is associated with poor academic achievement. According to Sirois and Pychy (2002), most students who suffer from procrastination resist completing assignments and addressing other deadlines that evoke tension and anxiety.

Although, the optimal goal of schooling is that students develop an indepth understanding of various content domains as well as possess high expectations for success, this seems to be an illusion as many students do not take their study serious until very close to examination period. This is especially true of mathematics which is a subject that demands students' understanding of mathematical reasoning and develop their mathematical knowledge through problem solving.

Mathematics is a broad domain addressing the measurement, properties and relations of quantities as expressed in numbers or symbols (Lynn 2006) and as opined by Akinsola and Tella (2003) it is an important school subject because it is associated with more academic and/or career opportunities. However, relatively little is known about mathematical cognition because most students do not give in the needed attention and time. Meanwhile, admission into tertiary institution of learning depends on very good academic performance in mathematics and English.

Moreover, education at secondary level is supposed to be the bedrock and the foundation towards higher knowledge in tertiary institutions. It is an investment as well as an instrument that can be used to achieve a more rapid economic, social, political technological, scientific and cultural development in the country. But on the contrary, there is a consensus of opinion about poor performance in especially the two core subjects - English and Mathematics. (Agwah 2003).

Mathematics is a very important subject in secondary school education because it is one of the compulsory subject and a mandatory requirement for admission. Burton, cited in Agwah and Usman (2003) relates the importance of mathematics to the scientific, industrial, technology and social progress of any society. That mathematics is an important subject is indubitable but it is very sad to note that the performance by secondary school students especially at WAEC and GCE results in the subject in recent times is not encouraging. This can

be attributed to the fact that majority of secondary school students has been observed to be procrastinators and basically because not much has been done to counsel them otherwise.

Sutton (1997) argues that mathematics by its nature involves both cognition and affective effects and the glory of mathematics lies in the fact that mathematics does not come easily to anyone. It is in the struggle to understand and the manner in which this is met that one gets equipped in the knowledge of mathematics. However, most students often dislike mathematics as a subject. This is supported by Hopper (2005) and Phillips (2000) who discovered that mathematics to some students is often associated with pain and frustration and this may account for the reason why they procrastinate in studying mathematics. This assertion is also supported by Solomon and Rothblum (1984) who posit that people tend to avoid tasks which they find unpleasant and engage in activities which are more rewarding especially with short-term over long term gains. Also, Akinsola, Tella and Tella (2007) observe that many students refer to mathematics as being difficult and as asserted by the learning common fact series, procrastination often results when a task seems difficult, unpleasant or overpowering. This is especially true of adolescents who often prefer pleasurable times to being constrained to do something.

A developed and sustainable educational system is an enviable longing in any nation but this will continue to be an illusion if nothing seriously is done to help our unguided students by taking counseling especially on core subjects like mathematics very seriously in our secondary schools. If our secondary school students especially those in the senior secondary school continue to procrastinate, definitely, the weak manifestation of academic achievement in the subject will continue.

This is why this paper is a timely one to:

- Explain the meaning of procrastination
- Discuss the causes of procrastination
- Emphasize the dangers of procrastination on students especially those preparing for their senior secondary school certificate examinations and
- Point out possible ways of remediating the behaviour (procrastination) for improved academic achievement in mathematics.

2. Conceptual framework on procrastination

This section deals with the meaning of procrastination, characteristics and types of procrastinators.

2.1 Meaning of Procrastination

According to Lay (1986) procrastination is a frequent failure at doing what ought to be done to reach goals. In other words, procrastination as a behaviour becomes obvious when someone continues to fail in doing what he or she ought to do to achieve certain desirable goals. Oweini and Harray (1993) also define procrastination as the acts of needlessly delaying a task until the point of some discomfort. The issue of delaying what out to be done to later times is the bone of contention on the concept of procrastination and as pointed out by Janse and Carton 1999, procrastination is a behavioural problem that many adults experience on a daily basis. If procrastination as opined by Jansen and Canton (1999) is a behavioural problem that even adults engage in, then it becomes a more serious problem for students in the secondary school (who are mostly adolescents).

Still on the discourse of procrastination, Noran (2000) defines procrastination as avoiding doing a task which needs to be accomplished. In other words, most people who procrastinate would rather spend time socializing with friends or relatives rather than working on an important work that ought to be done soon or one would rather be watching an exciting movie on the television rather than studying for an upcoming test or examination.

Also, Popoola (2005) defines procrastination as a dispositional trait which has cognitive, behavioural and emotional components. According to him, this dispositional trait makes an individual postpone doing things that make him or her anxious and apprehensive. This description of procrastination shows that it is a natural behaviour that can be exhibited by anyone and that such a natural tendency needs to be reduced to the minimal.

2.2 Characteristics of procrastinators

There are certain things that characterize individuals who procrastinate. Some of these are low self esteem, self efficacy, self-critical behaviour, irrational fear of success or failure and the likes. Some of these are discussed below:

2.2.1 Self Efficacy

This refers to people's judgments of their capabilities to organize and execute courses of action required to attain designated types of performances (Bandura 1986). According to him, self efficacy strongly influences the choices people make, the effort they expend, and how long they persevere in the face of challenge. By

implication, how people behave can often be better predicted by their beliefs about their capabilities than by what they are actually capable of accomplishing as these beliefs help determine what individuals do with the knowledge and skills they have. Some other researchers like Maddux, Norton and Stollenberg (1986) have also established that self-efficacy is a strong predictor of behaviour. Perrari and Emmons (1995) also found out that procrastinators have low self esteem and delay task completion because they believe they lack the ability to achieve a task successfully.

2.2.2 Self critical behaviour

A procrastinator is also believed to be highly self critical because of high expectations he or she has for the completion of a particular task and what others will say about him/her. This often makes such an individual not to even get started at all. This view is supported by Effert and Ferran (1989) who demonstrate that procrastinators are publicly self-conscious and highly self-critical. They added that procrastinators have perfectionism expectations and are over-conscious. This is why Popoola (2005) describes the procrastinator as someone who knows what he wants to do in some sense, can do it, is trying to do it, yet doesn't do it.

2.2.3 Fear of success or failure

This is another character of procrastinators as most of them display irrational fear of success or failure which may lead them to avoid studying mathematics. Rothblum (1984) further asserts that procrastinators may be emotional, overwhelmed and anxious, having less need for cognitive complexity and are more likely to attribute success to external and unstable factors. Other characteristics of procrastinators according to Noran (2000) are that he knows what he wants to do, is equipped to perform the task, is trying and planning to perform the task, but does not complete the task or excessively delays performing the task, as he works on less important obligations rather than fulfilling the more important obligation or he may use his time wastefully in some minor activities.

2.3 Types of Procrastinators

The different characteristics of procrastinators highlighted above shows that there are different types of procrastinators. Some of these are:

2.3.1 Implosive Procrastinator

According to Ferran and Emmons (1994), these are procrastinators who fail to pick up cues from the environment because of the inability to delay gratification of pleasure, lacking self control, lacking motivation for achieving targeted goals and lacking energy or organizational abilities. Thus, this type of procrastination is often related to the problem of perceiving and estimating time.

2.3.2 Perfectionist procrastinator

This type of procrastinators keeps themselves ready to work but avoid the activity and according to Ellis and Knaus (1977), this type of procrastination has been found to result from cognitive distortions or faulty thinking. Such procrastinators are therefore over-conscious and they tend to fear success or failure which eventually leads to neurotic avoidance. They lack self-efficacy and self-esteem and are self-conscious and self-critical. Furthermore, Norman (2000) posits that academic procrastinators typically make four cognitive dimensions which promote and maintain their task avoidance. These are over estimation of time left to perform tasks; under-estimation of time required to complete tasks. Overestimation of future motivational states, mis-reliance on the necessity of emotional congruence to succeed at task and belief that working when not in the mood to work is sub-optimal.

3. Causes of Procrastination

Some of the causes of procrastination like self esteem and self efficacy, fear of success or failure, have already been mentioned under the characteristics of procrastinators and the types of procrastinators. However, Noran (2007) gave some other important causes of procrastination.

3.1 Lack of time management/

Someone who procrastinates suggests he/she is unable to manage time wisely. It implies uncertainty of priorities, goals and objectives. There is also a feeling that overwhelms one when doing a certain task. Subsequently, one postpones doing academic assignment for a certain data, while focusing on unproductive activities.

3.2 Inability to concentrate or having low levels of conscientiousness on one's work.

This is another reason for procrastination. This may be due to distortions in the environment, such as noise, cluttered study desk or trying to do an assignment on a bed.

3.3 Fear and anxiety related to failure:

A third of procrastinating is the fear and anxiety related to failure. A person in this category would spend more time worrying about forthcoming tests and projects rather than plan for it and completing them.

3.4 Type of students' characteristics

Valadez (2006) have identified three types of students, as the unconcerned students, target-oriented and passionate students. According to him, unconcerned students objective is that they just want to pass the class, look for easiest way, and are apathetic about studying. Such students exercise behaviours such as they do little studying or reading, look for help at the last minute, memorize information, reproducing statements from source text, sometimes cheat and goof in class. Indeed such students certainly do not take study seriously and may never pay attention to proper time management.

3.5 Lack of confidence:

A lack of confidence in one self according to (Plessis, 2006) will automatically keep one from those things which ordinarily one is capable of doing. Procrastination which is not a device for avoiding mundane things but on a higher level, is avoiding the big decisions and big actions then set in and prevent one from making real difference in one's life.

4. Effects of procrastination

Students who suffer from procrastination which is an avoidance coping behavior often have many problems with their academic performance. Some of the effects of procrastination on students are:

4.1 Tension and anxiety.

According to Trabant (2006), anxiety is a state of uneasiness and apprehension about future uncertainties and that anxiety suggests feelings of fear and apprehension, feelings of resentment and rage over this various form of manipulation cannot surface in the child. According to Britannica Concise Encyclopedia (2006) defines anxiety in psychology as a feeling of dread, fear or apprehension often with no clearly justification. Also, anxiety is seen typically as the product of subjective, internal emotional states rather than a response to a clear and actual danger and as such it is different from fear. Thus, anxiety can be viewed anxiety in relation to: (i) fear (ii) feeling of persistent and uncontrollable worry and nervousness (iii) it increases in tension and it is often accompanied by some physical and biochemical changes in the body (iv) it is a feeling that comes from within but that is manifested in outward actions. It can be seen as an emotional state caused by things man is incapable of doing and which if uncontrolled can be harmful to the individual. It was revealed by Akinsola, Tella and Tella (2007) that students who procrastinate resist completing assignment and other deadlines that create tension and anxiety. Also Effert and Ferrari (1989) demonstrate that procrastinators may also be emotional, overwhelmed and anxious, having less need for cognitive complexity and are more likely to attribute success to external and unstable factors (Solomon and Rothblum, 1984).

4.2 Effect on students' academic performance

Procrastination may also have debilitating effect on students' academic performance. This is supported by Tice and Baummeister (1997) who find out that procrastinator received significantly lower paper and examination grade than none procrastinators. Other research studies like Tuckman, Abry and Smith 2002; Beck, Koons and Morgan, 2000 and Wesley, 1994 confirmed this.

5. Counselling Students with Procrastinating Attitude

Since procrastination is not simply a habit, but complex pattern of recurring behaviours which includes emotions, thought, and actions and has comes habitual to the procrastinator, getting rid of it will involve replacing, circumventing or deactivating each one of the habits by new habits . Getting rid of such a behaviour may not be that easy because a simple decision could easily be overwhelmed by the force of habit and such a decision need to be implemented as a habit itself before it can compete effectively with the old habit. Thus, for a student to be able to confronts and control his procrastinating behaviour there will be need for counsellors to help students in the following ways:

5.1 Critically examine themselves

The first stage is for counsellors to help students to look at themselves critically and determine the distractive and incompetent attributes that negates their positive behaviours towards their academic activities.

5.2 Instilling competence in students

Procrastination as a form of incompetence has to be eliminated in order to cure it. Since incompetence is the opposite or lack of competence, the only way to eliminate it is to be replaced with competence (Wikibooks,

2006). Personal competence is comprised of five elements: emotional strength, well-directed thoughts, time management skills, control over habits and task completion abilities (Wikibooks, 2006).

5.3 Inculcating ability to be well organized

Some of the practical steps that will make students to be well organized are for the students to be well organized by starting out small to accomplish the larger goal must be emphasized to them. In other words, a student may need to prepare a scale of daily preferences dividing major projects which seems overwhelming into little pieces. What is not done in one day can be added to the next day's list.

5.4 Teaching students to start from simple to complex

Also, a procrastinator may have to be taught to start with the easiest task and proceed from there to a more rigorous and demanding tasks. They must be made to see that success in the easier task is likely to motivate and ginger him to more difficult task and hence building up confidence in his ability to tackle academic matters. One of the major reasons why people avoid the very tasks that free them from mediocrity is their lack of self-confidence (Plessis, 2006).

5.5 Instilling effective use of time in students

When students manage time judiciously, taken time as precious commodity, periodically observing and modifying the use of it, procrastination may be reduced to the minimum. Such a student is likely to make sure that he/she is in the right class and have the proper prerequisites, and will be willing to review previous mathematics topics already forgotten which may be critical to the understanding of the new learning. In addition, student with low level of procrastination may also be taught to get involved in studying with classmate, teaching each other the principle involved and discussing difficult mathematics concept, and reading the textbooks for additional information and examples.

6. Conclusion

In conclusion, mathematics procrastination is very real and occurs among thousands of people. Much of this happens to students due to their hatred for mathematics. Today, the needs of society require a greater need for mathematics. Mathematics must be looked upon in a positive light to reduce academic procrastination in mathematics. Therefore, the role of counsellors in inculcating confidence, competence, effective use of time, good organization and the likes cannot be over-emphasized. Teachers must re-examine traditional teaching method which often do not match students' learning styles and skills needed in society. Lessons must be presented in a variety of ways. As a result once young children see mathematics as fun, they will enjoy it, and, the joy of mathematics could remain with them throughout the rest of their lives. In this way, developing a sustainable educational system will be ensured.

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An Analysis on Social and Cultural Background of the Resistance for China's Education Reform and Academic Pressure

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Abstract

Since the "Quality education" was proposed in China in 1997, the Chinese education reform has had some success; however, the resistance of it is also quite obvious. The academic pressure of the students in China is not reduced but increased instead. The paper analyses the resistance of China's education reform and the source of Chinese students' academic pressure from three aspects: China's tradition of academic examinations, one child policy and China's leaping economy.

Keywords: Quality education, Academic pressure, Resistance of education reform

1. Introduction

It has been 13 years since "Quality Education" as opposed to "Examination-oriented Education" in China was proposed in 1997. Many Chinese scholars have realised the harm of the "Examination-oriented Education" and the importance of the "Quality Education". For example, some researchers found that on the one hand, Chinese students won many awards in international Olympic competitions of Math, Physics, Chemistry and other Sciences, however, on the other hand, Chinese students are comparatively lack of innovative ability and there has not been a single Nobel Prize winner in China so far. The current situation of the Chinese education has obtained much attention of China's decision makers. Two representative documents for China's education reform were introduced, respectively, on the 24th December 1998 by Chinese Ministry of Education named "21st Century Action Plan for Invigorating Education" and on the 13th June 1999 by China's Central Committee and State Council named "Decisions on Deepening Education Reform and Promoting Quality Education". The two documents was followed by some methods of innovative education reform and quality education reform which had some success but meanwhile the resistance is also quite obvious. For the reasons of the resistance, China's cultural background and pressure from the Chinese families are inignorable. For example, in order to push the quality education reform, reduce the harm of examination-oriented education, the Chinese government required primary and secondary schools to increase students' leisure time, cancel extra classes outside school and remove score ranking. Also, students should choose their secondary schools based on residential regions instead of being chosen by score ranking. However, the traditional thinking of hierarchy in the Chinese culture has a large impact on education. Every region has their own public recognised key schools and non-key schools, although this distinction may not be accepted by the government. The standard of the distinction between key schools and non-key schools is the transition rate. Thus in order to get good students, schools give extra classes outside school time secretly for a higher transition rate and admit students based on applicants' special skills, levels and numbers of outside school awards (especially their Olympic Maths scores which becomes the key evidence of students' ability) given the fact that the governments have removed the entrance exams. From parents' aspect, in order to get their children admission to key schools, they would spend a fortune to buy houses near the key schools, and the price of the houses near those key schools increase as a result. Under these circumstances, after-school classes focusing on Olympic Maths and other special skills emerged. For the success of their children, parents send their children from the in-school classes directly to various after-school classes, ignoring children's individual ability. For such reasons, the burden on children is not decreases, but increased more and more. It is not surprising to say that nowadays in China, the most tired people are children. Their childhood which is supposed to be pressure-free has been deprived by various after-school classes and classes for special skills.

2. Reasons for the Resistance of China's Education Reform

The education reform in China is difficult for some deep-rooted reasons:

1.1 China's tradition of academic examinations is an important source of academic pressure.

In 1978, China resumed the university entrance examination. The "entrance examination" has then become a top priority for many families in China. The only goal for Chinese children who study very hard for more than ten years is to gain a good university entrance examination score. One of the most important social indicators of the success of families is what type of university their children go to. The measure for the quality of a school is also about the percentage of students going to universities (transition rates). Furthermore, the local transition rate has also become an indicator of the political performance of the local government; as a result, some places weigh the transition rate as important as the GDP.

The university entrance exam, like a baton or a magic spell, relates all types of study closely to it. Before the exam, there are extra classes and prolonged school time, teachers make a guess of the contents of the exam paper and give students a lot more homework. In addition, review classes before the exam are based on the past papers and a strategy called "sea of exercises" are commonly adopted to make students do as many exercises as possible which is accompanied with excessive mechanical memory training. The countdown board stating the days left before the university entrance exam will be hang in the classroom and the students could only have a few hours' sleep a day. Many schools, teachers, parents and students admit that the study before the entrance exam to university is a purgatory-style study that is against human nature and is a physical and mental destruction for the human being. Every July, the hot topic of the community is about the university entrance exam and the focus is the students who are to take it. One more point of the score may decide a person's whole life making students and families unbreathable. Therefore, for the existence of the university entrance exam, the July in China are known as "Black July". Before 1998, the transition rate from high school to university was very low, thus the university entrance exam can be described as "thousands of people trying to run simultaneously through a single bridge which can only accommodate one person at a time" and anyone who could make it will have a secured life. After 1998, the universities in China expended the admission numbers, and the fight to universities became the fight to good universities.

Many Chinese people believe that the reason for the resistance of the education reform in China has its stem in China's traditional culture background of exams. The examination system was introduced in the Sui Dynasty in China over 1400 years ago. At that time, an "Imperial Exam System" was established and it was not until Guangxu thirty-one years of the Qing Dynasty (1905) that the "Imperial Exam System", which had last for over 1300 years, was formally abolished. The "Imperial Exam System" selected government officers among civilians from various levels through a special exam called "Ba Gu Wen" exam, the first one as a "champion" would be elected to the Royal Palace. "From a poor guy in the morning to someone going to the royal palace in the evening" was the dream of ancient scholars and the description of "play no attention to outside matters, only focus on saints book" vividly depicted the life of them. A lot of people take the exam from they were very young until very old, because this was the only way to get a better life. The content of the exam is mainly about classic Confucianism. There is an old story about an old man who finally passed the exam when he was 54 years old but went mad immediately when he heard the good news because of being too excited. This story gives a perfect example on how the exam impacted on people at that time. The "Imperial Exam System" which lasted for over 1300 years also had its positive side and had made great contribution to the fairness in competition, political stability, Chinese civilisation and the spread of Confucian culture. However, the content of the examination focused on text learning rather than practicing, mechanical memorising rather than innovation, and had over emphasised on exam scores and competition because of a narrow path to success, it had plant exams and competition deeply into our national culture and thus affect the contemporary education reform.

1.2 Pressure for Success on Children caused by "One Child Policy"

Traditional Chinese culture attaches great value to families. Grandparents have the responsibility and obligation to raise their grandchildren, children have the responsibility and obligation to support their parents, otherwise, they will be ostracised by the community and ridiculed by other people. For a long time, "continue the family line" has been the primary task of a family member. The "One Child Policy", began in 1979, led to the emergence of tens of millions of "one child" in the late 70s and early 80s of the last century. This is a special population which arised due to the extreme measures taken under the pressure of a high increasing rate of population. The one-child population, as a consequence of the reproductive behaviour of the previous generations, appeared in China with the imprint of the one-child policy. The "One Child Policy" is the last resort for China's population problem and it has made the one-child issues in China different from other western

countries at the very beginning. For a country like China which has been affected deeply by traditional culture, when the weight of the family and meaning of offspring are integrated into one child, the problems of the education of the one-child are inevitable. The one-child education in China has the same meaning with the one-child education in western world in terms of psychological characteristics and personality development, and it also has its own special meanings related to Chinese social culture and values in terms of “Succeeding problem”, “Destructive Enthusiasm” and “excessive indulgence” issues.

The “One Child Policy” has been adopted in China for over 30 years, according to the statistical record, it has lowered the population by 350 million and made a great contribution to the population and social burden control and has improved the quality of births. However, its drawbacks are also apparent, such as population aging problem and a serious imbalanced sex ratio. Another drawback of the “One Child Policy” is its impact on the psychological characteristics and personality development of those one-child children. A test using a Cartel 16PF test methods was conducted on 1060 undergraduates who started their university in 1994 and 1995 in Xi’an Electronic Science and Technology University and Xi’an Jiaotong University. The study found that the one-child students are less sophisticated, less sensitive and less experimental than the non-one-child student. They are more likely to rely on others, more likely to be excited and have more courage to do things than the non-one-child students. Another test which also used the Cartel 16PF test methods was adopted in an investigation on all of the 106 undergraduates from the computer science department who started their university in 1996 in Harbin Engineering University. The results showed that stability, social responsibility, sophistication and independence of the one-child students as compared with non-one-child students are poorer. The anxiety, reliance and boldness of the one-child students tend to show polarization. A sample survey on the education of the one-child families found that those one-child families’ has five problems regarding the education of their children: too much expectation, excessive indulgence, excessive interference, low quality of parental education and education from the elderly. In most of the Chinese families, children are raised up by grandparents while parents are working, and the grandparents’ love is more of a spoiled love without condition. The “One Child Policy” made the only child become the focus of a family and the one-child children became the “little Emperor, Little Princess” of the family. Because of the traditional concept of “continuing the family line” and “hard to raise a single child” that occupied the mind of parents and grandparents, the one-child children who were supposed to be educated became the dominator of the family and enjoyed all the family rights. From another point of view, the one-child children are the spiritual sustenance and the only hope of many families, although they receive more material comforts, they are not happier than their parents because of the academic pressure from the desire for success.

In October 1998, the China Youth Research Centre did a national wide survey in 12 cities on 3284 primary and secondary students who are the one-child and their parents, using tools like learning needs table, self-acceptance scale, character and interests needs tables. They further did an in-depth analysis of the personality status of the one-child. As indicated by a research group focusing on “China’s one-child children’s personality development” in their report, a multiple-response survey question showed that 77 percent of the interviewed one-child children claimed that they learn because they need to repay their parents, although whether the need to repay parents is a good characteristic that deserves development is still controversial. 66 percent of the one-child children indicated that they need to study for development. However, cognitive needs, which are supposed to be the most important internal driving force for study, received the lowest percentage, only 33%. Meanwhile, correlation analysis also found that academic pressure caused the one-child’s personality flaws: as shown by the children’s self-acceptance scale, only 15.6 percent of the students interviewed had strong satisfaction towards their study due to the excessive academic pressure.

1.3 A Leaping Economy Shifts Families’ Emphasis towards Children’s Education

China has been experiencing a great leaping-forward economic development after China’s economic reform and opening up of the economy. The children nowadays can no longer imagine the poverty in the previous generation when their parents still had to strive for proper meals and warm clothes, and lost many opportunities such as going to universities. Many parents placed their unrealised dreams as a young man on their children and brought too much pressure on their children. “Hoping their children to be the best” is a general thinking of Chinese parents. Parents take it for granted that children are now living without worries, there is no reason not to study hard and children should bring good scores back to prove their successes and to reward their parents. The ignorance of children’s emotion, mechanical learning, and excessive study has brought too much pressure on children.

Since the 1990s, family education expenditure increases at an average rate of 29.3 percent every year which is faster than the increase of family income, higher than the increases of other consumption expenditure and also

higher than the growth of China's GDP. The proportion of expenditure on education out of total family expenditure, either in absolute levels or rate of increase, is much higher than some developed countries. For example, in 2005, the average annual per capita expenditure of urban families on educational, cultural and recreational services reached 1098 Chinese Yuan (RMB), increased 6.3 percent compared to the previous year, taking up 13.8 percent of urban families' total annual expenditure. Compared to 4.68 percent in 1995 it shows that family investment in education has become prevalent, indicating that family's focus on investment in education has shifted to out-of-class training. According to a sample survey conducted by "Native and Foreign Students" magazine of Guangzhou in 2004, over 50 percent of secondary school students in Guangzhou attended extra-curricular training. This proportion reached to 80 percent for elementary school students. In 2006, a survey conducted in Tangshan City on elementary and secondary students showed that 70 percent of secondary school students attended extra-curricular training, only 10 percent of elementary school students did not participate in extra-curricular training. The extra-curricular training is mainly focused on Olympic Maths, English, Chinese, and some other subjects of interests. As a result, the day time education has been largely extended leaving great pressure on students. As indicated in "China Report 2009" conducted by Peking University: Students in Beijing have the longest study hours per day, 14.4 hours; students in Shanghai have the second longest study hours per day, 13.2 hours; the next one is students in Guangdong, 11.9 hours per day. For the success of children in the future, parents put a lot of money and effort on children's education without any hesitation. Many people believe that quality education means not only do children need to be good with their academic work, but also children should learn how to sing, how to dance, how to play musical instruments and chests, and how to write and draw. As a result, parents send their children to various classes for special skills besides the normal school education, without considering children's own ability and willingness. For a city child, they normally go to some special classes for skills from age 4. A 5-year-old child normally goes to 5 different skill classes in a week: dance class, piano class, story-telling class, presentation class, Calligraphy class and so on. It is said that the most profitable market in China now is the "child education market". To meet the parents' need of having a successful child, various child education classes emerged, however, some of them are with very poor quality, only there for profits. The excessive mechanical training and learning take up most of children's leisure time which was supposed to be thinking and gaming time, and this spoon-feeding education to some extent hindered the development of creativity and spirituality.

A large part of the resistance of the education reform in China is from families. For example, some schools responded to the government's call for an education reform with some quality education reform pilot projects which aim to increase the content of education with innovation, aim to cancel classes that are only for examination, and enable students with more flexible study time. However, voices of opposition came from parents who were worried that those actions would affect children's test scores and entrance exam scores to university. So parents required schools to give extra classes and do not take their children as a trial of the education reform. Otherwise, it would have bad impact on children's university entrance exam and their future. Many education reforms are thus failed because of the opposition from parents.

The Chinese government has noticed the seriousness of the issue. Recently, Chinese Minister of Education, Rengui Xue, proposed that China must transform from a large education country to a powerful education country with a focus on replacing exam-oriented education with quality education, eliminate the negative impacts of exam-oriented education and develop innovative talents. To do this, some actions have been taken, such as allowing some "key" universities choose their own students rather than from a unified national university entrance examination; enriching the content of primary and secondary school education ect. Shandong is the most radical province in this round of the quality education reform. The Local government decided to introduce a complete education reform to the secondary school entrance examination in 2010, replacing the original entrance examination with the educational grading system; university entrance test scores will become personal privacy and is no longer open to the public; and begin to implement "No Score" evaluation to the routine examination. Whether those new policies will have positive effects remains to be seen, however, if the new policies can be implemented successfully, it will be a precedent for China's education and will greatly reduce the pressure of school students and free children from the academic pressure. As described by Zhiyong Zhang, deputy director of Department of Education in Shandong Province, the ultimate goal of the new policy for the quality education reform can be summarised with "Three Returns": return the leisure time and holidays to children, return health to children, return innovative ability to children. No wonder, such changes must go through a complex process and will encounter various difficulties because of the large population in China and complexity of China's current situation. However, the government has determined and as stated by Rengui Xue: China's education reform has become extremely urgent and there is no way back."

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