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The Effect of Web-based Training on Hospitality Students' Internship Learning

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ABSTRACT The hotel industry is operating in a highly competitive environment. For tourist hotels, one of the best ways to enhance the competitiveness is to provide immediate and effective interns training. Through the web-based computer assisted learning, intern students' training costs can be substantially reduced. In this study, the researchers evaluated "learning motivation", "learning attitude", and "learning effectiveness" of test subjects that were selected from hotel service interns working in the food catering department of international tourist hotels. In this experiment, the researchers taught them how to follow the correct service procedures using three different teaching methods, namely expository teaching, computer-aided training, and web-based training. The researchers then utilized ANOVA and step-wise regression approach to analyze and consolidate the learning results. This study addressed the issue of introducing web-based training to hotel's intern students. Thereafter, the researchers studied the actual effects once the hotel introduced web-based computer assisted instruction, to confirm whether or not it can enhance the learning effectiveness of intern students.

INTRODUCTION

Competition in the hotel industry is heating up, as every hotelier is feeling the impact of market competition. Business organizations are eager to strengthen their operating structure for creating the competitive advantage. Since the international hotel industry always places great emphasis on the service quality and attention to details in order to maintain the market competitiveness, service personnel have to rapidly catch up with new trends, and may have to be re-trained occasionally. Work and study are part of the routine activities of hotel workers that need to be carried out simultaneously. However, since international hotel industry is so labor-intensive, the traditional corporate training curriculum cannot fulfill the human resource development for international hotel industry (Tsou 2001). Therefore, the tourist hotel industry relies heavily on technological advances to design the educational training strategy for the service personnel, so that it can meet their business needs.

With the advantages of the information technology and the popularization of the internet service, educational training can be realized through the computer network with fast speed and flexible demand, over a large scale. As a result, the training costs could be substantially reduced (Horton 2000; Driscoll 2002). Web-based computer-assisted instruction has created great impact over the traditional education and training. Many trainers, experts and scholars believe that the information technology has reformed the educational practices by introducing innovative teaching methods (Moursund 1992; Mehlinger 1996; Dexter et al. 1999; Dias 1999). Web-based learning and training systems are coming on fast to replace the traditional business educational training systems (Rand 1996) and benefiting trainer and student from computers for instructional purposes (Dogan 2013). Business organizations widely use web-based training (WBT), because it is more effective and enables considerable saving on manpower and money. In the past, organizations had to make plans for in-house training or send interns to outside training centers to take scheduled lessons. Moreover, the use of computer network learning method means more flexibility and space for employees while they can work and learn at the same time. The schedules can be carefully worked out without affecting corporate productivity and service quality, or interfering with their regular duties (ASTD 2001).

Web-based training is a means of providing distance learning through Internet, Intranet, or

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World Wide Web using innovative learning model (Hall 1997) and the form of teaching thinking via web-based computer simulation which is available and easy to access (Abdullah and Shariff 2008). With the advantages of information technology and the popularization of the internet, educational training can be realized through the network with fast speed and flexible demand, over a large scale. It usually involves lower training costs (Horton 2000; Driscoll 2002). Therefore, many scholars emphasizing the importance of information technology rely on computer integrated instruction or technology integration in teaching. They also provide lessons on how to use the information technology in training programs and classroom teaching (Dias 1999; Sprague and Dede 1999; Ertmer et al. 1999). Technology integration is included in regular curriculum (Curriculum Integration) as an important strategy. For the hotel industry, web-based training may provide needed training for their interns without the constraints of space and time. Especially for well-known international hotel chains, time, distance, and travel are their major considerations in the planning and development of the training curriculum. Web-based training method is a cost-effective method of interns training for first-line service personnel (Das et al. 1999). It not only will improve the quality of hotel services, but also can reduce the training costs substantially. Therefore, the introduction of web-based training system is considered an effective strategy for enhancing the learnning performance of intern students.

Web- based Training

Since the 1990s, information technology has become more mature for the development of online staff training programs, so the application of network technology is becoming more and more widespread (Ruttenbur et al. 2000). Today's teachers have to be able to know how to use this technology wisely for effective teaching and learning (Baytak and Hirca 2013).Web- based training is an implementation of training activities through the web. For most training recipients, their learning environment is simply to find a computer in their organization and then log onto the computer that has network access, through which they may receive online training by browsing through web pages (Nichols 1997; Dyer 1997). the lesson content of web-based training can be modified and updated at any time, as it is designed to be self-directed (self-directed) and self-tuning (self-paced) learning (Hall 2001; Discroll 2002). Web-based training also has the characteristics of mass media, as training, evaluation, and other learning activities can be carried out through independent computer platforms. In addition to the benefits of original computer-aided training, web-based training can also be implemented without the physical constraints of space and time. Also, WBT demands less resource, and yet it can offer more flexibility and diversity.

Contents of web-based training may be designed for variety of formats. It can improve learner's self-learning performance, while having high degree of interactivity and feedback. The two-way communication encourages information and resource sharing across the organization. Furthermore, its implementation can save the training costs as well as other benefits (Hall 1997). Routine lessons are very suitable for web- based training, such as the internal service processes in many departments of tourist hotel (Johnson 2000). In addition, the worker turnover rate in many tourist hotels is high. By strategy alliances, many hotels may corporate with schools and employ a lot of intern student. If hoteliers use web-based training system, it not only can provide interns with new learning environment, but also enables substantial savings in training costs. If a tourist hotel operates as part of an international hotel chain, web-based training curriculum can realize considerable savings on time, travel distance, and travel expenses through the introduction of web-based training system (Das et al. 1999).

Expository Teaching and Web-based Instruction

Expository teaching has long been the most commonly used teaching method. Using this teaching method, teachers do the talking when giving instructions, where students sit in the classroom and listen to them passively. The advantages of this teaching method are identified in this study. Students can save time in the process of knowledge acquisition; it is easy for teachers to control the instruction pace and order in classroom; because teachers explain subjects with enthusiastic and humorous attitude, dramatic effect, and logical explanation, students are willing to learn the lessons. The disadvan-

tages are identified in our study. All teaching activities are centered on teachers; students only need to listen to the instructions, and take notes occasionally, but this falls short of active learning and participation; the traditional teaching method tends to ignore individual differences among students, so students are unable to develop the problem solving ability on their own.

Computer-assisted instruction is to use the computer as a teaching tool which stresses the importance of adaptive learning. Its advantages are identified in our study. The learning programs can be individualized; students can set their own pace of learning; they can learn how to solve problems through trials and errors, and in different circumstances; it may also reduce the pressure of learning. Its disadvantages are identified in our study. It is more costly than the traditional teaching method; it lacks humanity, so that it can be easily influenced by human factors; it is more difficult to analyze the learning effectiveness.

According to the currently published literature, a combination of computer-assisted instruction and traditional expository teaching may produce remarkable learning effects (Dalton and Hannafin 1988). This means the above two teaching methods can produce complimentary effect for each other, while using the expository teaching as the main teaching tool, and the computer-assisted instruction as supplement. This combined teaching method can be introduced to mathematics and science classes at junior high level. In this study we established hypothesis 1 (H1), by inferring that three different teaching methods will produce significant differences in "learning effectiveness" in the process of training.

Learning Motivation, Learning Attitude and Learning Effectiveness

Kotler (1997) believed that motivation is the result of stimulated demand that is sufficient to trigger actions in order to fill that individual's need. Domestic scholars like Chang (1994) believed that motivation is the mental process of an individual, from triggering of thinking, maintaining the action, and directing the action towards a target. The driving force comes from inner self of individual, which is strong enough to affect and change the individual's behavior. Motivation may be in the form of interest, attitude and desire for something (Munn 1969). It therefore triggers action, directs and maintains the ongoing behavior (Baron 1998).

For service internships of tourist hotels, their motivation to receive education and training is closely related to the work environment (Miller 1967). At the same time, if students consciously know that the instruction content will meet their interests and needs, their learning satisfaction from such instruction will be increased (Lam and Wong 1974).

For the e-learning process, attitude, experience, cognitive and learning styles are the four key indicators that are used to measure the learning effectiveness of students (Simonson et al. 2000), in which learning attitude is the most important of all indicators. Attitude can direct the perception of an individual towards certain things, so attitude will have direct bearing on effectiveness of learning. Thus, "learning effectiveness" and "learning motivation" of student are related to each other. If a student shows high motivation for learning, the student's learning results will be enhanced (Berdie 1965; McCombs 2000). In this study, the researchers set Hypothesis 2 for this research by inferring that there is positive and significant link between "learning motivation" and "learning effectiveness" (H2). Also, for the same reason, a positive and significant link between "learning attitude" and "learning effectiveness" (H3). This research was designed for comparing "learning effectiveness" of student using three different teaching methods, namely, expository teaching, computer assisted training, and web-based training. This study further infers that the use of three different teaching methods will have certain degree of moderating effect on the causal link between "learning motivation" and "learning effectiveness" (H4). Similarly, certain degree of moderating effect also exists on the causal link between "learning attitude" and "learning effectiveness" (H5) using three different teaching methods.

RESEARCH FRAMEWORK

The present study is mainly focused on the learning effectiveness of intern students of international tourist hotel once the hotel introduced computer-assisted instruction. The researchers also explored the explicit correlation between the two, using three different teaching methods as a disturbance variable. The relationship between variables and hypotheses used in this study are

all given in Figure 1. The framework of our research is delineated basing on various hypotheses researcher set for this study.

Design of Research and Implementation

Under this research framework, all related factors for this study are classified into three types, namely, independent variables, dependent variable, and disturbance variables. "Learning motivation" and "learning attitude" are set up as independent variables, and "learning effectiveness" as dependent variable, and three different teaching methods as disturbance variable. Likert's seven-point scale (Likert Scale) is adopted for measuring the performance results.

For this study, a questionnaire is designed that includes the evaluation of four target dimensions, namely, learning motivation dimension, learning attitude dimension, learning effectiveness dimension, and demographic data variables. For the learning motivation dimension, this study has modified some part of the motivation scale original developed by Huang (1985) "Motivation Scale for Adults Participation in Continuing Education," with 15 questions used for our study. For the learning attitude dimension, researcher referred to the work of Liaw et al. (2007) with the title "Questionnaire to Study the Attitude of College Students towards E-learning Systems", so 12 questions are used for this study. For the learning effectiveness dimension, the researchers used the concept of Huang and Chien (1993) by allowing each student to actually learn and experience through expository teaching, computer-aided training, and web-based training respectively. Thereafter, a questionnaire is given with six questions asking what they have learnt from the above teaching methods. The survey data are collected, then quantified, and consolidated with relevant demographic data for each test subject. A statistical distribution is produced based on the demographic data variables, such as gender, marital status, work unit, age, educational level, and other variables.

The researchers' formal study was based mainly on quasi-experimental design basing on the education and training programs developed for the human resources department of 16 international tourist hotels in Taiwan. In this research, test subjects were selected from intern students that were attending the internal training courses

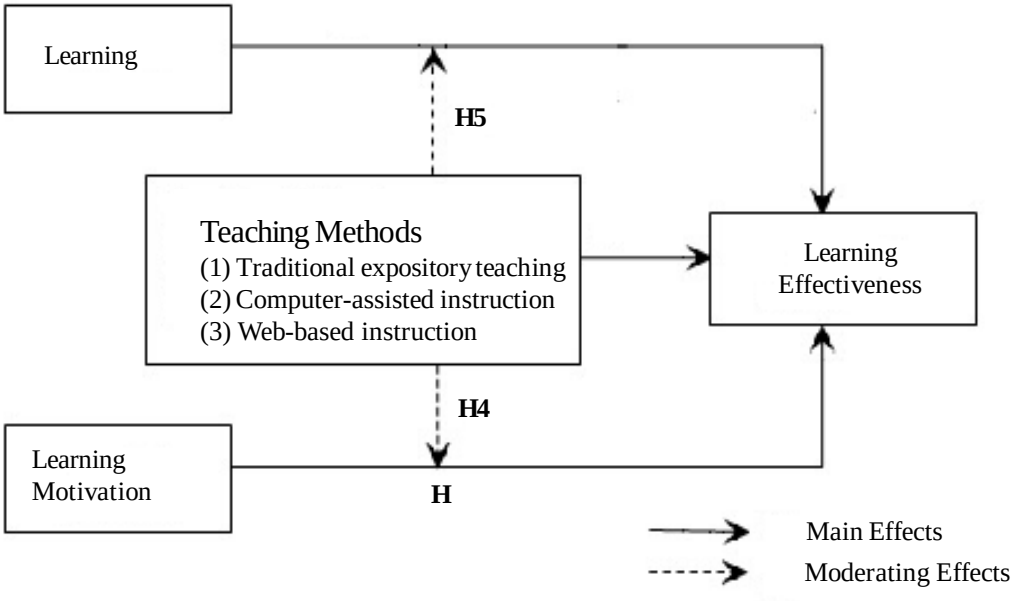

Fig. 1. Research framework

provided by 16 international tourist hotels. The research team also acted as lecturers. Test subjects were intern students in the same group that worked in the Chinese Food Department, Western Food Department, and LOGUE BAR respectively. The teaching content was focused on the service process of food catering services. Teaching was conducted by means of expository teaching, computer-assisted training, and web-based training on rotation basis. For expository teaching and computer-assisted training, 50 minutes of instruction time is assigned for each lesson, and for skill teaching lessons the class time is divided up into 15 minutes for teaching and 35 minutes for practice. For research experiment, 5-6 students are assembled to form one group to learn and practice the food catering service procedures, so altogether 6 groups are formed. Students of web-based training are provided with opportunity to practice what they have learnt. Each teaching method is implemented for one week, in rotating through three different teaching methods. The experiment is tested on selected service staff of the three departments mentioned above. The experiment lasts for two months, so that each student becomes quite familiar with three different teaching methods. Then, the questionnaire is distributed to these students asking them to fill out all the questions.

For test subjects, who are asked to respond to the questions in the questionnaire, 39 come from the Chinese Food Department; 34 from the Western Food Department; and 36 from Logue Bar. From a total of 109 test subjects taking part in the questionnaire survey, 17 are deemed invalid questionnaires (representing 15.6% of the total number of questionnaires issued). These questionnaires are invalid mainly because respondents failed to answer all the questions asked, or they filled out the questionnaire with similar answers for all questions, or they had not completed the education and teaching program using all three teaching methods, or they took leave of absence in the learning process. After removing the invalid questionnaires, 92 of the questionnaires are considered valid (84.4% of the total number of respondents). The results of confidence analysis show that Cronbach's á values for target dimensions are all greater than 0.8, so the pre-study questionnaire has obtained good reliability, as shown in Table 1.

Table 1: Results of confidence analysis for target dimensions

Target dimensions	*Scaled questions*	*Cronbach's α values*
Learning motivation dimension	15 items	0.875
Learning attitude dimension	5 items	0.906
Learning effectiveness dimension	12 items	0.869

RESULTS AND DISCUSSION

Description of Data Sampling

The results of analysis on the basic personal information of respondents are given in Table 2. It shows that almost 70% of test subjects were male (66 / 71.8%). 31 respondents came from the Chinese Food Department, 29 respondents from the Western Food Department, and 32 respondents from the LOGUE BAR. The majority of respondents were in the age group of 21-40 years old. Most respondents have an education level of college degree (64 / 69.6%), while the average monthly income for respondents is NT $ 45,000 or more (123 / 53%). Most respondents have seniority of 1-2 years in the organization they work for (47 / 80.6%), followed by 3-4 years (26 / 28.3%). The average monthly income for most respondents was 10,000-30,000 NTD (56 / 60.8%). From the above data, it can be seen that most of the hotel staff under training are relatively new to their jobs.

Hypothesis Testing

Variance Analysis for Learning Outcome from Three Different Teaching Methods

For this study, hypothesis 1 is set by inferring that there is significant difference in learning effectiveness using three different teaching methods (H1). To verify this hypothesis, ANOVA test and Scheffe Post Hoc test are used, taking $\alpha = 0.05$ as significance level. The learning outcome from three different teaching methods is analyzed. The test results are 4.066 for F value and 0.026 for P value. Thus, our hypothesis is verified that significant difference exists in the learning effectiveness from three different teaching methods, as shown in Table 3. Following our cross comparison, it can be seen that web-based

Table 2: Frequency of sample data in each group from demographic data analysis

Variable Name		*Frequency*	*Percentag (%)*	*Variable Name*		*Frequency*	*Percentage (%)*
Gender	Male	67	80.6	*Monthly*	0 -15,000	4	4.2
	Female	28	29.4	*Income*	15,001-30,000	57	
				(NTD)	60		
Work Unit	Chinese Food Department	31	32.6		30,001-45,000	23	24.2
	Western Food Department	29	30.5		45,001 or more	11	17.6
	LOGUE BAR	35	36.9				
Age	Under 20	2	2.1	*Seniority*	1-2 years	48	50.5
	21-30	52	54.7		3-4 years	26	27.4
	31-40	36	37.9		5-6 years	19	20
	41-50	5	5.3		7 years or more	2	2.1
Education	Graduate School (or above)	24	25.2				
Level	College	66	69.5				
	Senior H or vocational schools	3	3.2				
	Junior H (or below)	2	2.1				

Table 3: Variance analysis results for learning outcome from three different learning methods

Dependent variables	*F value*	*P value*	*(a)Teaching method*	*(b)Teaching method*	*Mean variance (a-b)*	*Significance level*
Learning effectiveness	4.066	0.026	Web-based training	Computer-assisted training	.2412	.017
				Expository teaching	.3967	.005
			Computer-assisted training	Web-based training	-.2412	.017
				Expository teaching	.1444	.048
			Expository teaching	Web-based training	-.3967	.005
				Computer-assisted training	-.1444	.048

instruction can produce the best learning result, followed by computer-assisted training, so hypothesis 1 is substantiated.

Testing of Correlation between Learning Motivation, Learning Attitude and Learning Effectiveness

For this study, multiple correlation coefficients and step-wise regression analysis are used to test hypothesis H2 and H3. Table 4 shows the mean values for variables, standard deviation values and correlation coefficients. In this study, the correlation coefficients for all variables have reached the significance level of $p < .01$. As shown in Table 4, the correlation between "learning motivation" and "learning attitude" produces high correlation coefficient (r =.76); the correlation between "learning attitude" and "learning effectiveness" shows moderate correlation coefficient (r =. 64); the correlation between "learning motivation" and "learning effectiveness" shows moderate correlation coefficient (r =. 65).

As the first step, the demographic data variables are plugged into the regression model, and then "learning motivation", "learning attitude", "predicted learning effectiveness" are entered in the second step. The results of step-wise regression are obtained as shown in Table 5. It can be learnt that, under the control of demographic data variables, the effect of "learning motivation" over "learning effectiveness" can be predicted

Table 4: mean values for all variables, standard deviations and correlation coefficients

	Mean value	*Standard deviation*	*Learning motivation*	*Learning attitude*	*Learning effectiveness*
Learning motivation	4.15	.57			
Learning attitude	4.02	.53	.76**		
Learning effectiveness	3.88	.60	.64**	.65**	

Note: a. n = 95; * p <.05, ** p <.01

(ΔR^2 =.493, p<.01). The result shows significant positive correlation (β=.533, p <.01). Similarly, under the control of demographic data variables, the effect of "learning attitude" over "learning effectiveness" is also predictable (ΔR^2 <.526, p<.01), while significant positive correlation (β =. 780, p<.01) is shown.

Table 5: Outcomes of step-wise regression analysis for the relationship between learning motivation, learning attitude and learning effectiveness

		Learning effectiveness		
	Prediction variable	*β*	R^2	ΔR^2
First Step	Demographic Data Variables		.004	
Second Step	Learning Motivation	.533**	.498**	.493**
	Learning Attitude	.780**	.528**	.526**

Notes: a. n = 95, * p <.05, ** p <.01

The results of regression analysis show that H2 and H3 are substantiated. It can be seen that when students have shown proactive motivation and positive learning attitude, positive outcome will be produced for their skill learning and learning ability through active participation in the staff training program. More importantly, positive attitude toward learning has been proven that it can substantially improve the outcome of learning process.

Testing of Moderating Effect of Three Different Teaching Methods on the Causal Link between "Learning Motivation" And "Learning Effectiveness", and the Correlation between Them

For testing the moderating effect of three different teaching methods on the causal link between "learning motivation" and "learning effectiveness", and the correlation between them, this study sets out hypothesis 4 and 5. In the first step, demographic data variables are plugged into the regression model, and then "learning motivation" and "learning attitude" are entered to test the predictability of "learning effectiveness". The same testing procedures are repeated for all three different teaching methods, so as to generate the analysis results as shown in Table 6.

The analysis results are given in Table 6. It can be seen that, even with the three different teaching methods given in rotation, positively correlation still exist on the relationship between "learning motivation", "learning attitude" and "learning effectiveness". But careful study of the regression outcome one can find that, the causal link between "learning motivation" and "learning effectiveness" is the highest when using web-based training method and computer-aided training method, so "learning effectiveness" attains the highest level. When using web-

Table 6: Different teaching methods on the causal link between "learning motivation" and "learning effectiveness"

	Moderating effects analysis	*Web based training*			*Computer assisted training*			*Expository teaching and training*		
		β	R^2	ΔR^2	*β*	R^2	ΔR^2	*β*	R^2	ΔR^2
First Step	Demographic data variables		.093			.002			.108	
Second Step	Learning motivation	.459**	.612	.520**	.453*	.643	.630**	.394*	.538	.430**
	Learning attitude	.724**	.599	.506**	.800**	.596	.574**	.642**	.602	.494**

Notes: a. n = 95, demographic data variables, including divisions, gender and so on. *p<.05,**p<.01.

based training, the impact of students' motivation over learning is significantly higher than that using expository teaching and training. For students' learning attitude, the introduction of e-teaching will produce far more impact on students than the regular and traditional learning and training methods. In the process of internships training, it is found that the use of three different teaching methods in rotation definitely has an impact on the outcome of student learning. Thus, this result has verified that the use of three different teaching methods will produce moderating effects over the causal link between "learning motivation" and "learning effectiveness", as well as the casual link between "learning attitude" and "learning effectiveness", so H4 and H5 of our study are also substantiated.

CONCLUSION

From the test results, it can be found that e-learning is far better than the traditional learning method. Some possible reasons are identified in our analysis. Because the food catering service procedures practiced by international tourist hotels are meticulous and often repetitive, for relatively new service interns, it will be more difficult to understand the details through expository teaching and training within a short period of time, not to mention digesting the the materials learnt and letting them become part of their skills for rendering of services. Coupled with another problem, expository teaching does not give students an opportunity to visualize the service procedures in the form of digital images.

However, through computer-assisted instruction, students can learn step by step, and the instructions can guide them through the whole process. It can provide full explanation when needed, and even can correct their action through simulation exercises. Furthermore, web-based training gives students more freedom in terms of time and space. Students just need to log onto the computer with network access and attend a lesson at any time any place; correct procedures may be learnt through repetitions. Since their working hours are more than other industries, the working conditions in tourist hotels are generally considered as labor-intensive. Thus, web-based training is very suitable for their interns training. Students are allowed to set the learning schedules according to their own pace. Thus, their learning motivation will be higher compared with the previous situations when they had to allocate time to sit in classrooms and attend traditional training. As a result, they now show more positive attitude towards e-learning, so their learning effectiveness is expected to increase.

REFERENCES

Abdullah S, Shariff A 2008. The effects of inquiry-based computer simulation with cooperative learning on scientific thinking and conceptual understanding of gas Laws. *Eurasia Journal of Mathematics, Science and Technology Education*, 4(4): 387-398.

ASTD 2001. A Vision of E-learning for America's Workforce. From < http://www .astd.org/virtual_ community/ public_policy/PubPol_E_Learning.html> (Retrieved on September 18, 2012).

Baytak A, Hirca N 2013. Prospective teachers' lived experience on computer-based instructional materials: A phenomenological study. *Anthropologist*. 16(1-2): 97-109.

Baron RA 1998. *Psychology*. 4th Edition. Boston: Allyn & Bacon.

Berdie RF 1965. *Perceptions of the University of Minnesota: A Progress Report.* Student Counseling Bureau, Office of the Dean of Students, University of Minnesota. (Mimeo)

Chang CH 1994. *Modern Psychology.* Taiepi: Tunghua.

Das S, Yost S, Krishnan M 1999. Effective Use of Web-based Communication Tools in a Team-oriented, Project-based, Multi-disciplinary Course. *Frontiers in Education Conference, FIE '99. 29th Annual* (Volume: 2), 10-13 November. 1999, San Juan, pp.13A2: 14-17.

Dalton D W, Hannafin M J 1988. The effects of computer-assisted and traditional mastery methods on computation accuracy and attitudes. *Journal of Education Research*, 82: 27-33.

Dogan Y 2013. Teachers and students' benefiting from computers for instructional purposes: Bursa example. *Anthropologist*, 16(1-2): 133-143.

Dexter SL, Anderson, RE, Becker HJ 1999. Teachers' views of computers as catalysts for changes in their teaching practice. *Journal of Research on Computing in Education*, 31(3): 221-239.

Dias LB 1999. Integrating technology: Some things you should know. *Learning and Leading with Technology*, 27(3): 10-13, 21.

Driscoll M 2002. *Web-based Training: Creating E-learning Experiences.* 2nd Edition. San Francisco: Jossey-Bass/Pfeiffer.

Dyer B 1997. Web-based Training Pros and Cons. From http://dyroweb.com /wbt/ page1.html> (Retrieved on July 18, 2013)

Ertmer PA, Addison P, Lane M, Ross E, Woods D 1999. Examining teachers' beliefs about the role of technology in the elementary classroom. *Journal of Research on Computing in Education*, 32(1): 54-72.

Hall B1997. *Web-based Training Cookbook*. New York: John Wiley and Sons.Inc.

Hall B 2001. New Technology Definitions. Brandonhall: From <http:// www.brandonhall.com/public/glossary/glossary.html>(Retrieved on March 18, 2004).

Hwang FS 1985. *An Exploration Into the Relationship Between Learning Style, Motivation and Satisfaction of Continue Educational Students—An Example of Institute of Continuation Education.* Kaohsiung: Wuwen Ltd.

Hwang KH, Chien MF 1993.*Educational Research*. Taipei: Normal University Book Store.

Horton W 2000. *Designing Web-based Training*. New York: John Wiley and Sons.Inc.

Johnson AH 2000. Learning by Wire. *Computerworld*, 34(26): 96~98.

Kotler P 1997.*Marketing Management-Analysis, Planning, Implementation, and Control*. 9th Edition.. New Jersey: Prentice-Hall.

Lam Y, Wong A 1974. Attendance regularity of adult learners: An examination of content and structural factors. *Adult Education*. 24: 130-142. (ERIC Document Reproduction Service No.EJ092 333).

Liaw SS, Huang HM, Chen GD 2007. An activity-theoretical approach to investigate learners' factors toward e-learning systems. *Computers in Human Behavior.* 23(4): 1906-1920.

McCombs BL 2000. Reducing the achievement gap. *Society*, 37(5): 29-39.

Mehlinger HD 1996. School reform in the information age. *Phi Delta Kappan*, 77(6): 400-407.

Moursund D 1992. *The Technology Coordinator. Eugene*. Oregon: International Society for Technology in Education.

Munn NL 1969. *Introduction to Psychology.* Boston: Hougmton Miffin Co.

Miller HL 1967. *Participation of Adults in Education: A Force-Field Analysis.* Boston: Center for the Study of Liberal Education for Adults. Boston University.

Nichols G 1997. Grag's Web-based Training Place. From <http://www.bconex.net/~gnichols/index.html> (Retrieved on May 12, 2012).

Rand A 1996. Technology transforms training. *HR Focus.* 73(11): 11-13.

Ruttenbur BW, Spickler GC, Lurie S 2000. E-Learning-The Engine of the Knowledge Economy, From <http://www.masie.com/masie/researchreports/elearning0700nate2.pdf> (Retrieved on June 4, 2012)

Sprague D, Dede C 1999. If I teach this way, am I doing my job? Constructivism in the classroom. *Learning and Leading with Technology*, 27(1): 6-9, 16-17.

Tsou CP 2000. Questions are more important than answay. The critical issues of business must adapting WBT. *Management Magazingt Taipei*, 309: 38-41.