Promoting of Knowledge and Moral Lessons about the Life's 38 Blessings with Video on the Web-Based Instruction

Sirichom Pichedboonkiatrst

Abstract—An action research analysis of findings from 120 controlled evaluation studies showed that web-based instruction with the title on the Life's 38 Blessings usually produces positive effects on students. The studies covered learners of undergraduate students who registered the Life and Social Skills subject in the second semester year 2013. The Life's 38 Blessings on WBI raised student examination scores by 86.64 standard percent in the average study, and changed their behaviors by 4.12 standard deviations in the average study, a high significant effect. Size of effect varied, however, as a function of study feature. The Life's 38 Blessings on WBI also produced small but positive changes in student attitudes toward teaching and computers, and it reduced substantially the amount of time needed for instruction.

Index Terms—Web-based instruction, knowledge, moral, life's 38 blessings, undergraduate students.

I. INTRODUCTION

21st century is called an information age. In this information age, the developments in science and technology influence the structure of the economy, society and educational systems, and information and communication technology has provided enormous opportunities for developments all around the world. Rapid growth and development in ICT has conducted to the diffusion of technology in education [1] therefore, ICT is nowadays indispensable for educational studies, such as surveys, presentations, project work or research, online and distant and web-based learning. Not only is ICT the basis of learning environment, but also it provides individuals to have lifelong learning, to improve educational outcomes, to learn new occupational skills, and to decrease inequities between groups. Web-based instruction offers multiple dimensions of use in education and training environments. As with Computer-Based Instruction, it is capable of providing direct instruction to meet individual learning objectives. Due to its networking capability, the Web-based instruction can play additional roles. These include promoting and facilitating enrollment into courses, availing the syllabus or program of instruction, posting and submitting assignments, interacting with instructors and fellow students, collaboration on assignments, and building learning communities [2].

The Web-based instruction has become a powerful tool for learning and teaching at a distance. Its inherent flexibility

Manuscript received July 4, 2014; revised September 12, 2014.

allows application in a variety of ways within an educational context, ranging from simple course administration and student management to teaching entire courses online. Each of these types of use works towards a different goal. These goals should be recognized when evaluating the use of the Web. For example, an instructor may hold face-to-face lectures in a classroom but post the class syllabus, assignments, and grades on the Web. In this case, it may not be appropriate to evaluate the use of the Web with respect to learning outcomes since the Web was not used in a direct instructional role [3].

For these reasons, a better understanding of the relationship between learning and teaching towards web based instruction would prove to be beneficial. In the light of the foregoing issues, the purpose of this study was to investigate whether personality traits were related to learners' attitudes towards web based instruction and academic achievement in a web based instruction.

A. Purpose of the Research

The aim of this study is to investigate the effects of the web-based instruction with the title the Life's 38 Blessings on the achievements and learning behavior of the undergraduate students.

II. METHODOLOGY

The research is action research the pre-test, posttest, randomized group design is as follows:

As can be seen in Table I, notations are: S_1 = undergraduate students, O_1 , O_2 = Pre-test and Posttest scores, X_1 = Process that stands for the experimental variable of web-based instruction on the Life's 38 Blessings.

TABLE I: THE PRE-TEST-POSTTEST CONTROL GROUP MODEL					
Sampla	Desttest				

Sample	Pre-test	Treatment	Posttest
S_1	O_1	X_1	O_2

A. Population

Population is 120 undergraduate students who enrolled the subject 'Life and Social Skills subject', second semester on 2013.

B. Variable

Independent variable is the undergraduate students who study by using web based instruction on the Life's 38 Blessings.

Dependent variable

1) The achievement of the undergraduate students who

Sirichom Pichedboonkiatrst is with Ajamangala University of Technology, Lanna, Chiangrai, Thailand (e-mail: sirichom12@gmail.com).

study by using web based instruction on the Life's 38 Blessings, second semester on 2013.

- 2) The satisfaction of the undergraduate students for the web based instruction on the Life's 38 Blessings and consist of 10 units which are followed:
 - Unit 1 Trained to be a good person
 - Unit 2 Prepare a training manual
 - Unit 3 Training to be useful
 - Unit 4 Benefit to families
 - Unit 5 Social benefits
 - Unit 6 Mind preparation
 - Unit 7 Pursuit of Dharma
 - Unit 8 Seeking high morals for self
 - Unit 9 self-practice to eliminate passion to end

Unit 10 Practice Result for Passion reduce

C. Research Tools

There are five types of research tools which were developed by the researcher

- 1) Web based instruction on the Life's 38 Blessings
- 2) Achievement test before and after using web based instruction on the Life's 38 Blessings
- Exercises for web based instruction on the Life Sacred 38 consisting of ten units
- 4) Questionnaire for learning behavior of web based instruction on the Life's 38 Blessings
- 5) Questionnaire for satisfaction of web based instruction on the Life's 38 Blessings

D. Collecting Data Instruments Are

- There are 4 collecting data instruments are following
- Computer assisted instruction. It is web based instruction on the Life's 38 Blessings which was developed from Adobe Dream Weaver. It presents teaching activities and description of letters and animated characters. Create web based instruction on the Life Sacred 38 according to its content by describing with animated figure or character. The evaluation of web-based instruction on the Life's 38 Blessings was evaluated by five expert's scales, and also must have mean more than 3.50 in every aspects with explanation 'good' and the overall evaluation must have mean more than 3.50 which imply good quality and can be used.
- 2) Achievement test before and after study. The test is multiple choices with four choices. It contains ten units for one hundred items. Each item is one point.
- 3) The learning behavior test of the undergraduate students. The scale is a five grade Likert type scale rating from 1 to 5 and consisting of 21 items.
- The satisfaction tests of undergraduate student toward WBI. The scale is a five grade Likert type scale rating from 1 to 5 and consisting of 15 items.

E. Data Collecting

Explained web based instruction on the Life's 38 Blessings to the undergraduate students who enrolled subject 'Life and Social Skills', second semester on 2013. The students have to pass 60 percent in all unit. The content divided into ten units for ten weeks. Each week has three periods. One hour for one period with thirty in total. The students have to do exercises, pre-test, posttest in each unit and also evaluate the test of their learning behavior and satisfaction toward the web-based instruction on the Life's 38 Blessings after finished studying in all units.

F. Data Analysis

In the analysis of data, the dependent group's t-test" was used to test the equivalence of the achievements of the experimental group at the beginning of the study. At the end of the experimental process, in order to test the effectiveness of the experimental process. The t-test analysis was used to see whether there was a significant difference between the post-test score averages which were corrected according to the pre-test results of the experimental group [4]. The significance level was taken as .05 in the study.

III. CONCLUSION

1) The effective of Web-Based Instruction was 85.70/88.77

TABLE II: THE EFFECTIVE OF WEB BASED INSTRUCTION ON THE LIFE'S 38

Content of Web based	E_1	E_2
Instruction		
Unit 1	85.20	86.00
Unit 2	84.70	86.40
Unit 3	84.50	85.50
Unit 4	84.90	85.70
Unit 5	84.70	90.40
Unit 6	84.70	90.80
Unit 7	84.80	91.00
Unit 8	87.70	89.90
Unit 9	87.90	91.20
Unit 10	87.90	90.80
Total of the average	85.70	88.77

2) The before learning achievement of the undergraduate students who studied from WBI with entitled the Life's 38 Blessings was a lower than the standard of learning achievement (54.04 %), and the after learning achievement of the undergraduate students was higher than the standard of learning achievement (86.64%), which is significantly different at .01

TABLE III: THE LEARNING ACHIEVEMENT OF THE UNDERGRADUATE
STUDENTS WHO STUDIED FROM WBI ON TITLE THE LIFE'S 38 BLESSINGS

Content of	N	Total	of the	Total of the		t
Web based		score of pre-test		score of		
Instruction		μ	σ	μσ		
Unit 1	120	5.33	1.15	8.60	.66	$.00^{**}$
Unit 2	120	5.78	1.06	8.64	.65	.00**
Unit 3	120	5.40	1.05	8.55	.71	.00**
Unit 4	120	5.30	1.07	8.57	.65	.00**
Unit 5	120	5.26	1.01	8.53	.57	.00**
Unit 6	120	5.15	1.03	8.75	.60	.00**
Unit 7	120	5.58	.98	8.75	.59	.00**
Unit 8	120	5.17	1.05	8.74	.58	.00**
Unit 9	120	5.57	.96	8.78	.58	.00**
Unit 10	120	5.50	1.02	8.73	.59	.00**
Total of the av	verage	5.40	1.03	54.00	8.66	
Percentage		54.04		86.64		

**p<.01

3) The learning behavior of undergraduate students by using Web-Based Instruction Lesson of the Life's 38 Blessings found that undergraduate students have changed their behavior in the most positive way in both the behavior of internal and external behavior. ($\mu = 4.12$)

TABLE IV: THE LEARNING BEHAVIOR FOR 120 UNDERGRADUATE

Items	μ	σ	Behavior
			level
External Behavior			
You go to class on time	4.00	.33	Much
Consistency in attendance the class	4.23	.80	Much
You read the documentation in advance	3.63	.57	Much
You take a lesson summary review prior to	4.15	.48	Much
exams			
When you have free time then you have	3.78	.41	Much
read the additional books in the class			
Review for examinations	3.85	.49	Much
Doing exercises	4.19	.43	Much
Asking and Answering question in the class	3.80	.42	Much
You concentrate to listen while the teacher	3.95	.21	Much
is teaching			
While the teacher was teaching if you didn't	3.80	.41	Much
understand the you will be asked			
immediately			
Integration lesson to share with the friend in	3.95	.23	Much
the class			
Time management in learning	3.89	.53	Much
Average total	3.93	.44	Much

	-			
Items	μ	ı	σ	Behavio
				level
Internal Behavior				
Satisfactions in learning	4.46	.50	Much	
You have a purpose for	4.26	.44	Much	
learning in this subject				
Stress and anxiety in learning	1.33	.59	Very	
			few	
Enjoyment and pleasure in	4.22	.43	Much	
learning				
Motivation for learning	4.56	.56	Much	
Concentrate on learning	4.31	.46	Much	
Learning intentions	4.30	.47	Much	
Generosity and sharing spirit	3.91	.47	Much	
among friends				
Discipline and responsibility	4.24	.42	Much	1
in learning				
Average total	3.95	.48	Much	
Total of average	3.94	.48	Much	

TABLE V: THE SATISFACTION FOR 120 UNDERGRADUATE STUDENTS FOR Web Based Instruction on the Life's 38 Blessings

Details	μ	σ	Level of Satisfaction
Clear and consistent of objective and course content	4.00	.33	Much
Correlate and comprehensive of objective and tests	4.23	.80	Much
Accuracy of language explained	3.63	.57	Much
Sequence of the presentation	4.15	.48	Much
Clear pictures in the lesson	3.78	.41	Much
Proper font used	3.85	.49	Much
Document linkage	4.19	.43	Much
Clear instruction and questions	3.80	.42	Much
Result declare immediately	3.95	.21	Much
Fine format display	3.80	.41	Much
Easy to process	3.95	.23	Much
Interesting presentation	3.89	.53	Much
Knowledge obtained from using web based instruction	4.46	.50	Much
Can be used for making the life planning	4.26	.44	Much
Assist it making decision for having a better life	4.33	.55	Much
Total of average	4.01	.45	Much

4) The satisfaction of the undergraduate students who learned by using a Web-Based Instruction Lesson with title the Life's 38 Blessings is satisfied at a much level. $(\mu = 4.01).$

IV. DISCUSSION

The effective of Web-Based Instruction was 85.70/88.77. This may be due to web based learning had provided students different learning alternatives that have expanded the educational process beyond the traditional classroom. Web technologies' penetration of our lives and of both formal and informal education has created a need to examine the various aspects of this new way of learning and to explore how it fits in with different learners' needs. As Oğuz SERİN [5] studied on the effects of the computer based instruction on the achievement and problem solving skills of the science and technology students. The result of the study reveals that there is a statistically significant increase in the achievements and problem solving skills of the students in the experimental group that received the computer based science and technology instruction. According to Atkinson [6] argues, in a face-to-face teaching situation the instructor can observe the course participants' learning and adjust the pace, content, and activities according to their progress. The ability to make adjustments arises out of the instructor's ability to read the situation. However, it is more complex in a web based learning environment.

The significant increase in learners' achievements in this study can also be seen in Koch's study [7] showed the effect of WBI and Computer-based instruction (CBI) offer students very diverse options for their education. Therefore, it is critical that colleges and universities have ample, accurate information to help determine the extent and nature of WBI offerings that best fit with the strategy and mission of the institution. To that end, it is important to use metrics such as student learning, reduced cost, user satisfaction, and other similar metrics to assess the value achieved through the use of WBI. According to Olgun's study [8] entitled "The effect of the computer assisted instruction given to 6th grade primary school students on the students' attitude toward science and their metacognitive skills and their achievement showed that computer-assisted science instruction positively affected the attitude of the students toward science and their metacognitive skills. According to Demirer [9] studied entitled "The effect of the computer assisted teaching method and the traditional teaching method on students' academic achievement and their attitude toward science and the permanence of the acquired behaviors.

The learning behavior of undergraduate students by using Web-Based Instruction with entitled "the Life's 38 Blessings" found that they have changed their behavior in the most positive way in both the behavior of internal and external behavior. This may be due to the advantages of WBI for schools and faculty will also translate into performance improvements for the students, if the students are adequately ready for WBI. Flexibility, an increased number of learning modes, and anytime, anywhere access should improve instructional effectiveness resulting in better student performance. As Sitzmann [10] revealed that students' motivation perception benefited from the WBI with self-regulated learning strategies. Students learning within a web-based environment with self-regulated learning strategies became more responsible for their own learning, more intrinsically orientated and more challengeable. They tended to value the learning material more and became more confident in course understanding and class performance.

The satisfaction of the undergraduate students who learned by using a Web-Based Instruction with entitle "the Life's 38 Blessings" is satisfied at a much level. This may be due to the most important difference that has taken place in the world in the last few years is the rapid development and spreading of information technology in every field. It is accepted by all environments that information technology provides value in materialistic and moral aspects, and that is widely used in fields of education, economy, health, agriculture, social life, and entertainment [11].

V. RECOMMENDATIONS

The suggestions deriving from the findings of this research can be presented as follows:

This study is limited to the study of "the Life's 38 Blessings" in the social science course and can be seen only Buddhism. Similar research can be carried achievements and problem solving skills of high achievers and low achievers in the other school subjects. The duration of this research was limited to ten weeks. In another study, more time should be spared to find out the effectiveness of the experiment. Qualitative studies can be carried with the students who have weak problem solving skills and with those who have strong problem solving skills. Considering the effectiveness of the teaching package used with the experimental group, teachers can be asked to take part in-service training and can be taught how to use the programs such as Macromedia Flash, Macromedia Author ware, Adobe Photoshop. They can be encouraged to develop the computer-based science and technology software. Similar research can be conducted in different primary and secondary classes.

VI. RECOMMENDATIONS FOR FURTHER STUDY

- 1) Compare achievement of web based instruction every units of each subject.
- Compare the students who are going to continue their study and who are going to work by using web based instruction.
- 3) Conduct collaboration research for web based instruction for teacher and students in all subjects.

ACKNOWLEDGMENT

This research was financed by the Research and Development Institute at Rajamangala University of Technology Lanna Chiang Rai, Thailand.

REFERENCES

- B. A. Corbett and J. D. Willms, "Canadian students' access to and use of information and communication technology," presented at 2002 Pan-Canadian Education Research Agenda Symposium Information Technology and Learning, 30 April-2 May, Montreal, Quebec. Retrieved May 11, 2011.
- [2] A. Roger and R. M. Bernard, "How does distance education compare with classroom instruction? A meta-analysis of the empirical literature," *Review of Education Research*, 2004.
- [3] C.-L. C. Kulik. "Meta-analytic findings on grouping programs," *Gifted Child Quarterly*, vol. 26, no. 2. Spring, 1992.
- [4] B üy ük özt ürk, Experimental Designs Pretest-Posttest Control Group Design And Data Analysis, Ankara: Pegem A Publishing, 2006.
- [5] O. Serin, "The effects of the computer-based instruction on the achievement and problem solving skills of the science and technology students," *The Turkish Online Journal of Educational Technology*, vol. 10, no. 1, pp. 183-201, 2011.
- [6] K. Atkinson, "Learning from examples: Instructional principles from the worked examples research," *Review of Educational Research*, vol. 70, no. 2, pp. 181-214, 2001.
- [7] J. V. Koch, "Public investment in university distance learning programs: Some performance-based evidence," *Atlantic Economic Journal*, vol. 34, pp. 23-32, 2006.
- [8] A. Olgun, "The effect of the computer-assisted instruction given to 6th grade primary school students on the students' attitude toward science and their metacognitive skills and achievements," 2006.
- [9] A. Demirer, "The effect of the computer assisted teaching method (cat) and the traditional teaching method on students' academic achievements and their attitude toward science and the permanence of the acquired behaviors," Master's thesis University of Dicle, Diyarbakır, Turkey, 2006.
- [10] T. Sitzmann, "The comparative effectiveness of web-based and classroom instruction: A meta-analysis," *Personnel Psychology*, vol. 59, no. 3, pp. 623-644, 2006.
- [11] H. Uzunboylu, "The effectiveness of web assisted English language instruction on the achievement and attitude of the students," in *Proc. World Conference on Educational Multimedia Hypermedia and Telecommunications*, 2004. pp. 727-733.



S. Pichedboonkiat was born on August 12, 1964, in Thailand. Her highest educational background is a Ph.D. in development education and minor: rural development at Central Luzon State University, Philippines in 2003 and she worked as an assistant director of academic affairs and assistant director of research and development. Her current job is the director of academic affairs and the director of clinic technology at

Rajamangala University of Technology Lanna, ChiangRai campus, Thailand.

She published several articles. She is one member of the Association Researchers. She is also a committee member of Upper Northern Research Administration Network.