Evaluating Executive Strategies (Management Strategies and Teaching-Learning Strategies) of Graduate Curriculum: Case Study in Isfahan University

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Abstract

The present study seeks to evaluate executive strategies in graduate Curriculum of Isfahan University from the point of view of management and teaching-learning strategies. This study is an applied survey. The population comprised BA students and faculty members of the University of Isfahan. In order to do so, 141 professors and 278 students were selected from among all professors and students of graduate programs in Isfahan University through stratified random sampling and proportional to the statistical population. The tool used for collecting data for this study was a researcher made questionnaire with 25 questions scored via Likert scale. Validity of the questionnaire was ensured through content and face validity. Reliability of the test was calculated using Cronbach's alpha coefficient to be 0.94. The data collected from the questionnaires were analyzed via SPSS statistical analysis computer application in descriptive and inferential statistics level. In the descriptive statistics section, frequency, mean, standard deviation, and in the inferential statistics section, F test and single variable t test were used. Findings on teaching-learning strategies revealed that these strategies have been decently meeting the needs and expectations of students. However, they failed to meet the expectations of the students. Findings o management strategies, on the other hand, demonstrated that these strategies have not been able to meet the needs and expectations of neither professors nor students.

Keywords: curriculum, teaching-learning strategies, management strategies, Isfahan University

1. Introduction

Responsibility toward public inquiry through transparency in the results of the evaluations in higher education is dramatically increasing (Shavelson & Huang, 2003; Schneider, 2002; Allen & Bresciani, 2003; cited in Rachelle, 2005). One of the major factors affecting quality of higher education is the curriculum. Curriculums have always been one of the most important elements in an educational system (Rahmanpoor & Nasr, 2013: 125) and managing it is of utmost importance for higher education schools (Uzun & Ozden, 2011). Although the quality of higher education could be premium in some cases, it could not be executed with one hundred percent satisfaction for executing a perfect curriculum is generally more difficult than compiling it (Lewy, translated by Mashayekh, 2010: 88). Executing a curriculum refers to the processes and modifications in the interactions among people who create a curriculum and the other who transfer them. Execution necessitates works by several groups for changing knowledge, attitude and function of the people (Lunenberg & Ornstein translated by Sharif, 2011: 74). According to Mehr-Mohammad (2010: 317), executing a curriculum consists of the process of a practical change. This change mandates conditions, indices, factors and strategies of various types in order to be executed properly. Therefore, it could be said that executing a curriculum is a crucial stage of curriculum designing with at least two major strategies: teaching learning strategy and execution strategy. According to Campbell and Dickinson (2004: 167), teaching-learning strategies play a key role in realizing the purposes of a curriculum. These strategies are

parts of execution strategies and are conducted in university levels and practical fields; yet, they could not be separated from curriculums. Selecting teaching and learning methods is among stages of curriculum designing and responsibilities of curriculum designers who have to consider its principles and rules. It is disappointing to know that, in spite of the goals of education to train thinking and active participation, lectures are the most common forms of teaching in universities (Fathi et al., 2014: 53). Not many faculty members pay attention to various principles and methods of teaching and, in some cases, even the need for such considerations, and this lowers the quality of teaching and learning. As Edgarton (1988) and Light (1990) stated, although university instructors are knowledgeable about what they teach, they know little about teaching- learning strategies (Sharifian & Nasr, 2005). On the other hand, students have little or no familiarity with cognitive and meta-cognitive strategies and their functions and this ends in superficial and meaningless memorization (Rahmanpoor et al., 2013). Unfortunately, educational approach in classrooms focuses on transferring mere knowledge and considers students as a resource whose single task is to take the knowledge in classroom and recall it in the examination (Cuvence, 2007: 3). The reason for limitations to the success of higher education in learning may be lack of understanding from academic learning and insufficient tries to execute amendments to the educational system (cited in Howell, 2004). However, considering the fact that higher education is facing huge technological, scientific and economic advancements, innovative methods and teaching strategies are of vital importance (Giao & Engels, 2014: 1). Since teaching is closely related to the changes in knowledge, attitudes, trends and behavioral methods of students (Shabani, 2006: 104), active and interactive educational learner-oriented methods intensify the hopes for changes for they put the responsibility on learners (Magno & Sembrano, 2009: 74). In this regard, Chiari (2011) proposes simulation, discussion methods along with brainstorming and problem solving as teaching methods. Mattes (2008) suggests group discussions, brainstorming, interactive lecture, team work, planned games and project oriented educational methods as the most active teaching methods (Obzori, 2013). Fenstermacher and Soltis (2004) recommended executive, facilitative and liberal strategies. Executive approaches of the instructors are responsible for complicated processes in the classroom and try to utilize the best methods and skills to create desired outcomes. In facilitative approach, whatever brought to the classroom by students is considered to be important and the emphasis is on previous experiences of students. In this approach, the instructor helps the students grow individually and reach a high level of self-actualization. In liberal approach, the instructor lets the students be free and helps them become knowledgeable, well informed and experienced (translated by Nasr et al. 2011: 28).

Applying active strategies in teaching results in students' active learning. They have to be equipped with skills and abilities with which they could meet their needs for knowledge and information. Students will become explorers and dynamic inventors in the field of discovering and producing knowledge. Students will probably learn to go deeper in a subject individually and independently (Hussaini, 2009: 69). According to Bladwin and William (1988), active learning is the learning occurring with the least possible external interference. In other words, the instructor or the textbook or any other tool could only act as facilitators of learning. Active learning is an effective learning involving the learner actively and is in his own control (Fathi-Vajargah, 2010: 228). Active strategies are also defined in this framework. If anything predicted in the curriculum is a facilitator of learning, and the main purpose of the curriculum is to create deep, stable and insightful learning, active learning becomes a learning tending toward learner, giving him freedom and helping him with sustainable and easy learning. A strategy is an active one when all of its elements are actively participating in an active learning and an effective interaction (Fathi-Vajargah, 2011: 150). Since different students have different learning styles, their teaching methods should be of variety as well (Rahmanpoor et al., 2009: 48).

Executive and management strategies are the other important indices of executing a curriculum. Structures and procedures of executing curriculums are of a huge variety in different countries around the world (Reid & Scott, 2006: 182). Management strategies are lead through developing policies and educational and research strategies along with providing experienced teachers, equipment and facilities in order to improve academic performance of the higher education system (Hussaini, 2009: 66). Instructors as the most precious resources in universities play an important role in designing, evaluating, revising and executing curriculums and ought not to be neglected in any way (Bandyopadhyay & Lichtman, 2007: 804). Educational processes and policies are also important in this regard. These policies and processes include face-to-face education, correspondence teaching, compound teaching and virtual learning (Martin, 2012: 962). Any country depending on its infrastructures takes different strategies and policies. In some countries, students have easy and fast access to the internet and other communication and information technologies and this makes them tend toward virtual and electronic learning (Primose & Alexander, 2014: 6).

One of the most influential people in procedures and policies in executive system of universities is the manager

who, according to Vafaei (2005: 4-5), must possess certain qualities. The first skill a manager should have is interaction skill. He should be able to manage people during the execution of the plan. Second, he should have assignment skills to allocate people, funds and facilities needed for the plan properly. Third, he should have supervising skills i.e. his ability to find potential barriers and finally he should have organizing skills. He must be able to organize people in an organization to tackle the problem in case of a probable barrier. Instructors as the most precious resources in universities play an important role in designing, evaluating, revising and executing curriculums and ought not to be neglected in any way (Bandyopadhyay & Lichtman, 2007: 804). Instructors are in the bottom of all educational plans and curriculums and are vital to curriculums. Different educational systems are affected by their instructors in various ways (Obzori, 2013: 99). According to Fathi-Vajargah (2011: 185), the role of instructors in curriculum designing approaches could be divided into three categories. Anti-instructor curriculum approach, limited compatibility approach and open compatibility approach. In the first one, curriculum is prepared by curriculum designers and is given to instructors and executives to be executed. In this approach, the instructor is expected to execute the curriculum perfectly and without even minor modifications. In the limited compatibility approach, the instructor is more active and could make slight changes in it based on the inevitable realities in the context. In the third approach, contextual realities and execution of the curriculum determine it and the instructor could not only execute the curriculum but also be a designer.

Contribution from all benefactors during planning or designing and revising curriculums and allocating enough time for compiling desirable and long lasting curriculums is of crucial importance. Besides, in this process, factors hindering and facilitating should be kept in mind. Three of these factors include external factors, organizational factors and internal factors (Wolf & Hughes, 2008: 23). External factors cover all environmental, social and the alumni factors. Organizational factors include financial stability together with attitude toward teamwork and organizational infrastructures. Finally, internal factors consist of the attitude of individuals involved in the process of revising in any way. These individuals are the ones conducting the changes or the ones targeted by them (Hyun, 2010: 93). Considering these factors in countries with decentralized systems, students are insider the circle of planners and revising curriculums as well. This involvement is seen in countries like Germany and Singapore. Fathi-Vajargah (2010: 260) suggested three models in this regard: 1- the expert-oriented model with the power in control of experts; 2- the technician-oriented model with the main role played by technicians; 3- the coordinated contribution model in which there is a balance in decision making among different groups. It seems as if the first model is for the concentrated countries' curriculum designing and revising and the third one refers to the countries with decentralized systems.

The academic curriculum, especially at the graduate level, however carefully designed, if not well-executed, all efforts will be wasted and will not meet the needs and expectations. Executive teaching-learning strategies and policies at the level of colleges and departments are decisive factors in the quality of curriculum implementation. Implementation of curriculum is a bridge between design and scoping stage and the formation of results in student learning. That is why curriculum specialists have attached special importance to the implementation of the curriculum. What happens in the implementation of the curriculum must lead to the provision of the needs and expectations of students and teachers.

The thing generally happening in executing a curriculum should lead to meeting the expectations of the professors and students. Research findings in this area have had several achievements. "Evaluating the project for promoting the quality of education and curriculum with an emphasis on active methods in basic sciences" was a study conducted by Basiri et al. (2001) in Shahid Beheshti University of Medical Sciences. They found that evaluators and instructors considered the project to be successfully executed; however, students were not satisfied with executing active methods. Shadfar et al. (2007) in their study titled "investigating the compatibility of curriculum in the field of educational planning and management with the needs of students", demonstrated that the level of students' satisfaction of their scientific, individual, social and professional needs was below average. Therefore, students believed that this plan was not compatible with their needs. Bagheri (2005) investigated the curriculum of library and information sciences major in Iranian universities ansd concluded that there is an emergency need for revising the present teaching methods. Khosravi, Jafari, and Jafari (2009) conducted a study titled "investigating the present and desired conditions of curriculum in undergraduate major of educational technology from the point of view of the professors" and found that cooperative methods, educational tools and modern strategies are used in a below average satisfactory level.

Kirkgos (2009) conducted a study titled "challenges before planning and keeping innovations in higher education curriculums" and demonstrated that executive procedures in progress now are insufficient for meeting the needs of students and hugely need revisions. Harro-Loit and Ugur (2009) investigated media education as a part of higher education curriculum and concluded that technology based curriculums in higher education must be

represented in a way that nurtures technical and technological capabilities of students. They believed that active and composite methods should be utilized to execute technology-oriented curriculums. Braak and Hermans (2009) did a research and concluded that considering the fact that centralized decision making does not help meet the needs of students, decentralization approaches should be taken and experts and scholars should be involved in these procedures. They justified their conclusion and stated that instructors and teachers govern curriculum designing; thus, they should participate in designing them as well. Considering all these studies, and comments made by experts concerning the importance of strategies of executing curriculums, the present study aims to evaluate execution strategies of the higher education curriculums in Isfahan University. University of Isfahan is one of the pioneering universities in reviewing MA curricula and this university reviews its curriculum every few years. Therefore it is necessary to investigate whether curriculum revises has resulted in any achievements and whether the implementation of the current curriculum leads to the satisfaction of the students and professors.

2. Methodology

This study is an applied one conducted using background studies and surveys. It is a survey because it studies and analyzes the current conditions in relation to the educational need and realities and is based on the views and opinion of individuals. In other words, it seeks to find information regarding the experience and views of participants and to generalize the finding to the population. This research investigated the views of students based on demographical characteristics. The statistical population of the study included all professors and students of higher education in Isfahan University. The criteria for selecting professors were their full time employment as a faculty member and holding PhD degree. The criteria for the students to be selected were passing at least three semesters of the degree they were studying. According to the statistics published by the university, students and professors meeting the criteria were 1922 and 372 respectively. From among all population, 141 faculty members and 278 students were selected through stratified random sampling proportional to the whole population. Students included 59 PhD candidates and 219 graduate students. The tool used for collecting the data was a researcher made questionnaire with 25 questions using Likert scale. In order to ensure validity of the questionnaire, face and content validities were utilized. Reliability of the questionnaire was evaluated using internal compatibility coefficient for its questions and the Cronbach alpha coefficient was calculated to be 0.94. Later on, the questionnaires were distributed directly among departments and faculties and the subjects under study and were collected in ten days. The data collected through questionnaire were analyzed via SPSS computer application and descriptive and inferential statistics.

3. Findings

In this section, research questions are first stated and the results from data analysis are represented. The results from descriptive statistical analysis are presented first and later inferential analysis results are discussed.

First research question: Are the professors satisfied with MA curriculum implementation methods?

Question 1: Are the students satisfied with higher education curriculum?

Table 1. Means and standard deviations of the level of satisfaction from meeting the needs and expectations of instructors for executive strategies of higher education curriculum based on gender

Elemente ef Comientem		Male	Female		
Elements of Curriculum	Mean	Standard Deviation	Mean	Standard Deviation	
Teaching Learning Strategies	3.10	0.69	3.05	0.62	
Management Strategies	2.76	0.78	2.68	0.75	

Comparing means reveals that the mean of male professors' ideas regarding teaching learning strategies and management strategies are higher than those of female professors (Table 1).

Table 2. Results from F test for comparing means of meeting needs and expectations of instructors through executive strategy of higher education curriculum based on gender

Elements of curriculum	Sum of squares	dF	Mean of squares	F	Level of significance
Teaching learning strategy	2.41	1	2.41	0.05	0.82
Management strategy	9.52	1	9.52	0.16	0.69

The observed F in the level of significance of p > 0.05 fails to show a significant difference between ideas from male and female instructors in case of meeting their needs and expectations through executive strategies of curriculums (Table 2).

Table 3. Means and standard deviations of the level of meeting needs and expectations through executive strategies of higher education curriculums based on years of experience

		1-10 years		11-20 years		21-30 years
elements of curriculum mean		standard deviation	mean	standard deviation	mean	standard deviation
teaching learning strategies	2.93	0.65	3.11	0.69	3.24	0.66
management strategies	2.86	0.83	2.77	0.71	2.47	1.01

A closer look at the means reveals that means of the opinions from instructors with 1 to 10 years of experience on meeting needs and expectations by management strategies of curriculum is more than other groups; yet, in case of the index of teaching learning strategies, the mean of opinions from instructors with 20 to 30 years of experience was higher (Table 3).

Table 4. Results from F test for comparing the means of the level of meeting needs and expectations of instructors by executive strategies of higher education curriculum based on years of experience

elements of curriculum	sum of squares	dF	mean of squares	F	level of significance	Eta coefficient
teaching learning strategies	1.11	2	0.56	1.19	0.31	0.02
management strategies	1.72	2	0.86	1.42	0.24	0.02

The observed F in the level of significance of p>0.05 fails to show a significant difference between means from opinions of instructors based on years of experience for meeting needs and expectations by teaching learning strategies and management strategies of the curriculum (Table 4).

Second research question: Are the students satisfied with MA curriculum implementation methods?

Table 5. Means and standard deviations of the level of satisfaction from meeting the needs and expectations of instructors for executive strategies of higher education curriculum based on level of education

alaments of auriculum		PhD	Masters		
elements of curriculum	mean	standard deviation	mean	standard deviation	
teaching learning strategies	2.81	0.6	2.73	0.88	
management strategies	2.64	0.48	2.39	0.68	

These data show that the means of opinions from PhD students are higher than the means of opinions from masters' students (Table 5).

Table 6. Results from F test for comparing the means of the level of meeting needs and expectations of instructors by executive strategies of higher education curriculum based on level of education

elements of curriculum	sum of squares	dF	mean of squares	F	level of significance	Eta coefficient
teaching learning strategies	0.69	1	0.69	1.26	0.26	0.1
management strategies	4.7	1	4.7	6.85	0.009	0.02

The observed F fails to demonstrate a significant difference between means of opinions from PhD and Masters students on meeting their needs and expectations through teaching learning strategies of curriculums. However, the difference is significant in case of opinions on management strategies (p<0.05) (Table 6).

Table 7. Results from F test for comparing the means of the level of meeting needs and expectations of instructors by executive strategies of higher education curriculum based on field of study

elements of curriculum	sum of squares	dF	mean of squares	F	level of significance	Eta coefficient
teaching learning strategies	24.14	27	0.89	1.76	0.014	0.16
management strategies	75.83	27	2.79	5.88	0.001	0.39

The observed F demonstrates a significant difference between means of opinions based on field of study of master and PhD students on meeting their needs and expectations through elements of curriculums (Table 7).

Question 3: Is there any difference between opinions from responders on meeting the needs and expectations of instructors and students about executive strategies of the curriculum?

Table 8. Frequency and percentage of responses of the sample participants regarding the provisions and needs and speciation

		F	requen	су			_
Items	Group	Very high	High	To some extent	Low	Very low	Mean
providing lesson plans and student assignments during the semester	professors	5	83	50	3	-	3/64
providing resson plans and student assignments during the semester	Students	2	81	157	30	8	3/14
The coordination and the necessary balance between teaching-learning activities	professors	2	54	71	14	-	3/31
with curriculum	Students	3	55	151	61	8	2/94
The use of varied teaching strategies such as lectures, problem solving, group	professors	3	43	65	30	-	3/13
discussions tailored to the type of lesson	Students	5	60	122	75	16	2/87
challenging atmosphere and active participation of students in the	professors	-	43	72	23	3	3/1
teaching-learning process	Students	3	44	127	88	16	2/75
Opportunities to develop intellectual skills such as: discussion, critical thinking,	professors	2	35	78	25	1	3/08
creativity and innovation among students.	Students	1	41	133	78	25	2/69
.360pportunities to develop academic skills such as: ideation, simulation and	professors	-	24	69	47	1	2/82
presentation of new ideas among students.	Students	-	21	102	111	44	2/38
rich learning experiences (learning how to use and adapt it to the realities of life	professors	-	22	78	39	2	2/85
issues(Students	-	31	123	90	34	2/54
The capacity of the students to their learning in a course with learning other subjects that link.	professors	-	24	77	37	3	2/87
	Students	1	27	142	87	21	2/64
opportunities for students to develop communication skills and team work	professors	-	20	66	49	6	2/71
	Students	3	21	113	108	33	2/47
.Assignments are determined in proportion to quantity and quality (training or research)	professors	2	36	85	18	-	3/16
	Students	1	31	151	80	15	2/72
appropriate and timely feedback about the level and quality of student assignments, learning to handle the defects	professors	-	39	74	28	-	3/08
	Students	-	14	141	95	28	2/51
mobility, enthusiasm and stimulate a sense of need to learn, to solve scientific problems and strengthen the spirit of research among students	professors	5	28	82	26	-	3/09

The data presented in the Table 8 demonstrate that most responses are high, relatively, and low, in such a way that the mean in the group of professors for questions 31, 32, 33, 34, 35, 40, 41 and 42 was higher than the average 3, but in the students group all questions except question 31 were below the average 3. In other words, the highest mean in the professors group belonged to questions 31, 32, 33 and 34 and in the students group to question 31. The lowest mean in the professors group belonged to questions 36, 37, 38 and 39 and in the students group to questions 37, 37, 41, 42.

Table 9. Frequency and percentage of responses of the percipients of the sample group with respect to the provision of their needs and expectations by curriculum management strategies

			Frequen	су			_
Items	Group	Very high	High	Relatively	Low	Very low	Mean
acquainting the students with the approach of the sources of information,	professors	2	56	73	10	-	3/35
tools and resources needed for research	Students	1	75	145	54	3	3/06
optimal allocation of resources (human, financial and physical) and	professors	-	21	76	41	3	2/82
establish the relationships between them in order to achieve the goals of higher education	Students	-	29	142	86	21	2/64
	professors	-	3	82	52	4	2/56
trying to understand and meet professors needs and professional issues	Students	-	2	155	100	18	2/49
	professors	-	2	83	52	4	2/59
trying to understand and meet students needs and professional issues	Students	-	5	92	148	33	2/25
paying attention to the preparation and improvement of faculty, staff and	professors	-	6	72	59	4	2/57
administrators at	Students	-	1	124	117	36	2/32
Coordination and guidance of faculty members, support staff in order to	professors	-	12	80	45	4	2/71
improve teaching-learning process.	Students	-	14	124	104	35	2/41
The dynamic organizational culture, participation and knowledge in the	professors	-	4	79	51	7	2/57
relationship between faculty members, administrators, and students to communicate, exchange and increase of knowledge	Students	-	12	116	114	36	2/37
	professors	-	31	62	46	2	2/87
adequate, relevant and up to date teaching and research facilities	Students	3	52	109	92	20	2/71
an efficient system of reward and punishment for teachers and students to instil confidence and strengthen the interest and will to do a better job	professors	-	-	70	66	5	2/46
v	Students	-	6	96	150	26	2/29
providing expert faculty with high academic ability	professors	-	44	78	17	2	3/16
	Students	-	47	126	75	30	2/68
The establishment of an appropriate mechanism to connect students and professors with research centres and universities inside and outside the country.	professors	-	8	70	53	10	2/54
	Students	-	15	92	109	62	2/22
supporting the professors and students in order to implement a variety of teaching methods	professors	-	1	82	52	6	2/55
	Students	-	2	107	112	57	2/19
Taking into consideration faculty expertise in advising theses	professors	1	49	62	26	3	3/14
	Students	1	43	121	79	34	2/63

The data presented in the table 9 demonstrate that most responses are high, relatively, and low, in such a way that the mean in the professors group in all questions except questions 43, 52 and 55 and in the students group in all questions except questions 43 was below average. In other words, the highest mean in the professors group belonged to questions 43 and 52 and in the students group to question 43. The lowest mean in the professors group belonged to questions 49,51,53,54 and 39 and in the students group to questions 46, 51, 53, and 54.

Table 10. Results from single variable t test, comparing the means of meeting needs and expectations of instructors and students through teaching learning strategies of higher education curriculum with average level of 3

Group	Mean	Standard deviation	t	Level of significance
Instructors	3.08	0.69	1.35	0.18
Students	2.51	0.74	10.95	0.001

Analyzing findings indicated that mean score of teaching learning strategies of curriculum for the instructors is

3.08 with standard deviation of 0.69. Comparing mean scores with hypothetical mean 3 demonstrated that the level of significance of the observed t is more than 0.05. Therefore, the difference in the instructors group is not significant with the hypothetical mean and teaching learning strategies have met the needs and expectations of the instructors in a good level. In case of students, mean scores are 2.51 with standard deviation of 0.74. In this case, comparing the means with the hypothetical mean of 3 revealed that the level of significance of t is less than 0.05; therefore, the difference in the group of students with a hypothetical mean is significant and those strategies have failed to meet the needs and expectations of students(Table 10).

Table 11. Results from single variable t test, comparing the means of meeting needs and expectations of instructors and students through management strategies of higher education curriculum with average level of 3

Group	Mean	Standard deviation	t	Level of significance
Instructors	2.76	0.78	3.65	0.001
Students	2.36	0.84	12.76	0.001

Analyzing findings demonstrated that mean score of management strategies of curriculum for the instructors is 2.76 with standard deviation of 0.78 and 2.36 with the standard deviation of 0.84 for the students. Comparing mean scores with hypothetical mean 3 demonstrated that the level of significance of the observed t is less than 0.05. Therefore, the difference in instructors and students group is not significant with the hypothetical mean and management strategies have not met the needs and expectations of the instructors in a good level (Table 11).

Table 12. Mean and standard deviations of meeting needs and expectations of responders by executive strategies of higher education curriculums separating instructors, PhD and Masters students

	instructors		PhD students		Masters students	
Elements of curriculum	mean	Standard	mean	Standard	mean	Standard
		deviation		deviation		deviation
Teaching learning strategies	3.09	0.74	2.81	0.6	2.73	0.88
Management strategies	2.99	0.7	2.64	0.48	2.39	0.68

A closer examination of means demonstrates that means of opinions from instructors about meeting needs and expectations from teaching learning and management strategies were higher than those of PhD and Masters students (Table 12).

Table 13. Results from F test for comparing the means of the level of meeting needs and expectations of instructors by executive strategies of higher education curriculum based on instructors and PhD and Masters students

elements of curriculum	sum of squares	dF	mean of squares	F	level of significance	Eta coefficient
teaching learning strategies	11.85	2	5.92	9.2	0.001	0.14
management strategies	30.91	2	15.46	14.81	0.001	0.14

The observed F in p > 0.05 level indicates a significant difference between means of opinions from instructors and PhD and Masters students on meeting their needs and expectations through teaching learning and management strategies of curriculums (p<0.05). Therefore, the difference between means of each mentioned group is determined through post-hoc tests (Table 13).

Elements of curriculum	Group	Mean difference	Level of significance	
Teaching learning strategies	Instructors to PhD students	0.29	0.022	
	Instructors to Masters students	0.37	0.001	
	Instructors to PhD students	0.35	0.001	
Management strategies	Instructors to Masters students	0.6	0.001	
	PhD to Masters students	0.25	0.01	

Table 14. Results from LSD post Hoc test for comparing levels of meeting needs and expectations of responders through executive strategies of higher education curriculum from instructors and students

According to these findings, in case of teaching learning strategies, means of opinions from instructors was 0.29% more than PhD students and significant 0.37% more than Masters students. Regarding management strategies, means of the difference in opinions from instructors was significant 0.35% and 0.6% more than PhD and Masters students respectively. Means of opinions from PhD students was a significant 0.25% more than masters students (Table 14).

4. Discussion and Conclusion

Analyzing the data from this study indicates that mean scores of teaching learning strategies concerning instructors is 3.08 with a standard deviation of 0.69. Comparing the mean scores of responses with hypothetical mean of 3 demonstrated that the t level of significance is over 0.05. Thus, the difference in the instructors group with a hypothetical mean is not significant and teaching learning strategies have met the needs and expectation of instructors properly. However, a more accurate study has to be conducted to find the reason for their satisfaction despite all the problems involved. Mean scores concerning students is 2.51 with a standard deviation of 0.74. In this case, comparing mean scores with hypothetical mean of 3 revealed that the t level of significance is less than 0.05. Therefore, the difference in the students group with a hypothetical mean score is significant and has failed to meet the needs and expectations of students. These results concord with findings of the studies conducted by Basiri et al. (2001) and Khosravi et al. (2007) who concluded that teaching learning strategies fail to meet the needs of students and findings of Bagheri (2005) and Kirkgos (2009) stating that teaching methods have to be revised it seems as if, in spite of all the emphasis made, some instructors still use classic methods and neglect modern interactive teaching styles. Nevertheless, the modern society of science and university necessitates students' involvement in their own learning and their own responsibility in learning. However, it does not fade the role instructors' play in the classroom and they are expected to use various teaching methods to engage students in the classroom and facilitate the process of discovery and analysis for students in higher educational levels are expected to analyze and gain dominance over different issues through active teaching styles. Accordingly, Harro-Loit and Ugur (2009) have also emphasized on compound and active teaching styles.

Analyzing the data on executive strategies indicated that mean score of management strategies of the curriculum concerning instructors was 2.76 with standard deviation of 0.78 and 2.36 with standard deviation of 0.84 for students. Comparing mean scores for responses for both instructors and students with hypothetical mean score of 3 revealed that the t level of significance was less than 0.05 and therefore, the difference in mean scores of instructors and students was significant. In other words, management strategies have failed to meet needs and expectations of students and instructors and management structure of universities along with their academic departments as the original support for executing curriculum have to take more responsibility in executing the curriculum and provide instructors and students with decent supportive services. These services may include training courses and workshops held for instructors and facilitating their presence in those courses.

Overall, in order to increase the quality of the execution of curriculum, more applied researches with qualitative attitudes have to be conducted to reach more accurate results and the awareness toward weaknesses ends in their removal and better execution of curriculums.

Practical suggestions

In order to meet the challenges and concerns raised by the research, the following suggestions could be made. These suggestions are separately represented for two dimensions of teaching learning and management strategies:

On Teaching Learning Strategies:

1) The necessity for independent and self-guided learning in contrast to the learning guided by others; collaboration and activity of learner for profound learning will be impossible without any degree of self-management and self-organizing in the process of learning.

- 2) The necessity for further researches and research based training: transforming higher education mechanism to a science generating mechanism and development will be impossible without orientation of research.
- 3) Resisting the dominance of proving approach toward human and social sciences: this condition is certainly related to connecting students' dissertations top real life in society. Decreased number of studies by questionnaires and connecting correlation between variables are the biggest problems faced by higher education in the fields prevalent in universities.
- 4) Considering variety in scientific approaches and methods and removing drawbacks in qualitative and participatory methods.
- 5) Expanding interdisciplinary studies: having a comprehensive view toward development of higher education necessitates a balance between fields and strong interaction between fields must be considered.
- 6) The need for informing on the methods of generating science and its process to students and professors and increasing their trust in their field is not possible unless creativity and ingenuity are ignited.
- 7) The need for guiding topics of dissertations toward problems and needs of the country while regarding modern global problems
- 8) Acquainting students with study skills, research methods, information knowledge, teamwork skills in order to educate skillful work force
- 9) Concentrating on teaching learning processes and profound learning in contrast to superficial learning
- 10) Improving the spirit of responsibility along with inquisitive spirit in students
- 11) The need for using active teaching learning approaches

On Management Strategies

- 1) Improving bureaucratic management strategies and using novel approaches like collaborative management in order to enhance organizational culture and improving teaching learning procedures as a result
- 2) The need for a powerful leadership: if universities need basic and sustainable changes, it is necessary to reach higher levels of management and various management approaches to manage university affairs
- 3) The need for a supervising system which can efficiently identify problems of executing curriculum and try to solve them
- 4) The need for educational workshops in order to inform professors on active teaching methods, efficient supervision on theses, proper relationship with students and novel methods of education and research by students
- 5) The need for attention to the necessary infrastructures for executing curriculum like providing up to date lab equipment for innovative experiments, considering the capacity of the supervisor in supervising theses, employing experience professors and providing students in all degrees with decent facilities in dormitory etc.
- 6) Employing experience professors and improving the criteria for employing professors for higher education and supervisors of theses with an emphasis on the skills needed for research works including research methods, statistics, theoretical knowledge, analyzing power etc.
- 7) Correcting methods of admitting students for higher education
- 8) Expanding interuniversity relations and international relations through interdisciplinary communications between faculties, universities and countries along with reviewing criteria for sending professors to international congresses, seminars, study opportunities, advanced technologies and scientific developments
- 9) Encouraging students of higher education to select topics of research projects and theses in more applicable fields in order to develop national development plans
- 10) Creating the motivation in researchers through better access to data bases and scientific centers along with access to scientific journals, books and research centers
- 11) Strengthening the relationship between university and industry in order to meet the needs of industry and use its experiences in university like proper ground for research opportunities in industries
- 12) In order to promote communications of professors and researchers in the country, facilities and budgets must be allocated to basic and applied studies collaborating with researchers from other countries and other institutes of the country to maximize collaborative researches

13) The need for improving the quality of learning through taking measures for reducing professor to student ratios and reducing work loads of professors through meeting their financial needs and other requirements of professors and students

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