A Study of the Influence of Instructional Innovation on Learning Satisfaction and Study Achievement

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ABSTRACT

The purpose of this research is to discuss the relationship among instructional innovation, learning satisfaction, and study achievement in technological and vocational colleges (TVC) in Taiwan. The students of TVC in Taiwan were the subjects of this study while Stratified Sampling and SEM were used to analyze the data collected. The results showed that: (1) teaching innovation has a significant and positive influence on learning satisfaction; (2) teaching innovation also has a significant positive influence on students' study achievement; (3) learning satisfaction and study achievement were interrelated, with a positive correlation existing between them.

Keywords: instructional innovation, learning satisfaction, study achievement, SEM

INTRODUCTION

In today’s rapidly-changing society, ‘innovation’—with the ability to adapt quickly to change and changing needs--has become essential in our daily life. Bill Clinton, former president of the United States, once said 'in the era of knowledge economy, we should use technology as our fuel and take innovation as our power'. Su, Y.Q. (2002) also pointed out that in the era of knowledge economy, the new focus of education should be on developing effective innovative abilities, as well as abilities in question-solving, judgment, and information/technology application; these abilities are all fundamental for the success of the next generation. Since creativity is the fountainhead of innovation, the nurturing and promotion of creativity should be regarded as a crucial part of future education. For this reason, cultivating creative talents has become an important goal of education reform worldwide.

Innovation is a must for enhancing one's competitive edge when facing the challenges of globalization. However, innovation can only be created through education that focuses on cultivating creativity for both teachers and students. In January 2002, the Ministry of Education adopted 'Republic of Creativity, R.O.C.' as its vision and announced the 'White Paper for Creative Education'. In so doing, it positioned the role of creativity in education reform, devoting every effort to promote creative education, and pledging to use creative education as a key for future education reform. Therefore, to equip students with creativity, teachers must use innovative and creative teaching methods. Since teaching must help learners enhance their innovative abilities, 'teaching innovation' is the first step to be taken. The goal of teaching innovation is to increase students' knowledge and wisdom, which means to impart knowledge in students who benefit from this knowledge, and cultivate a flexible, intelligent, and high-quality learning environment. Hence, teaching innovation aims to provide students with valuable knowledge through an improved teaching process that betters the quality of students' learning and increases their motivation to learn.

Teaching innovation is an education model that aims at cultivating creative talents and realizing the heuristic method of teaching. The focuses of this method are to increase students' creativity and cultivate talents through creativity. Without innovation and creativity, a society will come to a halt stop making...
progress, and indeed may retrogress. The methods of teaching must change with the development of society. That is, to use modern, interactive, and special methods/contents to replace rigid teaching models, in the hope of cultivating students' innovative spirit and ability. Traditional school education focuses overly much on written tests, memorization, rote learning and recitation while neglecting practical evaluation and extracurricular performance. The result of overemphasizing written tests is that the process of learning has been overlooked, causing the suffocation of originality and creativity in the learning process. The goals of school education are to cultivate the student's sound character, democratic attitude, understanding of justice, cultural tastes, physical well-being, powers of thought, judgment, and creativity; to help students apply their acquired knowledge to their daily lives; and to use independent thinking and judgment abilities in solving problems.

Both learning satisfaction and learning results are major criteria for evaluating students' study effect. Many factors affect students' learning satisfaction and study achievement, including students' personal characteristics, and the qualities of teachers, courses, and the learning environment. Researchers tend to emphasize different factors according to the goals and environment of their studies. Lynch et al. (1998) investigated the relationships between learning types and study achievement for medical school students. Jones (1996) also discussed how capabilities, self-efficacy, and personal objectives influenced one's performance and discovered that study achievement would be affected by some personal characteristics. Biner et al. (1997) investigated the learning satisfaction of students who studied TV broadcasting; his study focused on interaction, teaching methods, and course content. In general, although the researchers focused on different aspects of learning satisfaction and study effect in their studies based on their demands, all the factors were within the scope of the learning environment, administration, teachers, courses, study achievement, and interpersonal relationships. In this study, the author focuses on teachers' instructional innovation.

The continuing updating of teaching methods indicates the increase of learning satisfaction and the effective development of study achievement. Both of them can bring relative teaching and learning efficacy and improve student will to learn. Therefore, in this study, the author attempts to discuss the relationships among instructional innovation, learning satisfaction, and study achievement in technological and vocational colleges (TVC) of Taiwan. The goals of this study were as follows:

(1) Discussing the influence of instructional innovation on study achievement in TVC of Taiwan.
(2) Discussing the influence of instructional innovation on learning satisfaction in TVC of Taiwan.
(3) Discussing the relationship between learning satisfaction and study achievement.
(4) The results of this study can serve as a reference for teachers when updating teaching methods and developing learning strategies.

**LITERATURE REVIEW**

**Instructional Innovation**

According to Bruce (1989), instructional innovation means to 'learn' the interactive relationship between the 'learners' and the 'learning environment', and adopt information technology in teaching by using proper strategic skills, in the hope of generating better teaching efficacy. Wu, Q.S. (2002) also mentioned that instructional innovation meant teachers adopted diversified and lively teaching methods/contents in the teaching process, expecting to arouse students' interest in learning, cultivating their proactive learning attitude, and improving their learning abilities. Lin, Y.M. (2002) held that instructional innovation indicated teachers must be open-minded and have the ability of introspection;
they should have the ability of reflection, questioning, deconstruction, and reconstruction, using these abilities to guide students on the right learning path and cultivating students' judgment and creativity; furthermore, teachers should show their morality and positive characteristics to students, helping change and influence students' behaviors unobtrusively and imperceptibly. They should also help students build good moral values and positive philosophies. According to ERIC Thesaurus, the definition of 'instructional innovation' is: 'introduction of new teaching ideas, methods, or devices', while the definition of 'creative teaching' is 'development and use of novel original or inventive teaching methods'. In a narrow sense, instructional innovation indicates that one adopts new teaching concepts/methods/or tools that have been developed by others or by the teacher himself, while creative teaching means that a teacher invents new methods/tools that can arouse students' interests. In a broad sense, instructional innovation and creative teaching have many common points in their definitions. Based on the above-mentioned studies, the author suggested that 'instructional innovation' and 'creative teaching' should be regarded as the same thing in this study and the definition of 'creative teaching' was teachers being 'creative in preparing lessons, teaching process, and examinations'; moreover, they should be able to develop or adopt new and diversified teaching methods or activities, in order to understand students' individual differences, arousing students' interests in learning, and improving their study effect. In this study, creative teaching was discussed in the following two dimensions:

A. The innovation of teaching methods: indicates that teachers should adopt new and meaningful methods to teach or solve problems, further bringing out their creativity in the class.

B. The innovation of course design: indicates the new course design that can inspire students to integrate the knowledge they learned and equip students with practical innovation ability; furthermore, it can have future substantial contributions to the related fields.

Learning Satisfaction

Learning satisfaction is one of the major criteria used to evaluate study effect. In addition to students' individual characteristics, teachers, courses, and the learning environment are all factors that may influence learning satisfaction. Long (1985) held that the major objectives of adult learning activities were to have achievement and satisfaction. Tough (1982) pointed out that satisfaction was student feelings and attitudes toward learning activities; a happy feeling or positive attitude indicated satisfaction, while an unhappy feeling or negative attitude revealed discontent. Scholars have different opinions and research results about the methods of evaluating learning satisfaction. In the College Student Satisfaction Questionnaire (CSSQ), Starr (1972) pointed out that this questionnaire, used to measure the learning satisfaction of college students, contained five aspects: school environment and equipments, study effect, administration measures and service, interpersonal relationship, and teachers and administrative personnel's respect toward students. Corts et al (2000) discussed the influences of the five environmental factors on student satisfaction; the result showed that career preparation and course offerings had the biggest influence on student satisfaction, while advising also had a positive influence. Teven and McCroskey (1997) suggested that the students’ perception that their teachers cared about them would have a positive influence on their learning and increase their appreciation of their teachers. Gaziel (1997) discovered that in a school, the culture that influences the school’s effectiveness were academic emphasis, continuous school improvement, and rules. Based on the above-mentioned studies and definitions, the author defined 'learning satisfaction' as students' joyful feelings or positive attitudes toward learning-associated activities. The following three aspects of learning satisfaction were discussed in this research.
A. Learning attitude: Students' relatively stable psychological tendency expressed in a learning environment. It usually can be judged and explained based on students' attention spans, management of emotions and behavior and level of willingness to focus when learning.

B. Learning motivation: The motivational power of learning. Whether students are proactive and interested in learning, and how they learn are all directly related to learning motivation.

C. Learning interest: Students' positive emotional tendency toward the subjects they are learning, including eagerness to understand and grasp the subjects. It is the motivational power that pushes students to learn proactively.

The Study Achievement on Students

The progress of learner’s knowledge, skills and attitude indicated that the learning effect has been achieved (Piccoli, et al, 2001). Jones (1996) pointed out that learning effect is influenced by learning type, curriculum design and teaching method. Loo (1999) also agreed with Jones’s argument. The learning evaluation can be conducted by comparing student’s school grades, the capability of receiving professional license and off-campus test grades. The study therefore defined that learning effect can be measured by the manifests, i.e. school grades, the capability of receiving a professional license and off-campus test grades. The operational definition of each manifest is described as follows:

A. School grades: test grades on campus;
B. Professional license: number of professional licenses received after tests; and
C. Off-campus test grades: test grades off-campus.

Instructional Innovation and Learning Satisfaction

Teachers nowadays have to be innovative in teaching attitudes, course design, teaching materials/methods, and assessments; furthermore, they have to adopt information technologies to upgrade their teaching content. Therefore, teachers must understand what integrating information technologies with teaching means (Wang, X.R., 2002). According to Wang, Q.S. (2001), integrating information technologies with teaching meant combining information technologies with course objectives, teaching material design, and teaching activities, making information technologies an essential teaching and learning tool, and an inseparable part of teaching activities. Furthermore, information technologies should be extended as methods or procedures that can be used to solve questions any time. Wang, S.R.. (2002) also mentioned that combining information technologies with teaching could make learning more diversified, individualized, and effective. He, R.G . (2002) also pointed out that integrating information technology with teaching made teaching more vigorous and creative.

Jones and Paolucci (1999) held that technologies could help increase learning motivation and achievement. Hoffman (1996) also pointed out that combining information technology with teaching contents was the best solution for enhancing teaching methods and skills; moreover, it could also help teachers solve teaching-related problems or step into creative teaching. However, it is not easy to practically integrate information technology with teaching. According to Wang, X.R. (2002), problems of people, environment, budget, time, course, and integration may appear during the integration process. If these problems can be resolved, instructional innovation will have a positive influence on students' satisfaction with studying. Therefore, based on the above-mentioned inference, the following hypothesis was made:

H1: Instructional innovation has positive influences on students' learning satisfaction
Instructional Innovation and Study Achievement

According to Wang, X.R. (2002), instructional innovation meant that teachers must be creative in preparing lessons, as well as with their teaching process, and assessments; in addition to this, teachers should be able to reflect and be open to designing/adopting new and diversified teaching methods or activities, understanding students' individual differences, keeping alive their motivation and interest in learning, and improving their study effect. In short, instructional innovation for Wang meant that teachers must be creative, adopt vigorous teaching methods to arouse students' interest in learning and improve their teaching effectiveness. According to Qiu, Z.W. (2000), Chen, S.M. (2002), and Wu, Q.S. (2002), the goals of instructional innovation as related to students were to: 1. Cultivate students' independent analysis, thinking, and judging abilities; 2. Arouse students' interests and motivation to learn; 3. Bring students' creativity and potential of solving questions into full play; 4. Improve students' learning abilities. Similarly, the goals of instructional innovation as related to teachers were to: 1. Improve the qualities and effect of teaching; 2. Make the teaching/lesson content more plentiful and diversified; 3. Make the assessments more diversified; 4. Achieve the goals and dreams of education. Based on the above-mentioned conclusion, the following hypothesis was made:

H2: Instructional innovation has positive influences on students' study effect

Learning Satisfaction and Study Achievement

Zheng, T. (1995) investigated the four aspects of learning satisfaction, including teaching materials, teaching quality, learning environment, and interpersonal relationships. Wu, W.R. (1992) confined the scope of learning satisfaction to four aspects: teachers, courses, study effect, and interpersonal relationships. Biner et al. (1997) investigated the study effect of students who studied TV broadcasting via long-distance learning; the aspects of study effect he used were: teachers, technologies, process management, positions of the general staff and students, the swiftness of data transmission, supporting equipment, and the liaison among teachers. In this study, the author adopted an 'academic record questionnaire' and 'learning satisfaction and self-evaluated performance questionnaire' to evaluate the online study effect of the subjects; the definition of learning satisfaction was that an individual evaluated his feelings and experience of each factors in the learning environment after instruction, while the definition of self-evaluated performance was that students were confident and capable of displaying the knowledge they had learned (Wang, Q.H., 2001; Piccoli et al., 2001). Furthermore, He, R.G and Yan, Y. J. (2001) suggested that although applying information technologies in the teaching process could improve students' study effect, the major components of education were still the lesson content and activities of teaching, and information technology could only be regarded as one of the assisting tools. Based on the above-mentioned inference, the following hypothesis was made:

H3: Students' learning satisfaction has positive influences on their study effect

Research Framework

According to the above-mentioned research goals and literature review, the research structure of this study is shown in Figure 1:
RESEARCH METHODOLOGY

Study Objects and Survey Design

The study objects were college students in Taiwan and the Stratified Random Sampling Method was applied. Among 730 questionnaires, 213 valid data were collected and the response rate was about 29.17%. The correlation of each variance (innovative teaching, learning satisfaction and learning effect) was analyzed. The five-point Likert Scale was used to evaluate the variance. The more the manifests, the more accurate the response and the inaccuracy can be avoided. Based on student’s subjectivity, a response was given. Variables included innovative teaching, learning satisfaction and learning effect, and the manifests were then divided accordingly. In each manifest there were 3-5 questions, which are shown in table 1.

Table 1: The latency and manifest variables of the study

<table>
<thead>
<tr>
<th>Latency variables</th>
<th>Manifest variables</th>
<th>Number of questionnaires</th>
<th>References</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Innovative curriculum design</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Learning satisfaction</td>
<td>Learning attitude</td>
<td>3</td>
<td>Biner, P. et al. (1997), Starr (1972)</td>
</tr>
<tr>
<td></td>
<td>Learning motivation</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Learning interest</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Number of professional license</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Off-campus test grades</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>
The Reliability and Validity of the Questionnaires

After collecting the questionnaires sent out, confirmatory factor analysis was used to test the reliability and validity of the questionnaires. The results showed that the Cronbach's α value of reliability in each dimension was higher than 0.7; the Composite Reliability (CR) was higher than 0.6, which conformed to the suggestion that CR should be higher than 0.6 as proposed by Bagobbi & Yi (1988). Since reliability is one of the important elements in building validity (Guo, S.Y., 1998; Zhou, W.X., 1999), the scale adopted in this study had good reliability and validity. In terms of validity, the T values of every dimension were all higher than 2, which indicated that the scale had a good convergent validity; moreover, the difference before and after dimension integration was significantly greater than 3.84, which showed that the scale had a good discriminative validity (Table 2).

Table 2: The Reliability of the Scale

<table>
<thead>
<tr>
<th>Reliability Scale</th>
<th>Instructional Innovation</th>
<th>Learning Satisfaction</th>
<th>Students' Study Achievement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cronbach's α</td>
<td>0.8031</td>
<td>0.7925</td>
<td>0.7713</td>
</tr>
</tbody>
</table>

ANALYSIS AND RESULT

Structural Equation Modeling, SEM

LISREL was used for case analysis and two basic questions derived from the sociology were answered; its purpose was to test the causal relationship between variances and its explanations. SEM (structural equation modeling) can solve this problem efficiently and LISREL software can be used to test the SEM.

Overall Model fit Criteria

The study aims at applying the Linear Structural Modeling to understand the relations between different latencies. The fit criteria has to be GFI>0.9 : NFI>0.9 : CFI>0.9 : RMR<0.05 and RMSEA<0.05 etc (Bagozzi & Yi, 1988). The GFI and AGFI is among 0.90~0.96 and RMR is smaller than 0.05. It presents significant consistence of the scale meeting the modeling listed in Table 3.

Table 3: Mold Suitability Evaluation

<table>
<thead>
<tr>
<th>Criteria</th>
<th>χ²</th>
<th>df</th>
<th>GFI</th>
<th>NFI</th>
<th>AGFI</th>
<th>CFI</th>
<th>RMR</th>
<th>RMSEA</th>
</tr>
</thead>
<tbody>
<tr>
<td>fit</td>
<td>44.91</td>
<td>17</td>
<td>0.9863</td>
<td>0.9897</td>
<td>0.9012</td>
<td>0.9657</td>
<td>0.0411</td>
<td>0.00</td>
</tr>
</tbody>
</table>

Fit of Internal Structure of Model Criteria

The individual reliability of each latency and manifest is R² value (squared multiple correlation, SMC). The purpose is to evaluate the intensity of linear correlation between each item and latency. If R² value is closing to 1, the intensity of linear correlation is higher. Table 4 lists the R² value of each variance.
Table 4: Internal quality of model criteria

<table>
<thead>
<tr>
<th>Latency Variables</th>
<th>Manifest Variables</th>
<th>$R^2$ value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Innovative teaching</td>
<td>Innovative teaching method</td>
<td>0.8864</td>
</tr>
<tr>
<td></td>
<td>Innovative curriculum design</td>
<td>0.9362</td>
</tr>
<tr>
<td>Learning satisfaction</td>
<td>Learning attitude</td>
<td>0.9309</td>
</tr>
<tr>
<td></td>
<td>Learning motivation</td>
<td>0.8729</td>
</tr>
<tr>
<td></td>
<td>Learning interest</td>
<td>0.9315</td>
</tr>
<tr>
<td>Study achievement</td>
<td>School grades</td>
<td>0.8218</td>
</tr>
<tr>
<td></td>
<td>Number of professional license</td>
<td>0.8014</td>
</tr>
<tr>
<td></td>
<td>Off-campus test grades</td>
<td>0.6983</td>
</tr>
</tbody>
</table>

Table 4 shows that if the $R^2$ value of school grades was at 0.8218, it could be referred to as an appropriate evaluation tool for learning effect; followed by professional license and off-campus test. If the $R^2$ value of the innovative teaching and learning satisfaction was higher than 0.8 in each manifest, both latencies could be referred to as the appropriate evaluation tools.

ANALYSIS RESULTS

After completing the goodness of fit test, the author estimated the standardized coefficients and correlation coefficients among each potential variable (please see Table 5 and Table 6); moreover, the result of path analysis is shown in Figure 2.

Table 5: The estimated coefficient of the latent variables

<table>
<thead>
<tr>
<th>Latency Variables</th>
<th>Evaluated coefficient</th>
<th>t value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Instructional innovation →</td>
<td></td>
<td></td>
</tr>
<tr>
<td>learning satisfaction</td>
<td>0.3675*</td>
<td>11.2132</td>
</tr>
<tr>
<td>Instructional innovation →</td>
<td></td>
<td></td>
</tr>
<tr>
<td>study achievement</td>
<td>0.3219*</td>
<td>11.0126</td>
</tr>
<tr>
<td>Learning satisfaction ←→ study</td>
<td></td>
<td></td>
</tr>
<tr>
<td>achievement</td>
<td>0.3872*</td>
<td>13.028</td>
</tr>
</tbody>
</table>

Note: * indicated that t value was significant ($\alpha=0.05$)

Table 6: The estimated coefficient of the observed variables

<table>
<thead>
<tr>
<th>Main dimension (latent)</th>
<th>Sub-dimension (manifest)</th>
<th>Estimated value of the standardized coefficients</th>
<th>t value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Instructional innovation</td>
<td>Innovation of teaching methods</td>
<td>0.9423</td>
<td>55.3277</td>
</tr>
<tr>
<td></td>
<td>Innovation of course design</td>
<td>0.9597</td>
<td>39.1263</td>
</tr>
<tr>
<td>Learning satisfaction</td>
<td>Learning attitude</td>
<td>0.9519</td>
<td>26.0988</td>
</tr>
<tr>
<td></td>
<td>Learning motive</td>
<td>0.9386</td>
<td>59.7635</td>
</tr>
<tr>
<td></td>
<td>Learning interest</td>
<td>0.9544</td>
<td>60.1323</td>
</tr>
<tr>
<td>Study achievement</td>
<td>Academic record</td>
<td>0.9088</td>
<td>59.8209</td>
</tr>
<tr>
<td></td>
<td>Numbers of professional license</td>
<td>0.8923</td>
<td>58.9923</td>
</tr>
<tr>
<td></td>
<td>External exams</td>
<td>0.7983</td>
<td>59.8217</td>
</tr>
</tbody>
</table>

Note: * indicated that t value was significant ($\alpha=0.05$)
Figure 2: The result of LISREL path analysis

Based on the test results, the following conclusions were drawn:

1. The instructional innovation of TVC in Taiwan had positive influences on students' learning satisfaction; since the estimated standardized coefficient was 0.3675, H1 was supported.

2. The instructional innovation of TVC in Taiwan had positive influences on the degree of students' study achievement; the estimated standardized coefficient was 0.13219, which indicated that the stronger the instructional innovation of TVC in Taiwan, the more the students' study achievement was improved; therefore, H2 was supported.

3. There was a positive relationship between learning satisfaction and students' study achievement in TVC of Taiwan; the estimated standardized covariance was 0.3872, which indicated that the higher the learning satisfaction, the more significant the students' study effect; by the same token, the higher the study achievement, the better the learning satisfaction; therefore, H3 was supported.

CONCLUSIONS AND RECOMMENDATIONS

Conclusions

According to the above-mentioned analysis results, the following conclusions were drawn:

1. In terms of the relationship between instructional innovation and students' learning satisfaction of TVC in Taiwan, there was a positive relationship between them. This result was consistent with those of Wang, X.R. (2002) and Jones & Paolucci (1999).

2. In terms of the relationship between instructional innovation and students' study achievement of TVC in Taiwan, instructional innovation would have a positive influence on students' study achievement, indicating that the stronger the instructional innovation, the more it would improve students' study effect. This result was consistent with that of Wang, Q.M. (2003).

3. In terms of the relationship between students' learning satisfaction and study achievement of TVC in Taiwan, these two factors would affect each other and there was a positive relationship between them. This result was partially consistent with that of He, R.G. (2001), in which only learning satisfaction would influence students' study achievement. In fact, the author discovered that students' study achievement would also influence their learning satisfaction.
Recommendations

The goal of instructional innovation was to increase the knowledge and wisdom of students; in other words, its goal was to impart knowledge and cultivate a high-quality learning process characterized by flexibility and wisdom. Therefore, innovation could provide students with valuable knowledge and increase the power of knowledge, which could be regarded as the fountainhead of learning motivation and high-quality study. Based on the results of this study, it was obvious that school education had to adapt to the development of society, using modern teaching tools, interactive teaching methods, and personalized innovative teaching content to improve students' learning satisfaction and study achievement. Therefore, the author proposes the following recommendations for teachers who would like to engage in instructional innovation.

1. Updating the teaching concept is the prerequisite of instructional innovation.

   Concept is the guidance of action. Therefore, instructors have to update their concepts and create new teaching models to meet the demands of innovation. Only when the concept of education has been innovated, can new instructional models be created.

2. The innovation of teaching content is the key to a successful instructional innovation.

   As the teaching content will keep changing with the development of modernization, instructors have to keep improving their teaching abilities; only by doing this can they adapt their teaching abilities to the changes and development of education and thereby meet the demands of their students.

3. Teachers' professional ethics is the motive of instructional innovation.

   Whether a teacher has good professional ethics will directly influence the quality of that teacher’s teaching. Being responsible to his career and the quality of his teaching is the basic professional ethic a teacher should have. Treating students with more respect, devoting themselves more to teaching, and thinking more about problems encountered are the ideal goals and inner motives for teachers, as well as the driving force behind instructional innovation.

4. The good professional quality of teachers is the foundation of instructional innovation.

   In the teaching process, teachers should seriously study the content of teaching materials and bring them into full play; furthermore, they should create personalized teaching methods, emphasizing the importance of ethics and reality, training students to solve problems with the theories they learned, and improving teaching methods, to best meet the instructional needs of all varying abilities and learning levels.

5. Innovating the form of teaching is the starting point of instructional innovation.

   Counseling is an important form of teaching that helps students accept instruction. To heighten students’ interests in learning and improve their study effect, teachers have to create new teaching styles, broadening their thought parameters, and bringing knowledge, vividness, interests, and practicability into the classroom. Innovating the form of teaching, is the starting point of instructional innovation.

   Developing an all-round education is our goal. Therefore, it is essential to provide students with a comprehensive education that includes good developmental opportunities, interpersonal skills, training opportunities that help cultivate students' rational judgment and personal expression abilities, their sense of objective observation and creativity, and perceptual abilities of caring and sacrifice. Only through these crucial improvements to instructional innovation can students have good ethics and a healthy temperament, and become solid individuals with both professional knowledge/skills and open minds.
REFERENCES

Biner, P. et al. (1997). Relative academic performance and its relation to facet and overall satisfaction with interactive tele-courses, Distance education, Volume 18, Number 2, p.318
Jones, Barbara Lynn (1996), Self-Efficacy And Personal Goals In Classroom Performance: The Effect of Task Experience, A Dissertation Submitted to the Kent State University Graduate School of Management in partial fulfillment of the requirements for the degree of Doctor of Philosophy.
Loo, Robert.(1999) Confirmatory Factor Analyses of Kolb’s Learning Style Inventory (LSI-1985), British Journal of Educational Psychology, 69, 213-219


