Online Workshop for Learning Strategies to Improve College Freshmen Learning

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Abstract

Most of college freshmen feel frustrated in using learning strategies when they start taking college courses. Therefore, this study developed an online workshop for learning strategies for Tamkang University freshmen to help them learn in college. This 3-year project was based on instructional design model and produced 4 units online workshop. The material was evaluated by Corporate Synergy Development Center and was rated "A". Freshmen voluntarily signed up for workshop. After finishing workshop, the evaluation was conducted. These freshmen, who were learning the online workshop, felt that they liked the online workshop and these learning strategies help them in their college studying.

1. Introduction

One of the important issues in education reform is to improve the quality of learning in college. Clark Kerr developed a regulatory system for every high school students in the United State who will attend different colleges [1]. No matter what kinds of colleges they attend, most freshmen face the similar difficulties in learning. Therefore, some scholars emphasized on college teaching, for example, Erickson, Peters and Strommer (2006) provided many perspectives for college teachers to design courses for freshmen [2]. Some scholars focused on students learning, for example, Bok (2006) [3]. Hence, how to help freshmen learn is an important task in higher education.

There are many different approaches to design academic programs for freshmen. Instructional design models systemize approaches to teaching. Tamkang University proposed a 3-year project based on instructional design model to develop an online workshop for learning strategies for freshmen. The first task in the system was to find out freshmen's needs to support their learning. Then, based on the results of needs assessment, learning strategies topics were decided.

Since Tamkang University admits about six thousand freshmen per year, the online workshop for learning strategies for freshmen would be a good way to reach each of them. Therefore, e-learning would be an effective approach to help freshmen learning successfully in college. The application of technological media not

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only increases students' motivation to learn but also provides an asynchronous web-based classroom platform [4] [5] [6]. In the past years, Tamkang University designed and implemented a web-based course 'Life in Cyber Space,' which is part of the Taiwan's Ministry of Education e-learning project, intended for in-service elementary and secondary teachers who teach in remote areas. The online course provided a convenient and practical in-service training choice for these teachers through both synchronous and asynchronous e-learning [7]. Therefore, Tamkang University decided to develop an online workshop for freshmen learning.

The purpose of this study was to examine the freshmen learning effects of the online workshop for learning strategies. Did freshmen like the workshop? Did the workshop help them learn in college? Therefore, the study followed the following steps:

• First, decide on the online topics from needs assessment.

• Second, develop the online workshop for learning strategies.

• Finally, implement the online workshop and evaluate the learning effects of freshmen.

In general, this study examined the learning effects of the freshmen in a learning strategies workshop, a web based blended e-learning workshop. This study also in the hope of gaining useful suggestions to teachers, instructional designers and university administers, provided a systematically programs for freshmen to enhance their learning in college.

Significance of this study is not only to provide a practical experience in developing a learning strategies online workshop to help freshmen but also to study the learning effects in online workshop. In another words, this study developed a good quality e-learning material and also examined the learning effects to enrich e-learning research.

2. Related Literature

This study focuses on examining the learning effects through the online workshop for learning strategies for freshmen. There is some literature in on-line instructional design and higher education related to freshmen learning.

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2.1 On-line Instructional Design

Instructional design is a systematical design, and it emphasizes the instructional elements such as needs analysis, learner character, content analysis, learning objectives, media, instructional strategies, and evaluation. According to Smith and Ragan (1993), the practice of instructional design is to target specific learners, select specific approaches, contents, and strategies, and make an effective teaching policy [8]. Almala (2007) reviewed the current issues in e-learning environments of higher education in the United States and indicated that more and more universities provide students with e-learning environment [9]. Although Guri-Rosenblit (2005) pointed out several paradoxes of e-learning in higher education, she agreed that the e-learning would be the trend in the future from her literature review [10]. Therefore, these studies encouraged Tamkang University to develop an online workshop for freshmen.

2.2 Higher education for freshmen learning

Studies showed that the lives of students who attend colleges were profoundly affected by their experiences in their first semester. Therefore, Svinicki(2004) and Bligh(2000) proposed many learning strategies for college freshmen [11] [12]. Hence, Tamkang University invited many scholars to publish a book for freshmen to help them to adjust to their college lives [13].

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3. Method

This study followed the procedure of instructional model and examined the learning effects of the online workshop for learning strategies. The research method is described below.

3.1. Procedure

Needs assessment was conducted for the first year project. A survey was conducted in the second semester. The questionnaire, College Students Learning Support System Needs Assessment, was developed from the previous research [14]. The questionnaire contained 28 items with 5 Likert-type Scale (ranging from strongly agree to strongly disagree). All the freshmen at Tamkang University were asked to fill in the questionnaire. There were 5,197 questionnaires sent to the freshmen, and 3,804 were returned. The return rate was 73.2%. One hundred and thirty invalid questionnaires were then eliminated. As a result, the total valid questionnaires were 3,674. The total valid questionnaires took 70.9%. The reliability α was .91. Table 1 shows the gender distribution of freshmen.

Table 1. The gender distribution of freshmen

Sex	Number	Percentage %
Male	1,785	48.6%
Female	1,889	51.4%
Total	3,674	100%

In the second year of the project, the online workshop for learning strategies was developed and evaluated. From the findings of the first year survey, Tamkang University decided the units to be offered in the online workshop for learning strategies. The four units were "Memory Skills", "Strategies for Reading English Textbooks", "Time Management", and "Test-Taking Skills" in figure 1.

Figure 1. Four learning strategies workshop units

Each unit required about one hour learning time. In order to motivate freshmen to learn, this online workshop provided examples of real-college-life experiences. The online workshop applied interaction, animation, multi-media, and game or simulation to the development of the units. During the time of development, the instructional designers, programmers, artists, and content experts were worked together. Then, the workshop materials were evaluated by Corporate Synergy Development Center. As soon as the feedback was given, the units were revised. The summative evaluation of the online learning strategies materials was rated "A".

In the third year of the project, the online workshop for learning strategies was implemented. E-tutors were available to assist the workshop running. At the same time, a meeting for freshmen advisers was held, and they were asked to encourage their students to take this online workshop.

3.2 Participants

In the third year of the project, the freshmen were voluntarily signed up for the workshops. During the workshop sections, in the fall semester, there were e-tutors to discuss with them either synchronously or asynchronously. At the end of the fall semester, the participants were asked to fill in a questionnaire about the

effectiveness of their learning. Since freshmen were not required to attend the online workshop, only 1,051 freshmen took the workshop and answered the questionnaire. After eliminating missing data, 457 questionnaires were valid.

In the spring semester, a survey to investigate freshmen's learning support system needs was held again. There were 5,652 questionnaires sent to the freshmen, and 3,834 were returned. The return rate was 67.8%.

4. Results

The results of the questionnaires were reported separately.

4. 1. The results of needs assessment

The first year survey investigated freshmen's learning support system needs. The results of the students responses' were ranked below as shown in table 2.

Table 2. Learning support system needs ranking list for 2007

Rank	Item
1	Second Language Learning Strategies
2	Test-Taking Strategies ****
3	Critical Thinking
4	Memory Skills Strategies *
5	Diagnosis of Learning Difficulty
6	Strategies for Reading English Textbooks **
7	Attention span Skills Strategies
8	Time Management Strategies ***
9	Oral Report Skills Strategies
10	Financial Support
11	Speech Skills Strategies
12	Reading Comprehension Strategies
13	Learning Objectives Skills Strategies
14	Assistant on Choosing a Course
15	Writing Skills Strategies
16	Data Collection Skill Strategies
17	Research Skills Strategies
18	Paper Writing Skills Strategies
19	Notes Taking Skills Strategies
20	Internship Support
21	Assistant on Development of Learning Attitude
22	Pressure Release Strategies
23	Data Analysis Skills Strategies
24	Body Language Skills Strategies
25	Peer Study Group Help
26	PPT Skills Strategies
27	Computer Software Strategies
28	Learning Difficulty Consult

* indicating the learning strategies workshop units

4. 2. The Learning Effects of online workshops

At the end of the fall semester, students were asked to fill in a questionnaire about their satisfaction of the online workshop. The results (ranging from 1 to 6) are listed in table 3.

Table 3. The satisfaction of the workshop units

Unit	Average
Memory Skills	4.26
Strategies for Reading English Textbooks	4.12
Time Management	4.25
Test-Taking Skills	4.19
Average of the Whole Online Workshop	4.21

The result of learning effects after taking this online workshop for learning strategies, most of the freshmen felt this workshop helped them in their college studies. The result is in table 4.

Table 4. The distribution of learning effects

	Number	Percentage %

Very Helpful	48	10.50%
A little Helpful	253	55.36%
Help	142	31.07%
Not Helpful at all	14	3.07%
Total	457	100%

4.3. The Result of Learning Supports System

The result of the third year survey, the College Students Learning Support System Needs Assessment, is shown in table 5.

Table 5. Learning support system needs ranking list for 2009

Rank	Item
1	Financial Support
2	Second Language Strategies
3	Paper Writing Skills Strategies
4	Speech Skill Strategies
5	Oral Report Skills Strategies
6	Critical Thinking
7	Assistant on Choosing a Course
8	Test-Taking Strategies ****
9	Internship Support
10	Time Management Strategies ***
11	Attention span Skills Strategies
12	Research Skills Strategies
13	Memory Skills Strategies *
14	Writing Skills Strategies
15	Data Collection Skills Strategies
16	Strategies for Reading English Textbooks **
17	Notes Taking Skills Strategies
18	Reading Comprehension Strategies
19	Learning Objectives Skills Strategies
20	Assistant on Development of Learning Attitude
21	PPT Skills Strategies

22	Body Language Skills Strategies
23	Pressure Release Strategies
24	Computer Software Strategies
25	Peer Study Group Help
26	Data Analysis Skills Strategies
27	Diagnosis of Learning Difficulty
28	Learning Difficulty Consult

* indicating the learning strategies workshop units

Some differences in ranking were found when the ranking list in 2007 and 2009 were compared, as shown in table 6.

Table 6. Top 10 items for 2007 and 2009

	Year of 2007	Year of 2009
1	Second Language LS	Financial Support
2	Test-Taking S****	Second Language LS
3	Critical Thinking	Paper Writing Skills S
4	Memory Skills S*	Speech Skills S
5	Diagnosis of LD	Oral Report Skills S
6	Strategies for Reading English Textbooks **	Critical Thinking
7	Attention span Skills S	Assistant on Choosing a Course
8	Time Management S***	Test-Taking S****
9	Oral Report Skill LS	Internship Support
10	Financial Support	Time Management S***

* indicating the learning strategies workshop units

The four units of the online workshop changed the ranking in 2007 and 2009. The needs for time management and test-taking were dropped down to 10 and 8. The needs for memory skills and the Strategies for Reading English Textbooks were even dropped out of 10.

5. Conclusion and Suggestions

Based on the procedures of instructional design model, online workshops for learning strategies would provide a good quality learning resource for freshmen learning. The students felt the online workshop helped their college learning, and the needs assessment also indicated the effects of the online workshops. Although the number of the participants of the online workshop is not large enough, the differences of the needs assessment indicated that a good program would help freshmen learning as suggested by the same with Svinicki and Bligh. The purpose of this study was to propose helpful ways for freshmen to learn effectively in college, and the results can support the fact that the online workshops were good resources for freshmen.

Based on the study, the researchers would like to suggest the fowling points.

- For future studies: Future studies may look for possible chances and scaffold to help freshmen learning in higher education. Needs assessment may also be collected from different sources such as interview.

- For the university policy makers: policy makers are suggested to integrate different resources to develop a system helpful for freshmen learning.

- For freshmen: To learn effective in college, college freshmen are strongly suggested to attend online learning workshops available for them.

Acknowledge

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