

# Evaluation a Career Planning Course with Case-based Teaching Model on College Students' Career Decisions and Learning Satisfaction

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## Abstract

This study aims to investigate the impact of the case-based teaching model on college students' career decision making and learning satisfaction. The study conducted both a pre-test and a post-test on a single group of subjects. Thirty-two freshmen (8 males and 24 females) taking the class "Career Planning in Finance" in the department of finance of a business university. The researcher developed case-based teaching model materials for an 18-week career planning courses in one semester. There are two-hour classes per week for a whole semester. The results are as follows: (1) There are significant differences in the pre-test and the post-test on career decisions measured with career decided scores ( $t=-4.05$ ,  $p=0.0028$ ). The differences in career indecision scores are also statistically significant ( $t=-3.85$ ,  $p=0.0001$ ); (2) The questionnaire on learning satisfaction reports high scores in general ( $M=4.73$ ,  $SD=0.40$ ). Meanwhile, the university's teaching assessment also indicates high satisfaction in this elective course ( $M=4.89$ ,  $SD=0.48$ ). Results suggest that college students' career decision making and learning satisfaction can be increased through their participation in the case-based career planning courses.

**Keywords:** case-based teaching model, career decisions, career planning, learning satisfaction, college students

## 1. Introduction

The rapid changes in the world and the job market are increasing the uncertainty associated with employment. The level of insecurity is on the rise as a result of unemployment, underemployment and job instability. The fundamental changes at workplace are also reshaping the structure of career counseling, with an increasing level of attention to nervous and anxious individuals and groups. Meanwhile, the data from the Ministry of Education in Taiwan indicates that the number of students suspending from the daytime programs in universities was 17,670 and 18,471, or 3.7 and 4% of university students in the academic years of 2016 and 2017, respectively. It is never an easy decision for students to take a break from universities after they have worked hard to get in. Nearly 20,000 students choose to suspend from universities each year, for reasons beyond the lack of interest in their majors. Economic status, physical health and employment requirements are also contributing factors. Students in both state-run and private universities are troubled with the decision whether they should take a leave of absence or not. The reasons for withdrawing somewhat vary in different departments. The statistics from the Ministry of Education regarding the top three reasons for suspending from daytime programs in universities in the 2016 academic year were "others", "a lack of interest" and "academic performances". In the 2017 academic year, these remained the top three reasons, with "a lack of interest" the most frequently quoted, followed by "others".

How to effectively assist college students by meeting various needs in career education or career counseling has been one of the key issues in higher education. The life-career development theory developed by Super (1980) posits that 15-24 years old are in a career exploration stage. College students are in the transformation phase of the exploration stage. They need to know what they are looking for and embark on career actions. They also need to establish self-identities and absorb information about career planning in order to make suitable career decisions (Herr, 2001; Savickas, 2011). Career counselors and teachers in colleges should formulate the teaching

strategies in order to narrow the gap between theory and practice and inspire students to learn and choose wisely, during university days and after graduation. The traditional approach to teaching career planning courses focuses on the frameworks and designs dictated by textbooks on career counseling. It is about reminding students in the sequence of chapters in the books. However, Peng and Herr's study (1999) mentioned that the high level of personal differences in the issues that students care about in their own career planning. The traditional, one-way instructions by teachers in career counseling delivers knowledge and information with less interacting with students.

Case-based teaching is based on learning and analysis surrounding the cases. It can be decomposed into the following elements (Drake, 2019; Ellet, 2007; Lin, 2018; Prado, Arce, Lopez, Garcia & Pearson, 2019): (1) Identification of practical wisdom in the context of expertise knowledge and skills via the analysis of cases; (2) Discussions in the classroom, preparation by teachers and students, the selection of cases, the integration into curriculum, and conclusion of the cases. This research hypothesis is that both contents design and teaching methods are important to the specialty-oriented career planning courses in different departments. This case-based teaching model may inspire students to reach their own career decisions and plans by discerning various factors by asking a series of questions. The process may guide students to learn how to resolve problems, develop critical reasoning and analytical skillsets.

### *1.1 Case-Based Teaching Model*

Case studies as a teaching method are a powerful strategy centered on students. It influences how students think critically, learn and communicate and socialize with others. It can train students to think independently and make judgements and develop a proactive approach to learning (Bonney, 2015; Newman, & Sidney, 2018; Popil, 2011). Over the past few decades, case-based teaching model has been increasingly applied in education programs of different disciplines, such as medical science (Bi, Zhao, Yang, & Wang, 2019; Norman, 2018), laws (Bager-Elsborg, 2019) and most importantly business (Farashahi, & Tajeddin, 2018; Mukherjee, 2018; Pilz, & Zenner, 2018). Harvard University is known for its case-based teaching model and has been actively promoting this method to other higher education institutions, corporates, government agencies and training organizations around the world. In the education of business and management, case writings and teaching methods have long been widely applied and enhanced (He, Zhu & Wang, 2018). In the MBA courses, case studies are the driver for the development of problem-solving skills and active learning habits. In the learning process based on asking questions, the nature of learning, to a large degree, depends on the quality of cases created by students. The cases designed by students should correspond to the conceptual framework of management theories (Prado, Arce, Lopez, Garcia & Pearson, 2019). Research also indicates the benefits and limitations of case-based teaching model. The advantages of case-based teaching model (Ginzburg, Deutsch, Bellissimo, Elkowitz, Stern & Lucito, 2018; Luo, Koszalka, Arnone & Choi, 2018), include: (1) proactive and enhanced learning, leading to high scores in certain subjects; (2) improvement of classroom participation and problem-solving capability; (3) encouragement of independent thinking and judgement. In brief, case-based teaching model promotes active learning. It also helps students to understand complex issues and describe the problem of solution development. Despite its many benefits, case-based teaching model also has its drawbacks and limitations (Reed, & Brunson, 2018; Yao & Collins, 2018): (1) A lack of understanding in courses contents; (2) More challenging and time-consuming; (3) Prone to the bias of the author who writes the cases; narrow focus on the predicament faced by an individual or a group of people; (4) Limitation in the scope of thinking due to the restriction of the cases. Case-based teaching model is useful in the situation where complex problems need to be resolved; (5) The development of cases could be difficult and time-consuming; (6) It is also necessary to address issues concerning privacy protection; (7) Teachers should possess good skills in asking questions in case studies; otherwise, the students who have not sufficiently prepared or are accustomed to traditional teaching methods may feel frustrated.

Teachers play a crucial role by creating an environment to empower students and assist in their development of independent thinking and judgement. Teaching strategies should emphasize proactive learning, in order to encourage independent thinking and judgement. Case-based teaching model is an effective teaching method (Reed, & Brunson, 2018). Literature calls for a wider adoption of case-based teaching model (Carrasco, Behling & Lopez, 2018; Singh, Shree & Parahoo, 2018). All the studies pertaining to case-based teaching model in professional and educational domains contend that this method encourages active learning, independent thinking and judgement. Case-study teaching method is an effective teaching strategy can promote critical thinking, independent thinking and inspire the passion of the students (Popil, 2011). By focusing on teaching academic career pathways, the findings of Bennett, Roberts, Ananthram & Broughton's study (2018) highlight that the

uncertainty surrounding career paths for teaching academics, who noted the absence of career or promotion scripts. Sometimes role plays and real-life data are used.

### *1.2 Career Decision-Making and Career-Planning Courses*

In 21 centuries, many studies related to career counseling and career education focus on assistance to career decision of college students (Farnia, Nafukho & Petrides, 2018; Fearon, Nachmias, McLaughlin & Jackson, 2018; Li, Ngo & Cheung, 2019; Penn & Lent, 2018; Zacher, Rudolph, Todorovic & Ammann, 2018). Career decisions are about the ability of an individual in dealing with the influence of various factors in the career decision-making process. It is about understanding the career paths under the remit of their own departments and faculties, and an active approach to planning for professional studies and career progression. Career decisions are pertinent to self-determination (Peter & Chen, 2018; Di Maggio, Shogren, Wehmeyer, Nota & Sgaramella, 2019). The self-determination theory reviews the process of adaptive behavior of an individual from the environmental context and the psychological needs and motivations of the individual concerned.

The research on career decision-making is focused on two key issues: factors of career decision-making and types of career decisions. The factors of career decision-making include interests, abilities, values, emotions, and the implication of career certainties and uncertainties (Farnia, Nafukho & Petrides, 2018; Kenny, Blustein & Meerkins, 2018; Milot-Lapointe, Savard & Le Corff, 2018;). Career beliefs is also critical for the courses design of career planning. It shows significant influence on career decisions and scenario anxiety (Huang, Peng & Wang, 2016; Peng & Herr, 1999). In general, university students have the need for career counseling. Most of the students are still in the explorative stage in terms of career decision-making (Hughes, Gibbons & Mynatt, 2013). Their troubles in career decision-making are mostly in three categories: personal issues (including anxiety, disturbance, and a lack of self-exploration); insufficient education or information about the job market; concern over the relations with significant others and opinions from significant others (Lee & Kuo, 2015). Career beliefs is also critical for the courses design of career planning. It shows significant influence on career decisions and scenario anxiety (Huang, Peng & Wang, 2016; Peng & Herr, 1999).

When an individual has difficulty in self-identity and career decisions, and cannot make career choices and then take actions, this is described as career indecision. It is a career status without clarity or directions (Lam & Santos, 2018). Career uncertainty in most about the difficulties in reaching decision due to factors associated with external environments. It may be personal difficulties in making decisions, or due to the influence of the external environment. This is known as outcome anxiety. Parsons (1909) is the first scholar to examine career decision issues by classifying the situations as “career decided” and “career undecided”. Orndorff & Herr (1996) describes the career undecided status as a lack of ability to make choices or take specific actions to prepare for or enter a specific domain in education or vocation. Osipow (1987, 1994, 1999) develop Career Decision Scale (CDS) and define career indecision as a lack of ability for an individual to pinpoint their choice about education or vocation. Career indecision is mainly subject to the impact of six factors: (1) lack of information; (2) need for information; (3) trait indecision; (4) disagreement with others; (5) identity diffusion; (6) decision anxiety. Gordon (1998) categories career decisions into three statuses: very decided, somewhat decided, unstable decided, and career indecisions into four types: tentative undecided, developmentally undecided, seriously undecided, and chronically indecisive. Gelatt (1989) points out the positive uncertainty in career decision-making. The uniqueness of an individual should be respected.

Career planning courses should be scheduled as an elective for all departments during the freshman year in colleges (Herr, 2001; Peng & Herr, 1999). The emphasis is on the significance of professional orientation and career planning, in order to enhance the employability, competitiveness and employment rates of college students (Peng, 2016; Peng, Lin, & Lin, 2017). The specialty-oriented career counseling courses should be well-designed and catering to different departments. Case-based teaching model is a method to enable active learning by students.

### *1.3 Learning Satisfaction*

Learning satisfaction is the issue of concern in higher education. It affects continuous learning and student recruitment. The only way to retain students is to improve education quality. The research on learning satisfaction sheds light on where improvements are in order, for courses and teaching. This will benefit learners and set the tone for courses developments (Yang & Wong, 2018; Wu, Hwang, Yang & Chen, 2018). Nagy (2018) contends that learning satisfaction is under the direct influence of the interactions among learners, perceived ease-of-use and learning performances. Learners' satisfaction is derived from the learning process. Satisfaction is a happy feeling or a positive attitude that students have towards learning. An unhappy feeling or a negative attitude is dissatisfaction.

Learning satisfaction is an attitude towards many things: learning environment and conditions, learning activities, learning outcome and relations with learning mates. Students are autonomous entities. They do not accept curricula in a passive manner. Rather, they are actively involved to confirm the value of curricula and adopt specific learning behavior accordingly (Fisher, Perényi, & Birdthistle, 2018). Learning satisfaction is very similar with job satisfaction. Learning satisfaction is the exploration of the factors behind students' level of satisfaction. The learning experience in specific scenarios can be treated as a complex attitude. The research on learning satisfaction of students helps schools and teachers to understand and review the learning effectiveness of students and ensure the quality of teaching delivered. The examination of learning satisfaction allows teachers to design and plan the curricula to cater to the needs of students, based on the levels of learning satisfaction. This will benefit the learning of students.

This paper explores the effectiveness of incorporating case-based teaching model into courses design for career planning of college students. By providing a supportive and friendly environment, teachers give students a learning scenario and constant feedback. By using case study teaching, teachers are advised to provide case studies with details concerning age, gender, career difficulties and emotional status, instead of elaborating on the theories of career planning and the strategies in making good career decisions at different inflection points. The purpose is to understand how this affects career decisions and learning satisfaction:

- (1) After taking the case-based career planning courses, are there differences between the pre-test and the post-test of Career Decision Scales of the students?
- (2) After taking the case-based career planning course, how is the level of learning satisfaction of the students?

## 2. Method

### 2.1 The Designing of a Case-based Teaching Model

Using the "Case-based teaching model" as the teaching focus (e.g. appendix-1 Example for Case-based Teaching Format; appendix-2 Syllabus for Career Planning in Finance;), this study explores the course effectiveness of the said teaching model on students' career decision making and learning satisfaction. The core essence of this curriculum design focuses on the importance of the specialty-oriented career planning courses (Peng, 2018), including stimulating students' learning motivation for a professional specialty; making an early professional-specialty career plan; and thus, improving future professional-specialty employability/competitiveness.

The design centers around case studies: Students raise their career-related issues within two weeks after the school starts, and then they are divided into groups to discuss these issues during each class using a case-study method. During the group and class discussions, students can also identify possible solutions to their career-related issues in the study of other student's problems. The curriculum design and teaching orientation adopted by this research has a case-based problem-solving focus, is action oriented, cooperative-learning oriented, and critical-thinking oriented, in order to help cultivate students' core employability. The concept and the method of case-based learning are highly valued by this research, and "The most important job of the teacher is not to lecture, but to ignite students' motivation." is achieved through the use of case discussions. The design of in-class and take-home assignments is to stimulate students' participation in the static and dynamic activities of the classroom.

Two sets of self-compiled audio-visual materials are used for supplementary teaching materials. The curriculum design, in addition to the case studies, contains two self-compiled YouTube video sessions for students to watch and learn independently, and then discuss in-class. This set of courses is designed from the students' point of views, with a reduction in straight theory, while substituting such with what are "easy to read, understand, and apply" contents. The courses, "TYS Career Soft Power", and "The Secret of Career Planning", can be used as the teaching aids for career planning courses (Peng, 2018).

Assignments for the Learning Folder: In addition to calculating the grades on case writing and discussions, the "career planning folder" is also used as a basis for performance evaluation. The folder contains a list of assignments, which include writings about students' issues concerning career conflicts; interviews on career mentors, and other relevant issues.

### 2.2 Research Design

**Participants:** 32 students (8 males and 24 females) taking the class "career planning in finance" in the first year of a four-year technical program in the department of finance of a business university. This career planning courses aims to facilitate professional orientation in finance and is required for all the students.

**Research procedures:** The researcher developed case-based teaching model materials for an 18-week career planning courses in one semester. At the beginning of the term, a list was established concerning the career conflicts and other career issues freshmen experienced. Case materials were created and edited for classroom discussions with pseudo names. Case-study teaching is centered on students, by providing opportunities for discussion and inspiration. Case-based teaching model is rendered with real-life scenarios and supporting data for analysis. Questions are being raised and possible solutions are explored. Case-based teaching model can be delivered to individuals or groups. However, small groups are frequently organized, to discuss and brainstorm for solutions. Cases can be presented in different formats, from simple to complex ones.

This paper focuses on case-based teaching model by changing the set of anonymous questions given to students regarding career issues at the beginning of the semester, into group discussions of case problems throughout the semester. Students can also identify problem-solving patterns in relation to their own career planning from others' questions. Representative cases were selected after the mid-term exam. Each group provided a case study and led the discussions. The teacher analyzed the responses and made conclusions. At the end of the semester, the career questions raised by students were consolidated into career stories (in pseudo names).

**Research measures:** A background questionnaire was developed to collect data, such as gender and university year. There were also open-ended questions: (1) importance of career planning; (2) whether they knew the professional progression by studying their major; (3) whom they turned to for problems in career planning. Also, this paper adopted two questionnaires, i.e. Career Decision Scale (CDS) and a questionnaire on learning satisfaction. Also, qualitative interviews were conducted on sampled students.

Career Decision Scale (CDS; Osipow, 1987,1994,1999) is one of the most widely used and well-regarded measures of career decision/indecision. It consists of two scales: (1) questions 1 and 2 measuring certainty of decision; (2) questions 3 to 18 measuring indecision. Questions 1 and 2 evaluate certainty of academic major or career goal. The higher the score, the greater the certainty. Questions 3 to 18 articulate the components of career and/or educational indecision and lower scores indicate greater vocation indecision. Subjects respond to the questions by circling one of four numbers to express their personal identification or fit with the situations described. The final item is intended for a free response if none of the previous items matches their situations.

Learning Satisfaction Questionnaire: This was a questionnaire developed by this paper based on the Likert five-point scale. There are six questions in total: richness of courses contents; context and flows of the lectures; personal learning outcomes; alignment of courses contents and topics; case discussions; classroom activity designs; overall satisfaction with the semester. The internal consistency reliability (coefficient alpha) of the six-item scale was 0.76. The meanwhile, the university's teaching assessment also used as a reference.

**Analysis:** The purpose was to understand the differences of the pre-test and the post-test of CDS with descriptive statistics a dependent t-test, the repeated measures t-test for the same participants on the Career Decision Scale . The qualitative interviews were meant to make up the lack of depth of quantitative research. The focus was on the career issues troubling the students and the response to the teaching methods. A review was performed on the reactions from students throughout the semester.

### 3. Results

The questionnaire covers three aspects: (1) Importance of career planning, with 36.7% students indicating "important" and 57% "very important"; (2) Clarity on the career progression of academic major, with 11.4% indicating "very clear", 26.6% "clear", 45.6% "somewhat", 11.4% "not clear"; (3) Whom to turn to for career planning issues: parents and teachers ranking the highest, followed by school counsellors, then taking up career planning classes, senior schoolmates, finally alumni and others.

The results indicate statistical significance in terms of the differences between the pre-test and the post-test of the career decided scores and career indecision scores. As noted in Table 1, the post-test result of the experimental group was significantly different from that of the pre-test ( $t=-4.04$ ,  $p=0.0028$ ). The post-test mean score for the certainty in the Career Decision Scale is 6.76 higher than the pre-test mean score of 5.25. A high score in certainty indicates a high level of confidence in career decisions. A higher score measured in the post-test suggests a higher degree of certain certainty (compared with the pre-test result). As noted in Table 1, the result for the Career Indecision Score of the CDS indicated a significant difference ( $t=3.85$ ,  $p=0.0001$ ). The post-test mean score for the Career Indecision Score is 46.56 (vs. the pre-test mean score of 38.83). The finding shows that the subjects experienced a lower degree of career indecision at post-test. Lower scores of the Career Indecision Score indicate greater career indecision. CR is the certainty score of the CDS, and a high score indicates greater career certainty. A high indecision score indicates lower career indecision. In sum, the research

findings suggest higher decision scores and lower career uncertainty after students have participated in the career planning courses integrated with case-based teaching model.

Table 1. Means and standard deviation at CDS Pre-test and Post-test (n=38)

<i>Item</i>	<i>Pre-test</i>	<i>Post-test</i>	<i>t value</i>	<i>P</i>
<b>Career decided score</b>	5.25 (0.82)	6.76 (0.32)	-4.04	0.0028
<b>Cr1</b>	2.42 (0.58)	3.32 (0.55)	-3.55	0.0027
<b>Cr2</b>	2.83 (0.64)	3.44 (0.57)	-2.27	0.0038
<b>Indecision score</b>				
	38.83 (0.9)	46.56 (1.02)	-3.85	0.0001

\* $P < .05$

Table 2. Questionnaire on Learning Satisfaction

Means and standard deviations of surveyed results

<i>Items</i>	<i>Case-based teaching model Group</i>	
1. Richness of courses contents	M	4.76
	S	0.30
2. Context and flows of the lectures	M	4.72
	S	0.40
3. Personal learning outcomes	M	4.68
	S	0.51
4. Alignment of courses contents and topics	M	4.58
	S	0.42
5. Case discussions	M	4.80
	S	0.33
6. Classroom activity design	M	4.78
	S	0.42
Overall satisfaction with the semester	M	4.73
	S	0.40

Table 2 shows the results of the questionnaire on learning satisfaction. The mean score of the overall satisfaction is 4.73, with a standard deviation of 0.40. All the scores are high: (1) richness of courses contents (mean=4.76, SD=0.30); (2) context and flows of the lectures (mean=4.72, SD=0.40); (3) personal learning outcomes (mean=4.88, SD=0.51); (4) alignment of courses contents and topics (mean=4.58, SD=0.42); (5) case discussions (mean=4.80, SD=0.33); (6) classroom activity design (mean=4.78, SD=0.42). The overall satisfaction measured by the teaching assessment used by the university reports a mean of 4.89, with a standard deviation of 0.48. In brief, the trend is consistent between the questionnaire designed by this paper on satisfaction with career planning courses and the teaching assessment performed by the university.

The qualitative interviews reveal the career problems experienced by students in terms of career uncertainty or career conflicts. According to the courses feedback forms, students indicated that they managed to develop the following skillsets: time management; responsibility sharing in group reports; teamwork; organization and planning; communication and interaction with group members; decisions in professional and career progression. To teachers, case-based teaching model is also beneficial. It allows them to rethink about teaching methods, revive their interest in teaching materials and create the passion for both teachers and students. For example, students may become passive and not interested any more if they sit through lectures for the same topic time and again. Students feel refreshed by discussing cases in the classroom. In this way, teachers and students work together to resolve career issues.

Students responded in writing and interviewing with their feedback to the teachers in case studies. They were impressed with different career developments for different people in group discussions. They came to realize the importance of positive thinking and found the support. They enhanced communication abilities by working together. Case discussions help to bring perspectives to career planning in the future. Group interactions and conversations contributed to the solutions to career problems. Every story touched the heart. Classmates got along better via case discussions. It felt great to help classmates to solve their career issues. There were conflicts between parents' value and students' own values in career. They enjoyed the feeling of sharing ideas with classmates. Students no longer felt lost. They appreciated different angles from others in discussions. They felt the dedication of each other through interactions. They felt recharged this semester. They realized the importance of teamwork. In a nutshell, case-study teacher inspired students to think and raise questions, so that they could answer these questions based on their knowledge. It encouraged students to think independently and make judgment by providing opportunities for them to connect the dots and resolve career planning issues in practice. Students were prompted to deliberate and participate in order to develop possible solutions from different perspectives.

In conclusion, case-based teaching model is an effective way to boost learning satisfaction of students. The integration of case-based teaching model in career planning courses helps college students to think and understand the meaning of the knowledge they have and synthesize theory and practice in a hands-on environment. This helps to develop independent thinking and judgment.

#### 4. Discussion

This paper seeks to explore the career decisions and learning satisfaction of students taking part in the career planning courses integrated with case-based teaching model. According to the statistical analysis on the questionnaire findings, 93.7% of the students believe that career planning is important and 57% of the students feel career planning and professional orientation is necessary. In addition to consulting teachers, parents and counsellors, students think career planning classes help them to make decisions on their own. This includes the decisions to suspend from the university or transfer to another department.

The research findings highlight the significant influence of the incorporation of case-based teaching model into courses on career decisions. Students were highly satisfied with the learning outcomes. This paper ran two questionnaires and there were significant differences between the pre-test and the post-test results on career decisions. Students were pleased with the case-based teaching model.

The conclusions drawn from the statistical analysis are as follows:

- (1) After one semester of the integration of case-based teaching model into career planning courses in colleges, the difference between the pre-test and the post-test score in career decision were statistically significant ( $t=-4.05$ ,  $p=0.0028$ ), as well as in career indecision ( $t=-3.85$ ,  $p=0.0001$ );
- (2) Research subjects reported high scores in all items in the questionnaire on learning satisfaction after one semester of case-based teaching model; the questionnaire on learning satisfaction reports high scores in general ( $M=4.73$ ,  $SD=0.40$ ). All the scores are relatively high: learning satisfaction in case studies in the classroom ( $M=4.80$ ,  $SD=0.33$ ); satisfaction with the courses contents ( $M=4.76$ ,  $SD=0.30$ ); satisfaction with learning outcomes ( $M=4.88$ ,  $SD=0.51$ ); satisfaction with teaching activities ( $M=4.78$ ,  $SD=0.42$ ). Meanwhile, the university's teaching assessment also indicates high satisfaction in this elective course ( $M=4.89$ ,  $SD=0.48$ ).
- (3) Qualitative interviews provide additional color and depth to quantitative research and examine some phenomena and responses throughout the semester. The summary of the interviews and feedback forms indicate a high level of acceptance of case-based teaching model and positive change to the mindset of students. Students became more motivated in learning, professional orientation and career planning.

In the meantime, this paper holds the same views as Popil (2011), Reed and Brunson (2018) regarding case-based teaching model. Whilst the case-study method enhances the teaching competences, teachers need to spend more efforts in courses design and teaching preparations. In the classroom, they should stay on top of questions and stay organized in order to guide the discussions. The interviews and basic data analysis shed light on the three areas of problems for students: personal issues, external factors and career decision dilemma. Lee & Kuo (2015) classify career decision issues experienced by college students into three types: personal disturbances, confusion with education or information about the professional world; relations with significant others and opinions from significant others.

The research findings serve as a practical template for the promotion of professional orientation and career counseling in higher education. An emphasis on inspiring teaching should be placed for career planning courses

in colleges. Case-based teaching model is fun and meaningful because it is catering to specific students. This paper suggests that case-based teaching model should be applied to career planning curricula for different departments and faculties. This will help to resolve the problems with the misalignment of personal interests and academic majors in some students and hence reduce the number of students repeating the academic year or suspending from the university. In the future study, this study recommends the case-based teaching method can be targeted at meeting the career development needs of non-traditional college students.

The research restrictions are as follows: (1) many variables may lead to quality variances in case-based teaching model. For example, classroom discussions require students willing to change their learning methods and have the courage to share stories and give opinions; (2) the limited generalization of the findings exists because the sample is very small which will affect the external validity of the result; (3) overly keen and passionate lectures may invite strong responses from study groups; (4) qualitative interviews reveal the needs related to different career conflicts for career counseling and education to accommodate cultural differences between the west and the east. In contrast, family harmony and social collaborations are the cultural values in the east. Many students encounter conflicts from social cultures and values in their career decisions.

Based on the quantitative and qualitative analysis, this study is an innovation to integrate case-based teaching model into the specialty-oriented career planning course for freshmen in colleges. It is hoped that the research process and results may lead to changes to the teaching model in the career planning courses in higher education. The innovative case-based teaching model in this paper recommends to the design of career planning courses or career counselling interventions for different departments college students.

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## Appendix 1

### Example for Case-based Teaching Format: Career Choices parent-child conflict

Helen Story Summary: Because Helen's High School Entrance examination is not successful, her father suggests her to choose a five-year specialized department, Finance. Helen's father, who is in charge of a bank, hopes her daughter will work in the bank in the future. But Helen's mother wants her daughter to be able to study nursing specialized, in the future may become nursing related line profession.

Helen does not know what she wants, because of her parents with different opinions. Finally, Helen chose his father's advice. And majoring in the Bank Insurance department, the third year, Helen found that the business is not her most favorite, during the first three years studying, she likes to help others and likes to encourage others. At the three-year, one day Helen saw the alumni information in the department journal and found that one of the alumni went to a university counseling department. Helen's intuitive judgment which is one day she can be a counselor at tutor Zhang, which is a non-profit organization in Taiwan.

Anyway, Helen's father still suggested her taking government test or another university financial related department. Although her mother did not object to her daughter's decision, she was not sure whether the counseling department would find a job in the future. Helen is so confused about how to communicate her ideas with her parents?

### Discussion

1. Helen High School Entrance examination is not good enough, try to describe her that present mood?
2. Why does Helen choose to read five-year college?
3. What're Helen parents' expectations?
4. How is Helen the most interest? What is her expected job?
5. How can Helen communicate her dream/ ideas with her parents?

Related class topic activity:

Watch the movie, "The Belle Family."

Introduction to the film plot

If I were the actress, how would you communicate with your parents and go your own way?

### Assignment:

Collect information about your own "interested" department and "interested" work

## Appendix 2

## Syllabus for Career Planning in Finance

## A Case-based Teaching Model

Teaching website: <https://www.dreamerpengh.com/>

<i>Week</i>	 <i>Topics and Schedule</i>	<i>Career Activities</i>	<i>Group discussions/ Case studies</i>
1	Start of the Semester 01 Career soft power	Career Group studies Career planning in finance <b>Six groups (A, B, C, D, E, F)</b>	Group discussion: What are your dreams?
2	02 Grit Importance of Persistence and Perseverance Topic 1 Importance of Career Planning and Career Theory	Requirements for a finance professional Story sharing Association of Alumni in Finance	<b>Career case studies</b> <b>Sharing of group discussions</b>
3	03 Career theory Importance of Career Planning and Career Theory	Experience sharing from alumni in the banking industry Career planning in finance	<b>Group A discusses internally the case it has collected</b>
4	04 Specialty-oriented career planning Importance of Professional Orientation in Career Planning	Application of career resources Test on multiple intelligence	<b>Group B discusses internally the case it has collected</b>
5	05 Personality and multiple intelligences Knowing about Your Own Characteristics and Multiple Intelligence	Test on career interests Venue: Counseling Center How to use resources in the University Counseling Center	<b>Group C discusses internally the case it has collected</b>
6	06 Career beliefs and positive thinking Knowing about Your Interests and Strengths	Experience sharing from alumni in the insurance industry Key factors to realize your dream: Application of positive psychology Sharing with Department of Finance	<b>Group D discusses internally the case it has collected</b>
7	07 Career interest and advantage Career Conviction/ Importance of Positive Thinking	Experience sharing with the securities industry Career related websites / website browsing	<b>Group E discusses internally the case it has collected</b>

8	08 Career values Career Values-Fight for Your Dream	Explanations of the reporting format for case studies in career planning by study groups after mid-term exam	<b>Group F discusses internally the case it has collected</b>
9	09 Time Management and Mid-Term	Learning map consultation/Interview with career mentors	Data Folder Inspection
10	10 Study Techniques	Career choices and action plans	Case Study Learning Output Report
11	11 Career decision Strategy Career Choices/Career Flows	<b>CASE Discussion</b>	Conflicting career choices – case study & discussions
12	12 Learning process planning	<b>CASE Discussion</b>	Conflicting career choices – case study & discussions
13	13 Career narrative theory and Career Interviews	<b>CASE Discussion</b>	Conflicting career choices – case study & discussions
14	14 Gender and Career Development	<b>CASE Discussion</b>	Conflicting career choices – case study & discussions
15	15 Emotional injury/ Trauma and Career Planning	<b>CASE Discussion</b>	Conflicting career choices – case study & discussions
16	16 Listening to internal calling Listen to Your Inner Voice/ Spirituality for Career Planning	<b>CASE Discussion</b>	Conflicting career choices – case study & discussions
17	17 Planning for professional license/Acquisition of Financial Licenses/Certificates	<b>CASE Discussion</b>	Conflicting career choices – case study & discussions
18	18 Spiritual map/Mind Map 19 Luck is no accident/ Good Luck Not by Chance	Retrospectives and perspectives/ Final exam	Retrospectives and perspectives

\*

- Case studies could be (1) career development of alumni;  
(2) students' own stories, for employment or further studies
- Before the mid-term exam, case discussions are within study groups. After the mid-term exam, each group presents a representative case for discussions in class.

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