

## THE DEVELOPMENT OF ONLINE INSTRUCTIONAL MEDIA FOR INDEPENDENT LEARNING OF ENGLISH IN TERTIARY LEVEL EDUCATION

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### ABSTRACT

The objectives of this study were to develop online instructional media for independent learning of English in tertiary level education; investigate the students' learning satisfaction towards independent learning of English in tertiary level education using online instructional media, and compare the students' learning achievement between control group and experimental group for independent learning of English in tertiary level education using online instructional media. A purposive sampling was applied to select two sections of forty tertiary level EFL students each; one as control group and the other as experimental group. The experimental group was treated with online instructional media whereas the control group was taught using the traditional method. The quantitative data and the qualitative data were collected through post-survey questionnaire, pretests, posttests, as well as focus group discussion. The quantitative data were analyzed and interpreted using inferential statistics t-test with  $p \leq .05$  level of significance, mean, and standard deviation. The qualitative data were analyzed using content analysis method. The results revealed that the students' average level of satisfaction was considered as of a high level with mean score of 4.44 and S.D. of 0.10. The pretest mean score in the experimental group was significantly higher than that of

the control group with the mean difference of 0.46. After the treatment for eight weeks, the posttest mean score in the experimental group was also significantly higher than that of the control group with the mean difference of 0.43. The responses of focus group discussion confirmed that incorporating this learning platform in teaching and learning remarkably had a positive effect on students' learning satisfaction and achievement.

**Keywords:** Online Instructional Media, Independent Learning, EFL, Tertiary Level Education

## Introduction

Thailand's new development model, popularly known as Thailand 4.0, is a model that aims to unlock the country from several economic challenges. Its policy on tertiary education is one of the top priorities on national development agenda. Like other countries in the region, Thailand has been through an education reform in order to cope with the advances in modern technology which has dramatically transformed Thai society from an agricultural one to a semi-industrial and service-based one (Pitiyanuwat & Antrasirichai, 2002). In today's twenty-first century society and education, English has been playing a major role at the level of tertiary education in many countries around the world, including Thailand. Fluency and competency in English help graduates find high-quality jobs in reputable companies. Even though English plays a crucial role in the globalized economy, it cannot be denied that Thailand does not provide sufficient

English exposure and opportunities to use it.

In the recent ranking conducted by the Switzerland-based Education First (2018), Thailand has been categorized in a low proficiency band. Teaching English as a foreign language is a challenging task in developing countries, Thailand in particular. The creation of a language classroom environment which fosters learning greatly is very crucial to the success of language learning. The classroom environment must provide students with opportunities to be exposed to English language in or outside the classroom and to work more independently.

Learners in the 21<sup>st</sup> century are very aware of the internet and other topics about technology. Technological devices should always be used by students and teachers. The development of web-based language teaching and learning activities continue to be an exciting and growing field. With the availability of technology in educational

institutions, students learn faster and easier than before since the barrier of location for people in different parts of the world has been reduced by some of the latest technologies such as the web, internet, and mobile devices (Sarica & Cavus, 2008).

For this reason, the researchers would like to propose that; going through internet is an alternative way to study English. There are a number of popular web-technologies which are used in education such as Facebook, LINE Messaging App, Wikis, Blogs, and Learning Management System like Google Classroom, iTunes U, Blackboard, Canvas, and the highly effective one, MOODLE (Ernenebaatar, et al., 2011).

#### **MOODLE: Modular Object-Oriented Developmental Learning Environment**

MOODLE, as online instructional media is a learning platform designed to provide educators, administrators and learners with a single robust, secure and integrated system to create personalized learning environments. MOODLE supports both blended and online courses, and has apps available for iOS, Android, and Windows Phone. Its assessment, tracking, and reporting capabilities are exceptional. The MOODLE platform has three levels of use, with features of differential use and access. There are the administrator (the

manager of the platform), teacher (who may also have other designations, for example, trainer, facilitator, promoter) and the student (learner, participant, user, or trainee). MOODLE has a set of activities features in the system including Assignments, Chat, Database, Forum, Glossary, Lesson, Quiz, SCORM, Survey, Wiki and Workshop. All of these can be found when the editing is turned on and the link 'Add an activity or resource' is clicked.

#### **Independent Learning and MOODLE**

MOODLE was preliminarily developed based on the importance of social and co-operative learning with the construction of personal knowledge (Brown, 2007). Suppasetseree (2010) highlighted several features in the MOODLE system that helped support and deliver instruction easier than in a traditional classroom setting. Independent learning through MOODLE, when used appropriately, can help significantly improve students' satisfaction, interest and motivation to be actively engaged in their educational experience. The features of MOODLE such as increasing convenient access to the course, supporting shared creation, collaboration among peers and mastery of knowledge are very essential in any tertiary education learning environment. Students are able to control the pace of learning,

mode of interaction, and by enhancing opportunities for collaborative learning, control of interaction (Blin, 2004). This responsibility for learners to take control of their learning may also empower and motivate learners which may subsequently foster autonomy (Murry, Hourigan, Jeanneau, & Chappel, 2005).

Students, as independent learners, improve academic performance; increase confidence; greater student awareness of their limitations and their abilities to manage them; enabling teachers to provide differentiated tasks for students; and fostering social inclusion by countering alienation. Independently self-regulated learning in the 21st century will only be effective with the proper usage of technology. It overcomes all barriers, makes learning fun and accessible, thus increasing achievement.

From all of the aforementioned, any profound research and study on the use of online instructional media for independent learning of EFL in tertiary level education will help shed some light on how this kind of teaching and learning platform can be related to students' achievement and satisfaction in learning English as a foreign language. Most of all, the researchers hope that this study will

contribute to a more effective alternative way of teaching and learning in today's twenty-first century society and education.

### Research Objectives

1. To develop online instructional media for independent learning of English in tertiary level education.
2. To investigate the students' learning satisfaction towards independent learning of English in tertiary level education using online instructional media.
3. To compare the students' learning achievement between control group and experimental group for independent learning of English in tertiary level education using online instructional media.

### Expected Benefits

1. Using MOODLE as a tool of online instructional media would remarkably enhance students' learning satisfaction towards independent learning of English in tertiary level education.
2. Through the use of online instructional media (MOODLE), the students' learning achievement for independent learning of English in tertiary level education would be improved significantly.

## Research Scope

### 1. Location of the Study

The participating university is a Thai private university located in Pathum Thani province on the outskirts of Bangkok. The name of the participating university cannot be disclosed without its consent. This study was carried out using English Reading and Writing Course in Semester S (Summer Term) of academic year 2018 at the participating university.

### 2. Population and Sample

#### Population

The population of the study consisted of 1,043 undergraduate students, both male and female with mixed English language abilities. They enrolled in an English Reading and Writing Course according to the requirements set by their own faculties in Semester S (Summer Term) of academic year 2018.

#### Sample

By employing the purposive sampling method, one section was selected to be the control group and another to be the experimental group. Of the forty participants in the control group, fourteen were female and twenty-six were male ranging in age from 19 to 24. They were the students from ten faculties: College of Design, Faculty of Digital Art, College of Social Innovation,

Faculty of Business Administration, Faculty of Communication Arts, Faculty of Architecture, Faculty of Law, Faculty of Liberal Arts, Faculty of Political Science, and The Conservatory of Music. Almost all had also been studying English for approximately ten years. In addition, of the forty participants in the experimental group, twenty-four were female and sixteen were male ranging in age from 19 to 21. These undergraduates were from five faculties: Faculty of Business Administration, Faculty of Communication Arts, Faculty of Liberal Arts, Faculty of Accountancy, and College of Engineering. Almost all had been studying English for approximately ten years. The students' previous grades of English were examined and compared to assure the indifference in the students' English language competency between the experimental group and the control group. Evidently, the participants in both groups were considered on the similar level of competency based on their grades from previous English course with a mean score of 2.43 for the experimental group and a mean score of 2.10 for the control group.

#### Time Frame

The study was carried out for the duration of 8 weeks of Semester S of academic year 2018 (15<sup>th</sup> June – 15<sup>th</sup> September, 2018). The students were asked

to do all the required activities depending on their availability but had to finish them 2 weeks before the final exam.

### Conceptual framework

The researchers developed the MOODLE course which was an independent online learning platform designed for extending the students' learning activities outside the classroom. The experimental group was taught using the MOODLE course as a supplementary teaching and learning material whereas the control group was taught using the traditional method without using the MOODLE course. The traditional teaching method in the control group and the use of the MOODLE course in the experimental group were independent variables whereas learners' learning satisfaction towards the MOODLE course together with the learning achievement of both control and experimental groups was the dependent variable.

### Research Methodology

The research method combined quantitative and qualitative approaches for an in-depth understanding of the complex phenomenon and enhanced accuracy as well as completeness which contributed to the overall validity (McKim, 2017). Hence the researchers applied the mixed-methods to carry out the study with an experimental research design including a control group and an experimental one. The traditional teaching method which had no the MOODLE course was used with the students of the control group whereas an online learning platform; in other words the MOODLE course was used with the students of the experimental group. The data collected from pretests, posttests, questionnaire responses and focus group discussion were used to achieve the research objectives of the study. All of these are shown in a figure below.

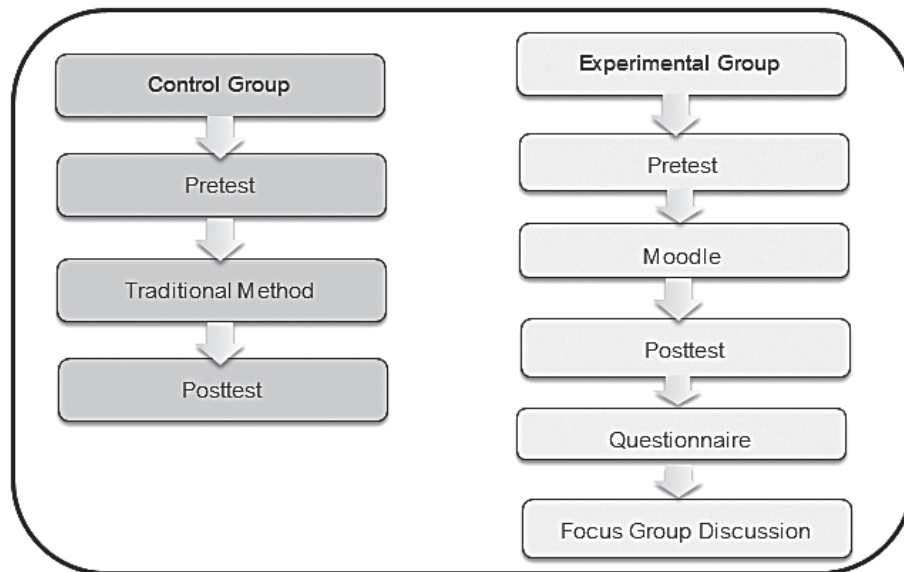


Figure 1 Illustration of Research Design

## 1. Instruments

### 1.1 Instructional Instrument

- MOODLE course

The researchers developed

the MOODLE course which was an independent learning platform designed for extending the students' learning activities outside the classroom (See Figure 2).

The screenshot shows the iLearn MOODLE course interface. The top navigation bar includes the iLearn logo, social media links, and user information (AjGary). The main content area displays the course title "ENL103 / ENL113 RW" and an overview of the course. The overview section states that the course is designed to promote independent learning and includes a competency badge. Below the overview, there are links to "How to Upload a Video File" and "How to Upload a BIG Video File". The left sidebar shows the course structure with lessons: Lesson 1: Environment, Lesson 2: Healthy Living, Lesson 3: Population, Lesson 4: Global Languages, Lesson 5: Beauty, and Lesson 6: Sports. The right sidebar contains contact information for AjGary and a QR code for LINE.

Figure 2 Online Learning Platform – MOODLE course

With an internet connection, the students were able to access the course anytime/anywhere with their smartphone, tablet, or computer. The system was protected by passwords. The students were asked to do all the required activities including picture, dialogue, dictation, video, grammar, Q&A, cloze, short talk, vocabulary, and reading tests depending on their availability but had to finish them 2 weeks before the final exam. The students were allowed to do each exercise only once (1 time) and also not authorized to review and check their submitted answers without the consent of the teacher/adviser. In spite of the fact that this was an independent learning method, it was still a requirement for all students to meet their teacher/adviser in the midterm and the final sessions to report their learning progress and limitations.

## 1.2 Quantitative Data Collection Instrument

### - Questionnaire

To investigate the students' learning satisfaction towards independent learning of English using online instructional media, the researchers administered the post-survey using 5-point Likert scale questionnaire with every student in the experimental group after the treatment were completed. The questionnaire was composed

of 30 items for the students' learning satisfaction and divided into four categories: System Category, Communication Category, Learning Behavior Category, and Lessons Category.

### - Learning Achievement Tests

To compare the students' learning achievement in both control group and in experimental group, the researchers conducted pretest prior to and posttest after the treatment of MOODLE course. The students in both groups were assigned to write an opinion paragraph of 10 sentences or around 150 words by choosing one of the statements in accordance with the lessons in an English course book: English language destroys other languages; Thailand should stop using fuel; or Attractive people have higher income. The statements above were also given in posttest; however, the students were not allowed to choose the same statement that they chose in the pretest to write in the posttest.

### - Writing Assessment Rubric

The researchers designed and applied a writing assessment rubric to obtain the data regarding the students' learning achievement scores in both control group and in experimental group. Both researchers were the evaluators; therefore,



any potential bias on the obtained data regarding the students' achievement could be avoided. The scores given by both evaluators were combined and hence each writing test was worth 10 points.

### 1.3 Qualitative Data Collection Instrument

#### - Focus group discussion

The head researcher carried out a focus group discussion asking thirteen randomly selected students with mixed abilities in the experimental group to give responses for 8 questions in a group of 3-5. They were asked to discuss and share their opinions regarding the satisfaction on using online instructional media, the MOODLE course.

## 2. Validity and Reliability of the Instruments

### 2.1 Validity

All of the research instruments in this study were validated by three experts who were the university lecturers in Education and Teaching English as a Foreign Language. The Index of Item Objective Congruence (IOC) was calculated by using the statistical formula. Every item of the research instruments was rated +1 by all the three validators together with some comments for further improvement of the instruments. Also, prior to the treatment, the

MOODLE course, an independent learning platform designed by the researchers was also validated and approved by the director and the technical staff of the Cyber University Center at the participating university.

### 2.2 Reliability

To evaluate the reliability of the satisfaction questionnaire, the researchers conducted the reliability test with another section of 30 students who were neither in the control group nor in the experimental group of the study. Cronbach's Alpha Rating Scale was applied to measure the reliability of 50 questionnaire items. The reliability statistics Cronbach's alpha ( $\alpha$ ) was 0.96 which indicated that the instrument had an excellent level of internal consistency (Mohamad et al., 2015). Nevertheless, after obtaining the validators' comments and suggestions for further improvement of the instrument, the researchers rechecked for any redundant items. Eventually, 20 items were excluded and only 30 items were used for the actual study and data collection.

## 3. Data Collection Procedures

### 3.1 Approval and Ethical Consideration

To ensure the ethics and morality of the study, all documents regarding the research procedures were reviewed and approved by Ethical Committee of Research

Institute of the participating university based on the Declaration of Helsinki and Good Clinical Practice.

### 3.2 Participant's Consent Approval

At the beginning of the study, each student was informed about the study and requested to sign a consent letter with a witness signature. They were assured that their information would be kept confidential and that it would not affect their course grades. The anonymity and confidentiality of the students were maintained at all times.

## 4. Data Analysis

### 4.1 Quantitative Data Analysis

#### - Questionnaire

The mean and standard deviation of questionnaire were computed and analyzed using a computer program. The total mean and standard deviation scores of four categories of the items for the students' learning satisfaction were interpreted according to the statistical analysis interpretation of the mean score.

#### - Learning Achievement Tests

Learning achievement scores of pretest and posttest were analyzed using a descriptive statistical analysis. The comparisons of mean, standard deviation and significance level were done through paired sample t-test and independent t-test. The value of 2-tailed significance value ( $p$ );

in other words,  $P \leq .05$  level of significance was referred to determine the significance difference between the mean.

### 4.2 Qualitative Data Analysis

#### - Focus group discussion

In order to acquire solid data, the focus group discussion in the current study was carried out by the head researcher and the students' responses in each group were videotaped and photographed. Afterwards, the same researcher transcribed, translated, and analyzed the responses by using the content analysis method.

## Research Results and Discussion

### Research Results

#### 1. Analysis and results of Quantitative Data

##### 1.1 Results of Questionnaire

The overall students' level of satisfaction was considered as of a high level with mean score of 4.44 and S.D. of 0.10. By examining the mean scores of all questionnaire items, the results revealed the high level and the highest level of students' of satisfaction with the mean scores ranging from 4.28 to 4.68 in seven items. Item 1, "*I could easily access the Internet as needed for my studies.*" ( $\bar{X} = 4.65$ ); Item 5, "*I could manage my study effectively with online class.*" ( $\bar{X} = 4.58$ ); Item 23, "*Online class*

helped me have strong time management skills." ( $\bar{X}$  = 4.63); Item 27, "Online learning offered me convenience." ( $\bar{X}$  = 4.68); Item 28, "Online learning met my learning needs." ( $\bar{X}$  = 4.63); Item 29, "Online learning improved my communication skills." ( $\bar{X}$  = 4.53); and Item 30, "Online learning promoted greater participation; and interaction." ( $\bar{X}$  = 4.55) were rated in the highest level and the other twenty-three items were rated in the high level. The lowest mean score was rated for Item 12, "The learning process was the same in class and online." with the mean score of 4.28 whereas the highest one was rated for Item 27, "Online learning offered me convenience." with the mean score of 4.68 respectively.

Based on the data from the 8-item System Category, students' level of learning satisfaction in this category was regarded as of the highest level with the total mean score of 4.51 and S.D. of 0.13. Item 27, "Online learning offered me convenience." was rated the highest with the mean score of 4.68 and S.D. of 0.47 while Item 26, "I could more easily monitor my academic progress in online class." was rated as the lowest in this category with the mean score of 4.35 and S.D. of 0.58.

Based on the data from the 5-item Communication Category, the students'

level of learning satisfaction in this category was regarded as of the high level with the total mean score of 4.41 and S.D. of 0.05. Interestingly, Item 29, "Online learning improved my communication skills." was rated on the highest level of students' learning satisfaction with the highest mean score within this category (mean=4.53 and S.D.=0.64) whereas Item 2, "I felt comfortable communicating electronically." and Item 11, "I could discuss with other students during online activities outside of class." were rated equally with the lowest mean score in this category (mean=4.38 and S.D.=0.59 and 0.70 respectively).

Based on the data from the 13-item Learning Behavior Category, the students' level of learning satisfaction in this category was also regarded as of the high level with the total mean score of 4.42 and S.D. of 0.10. Obviously, Item 23, "Online class helped me have strong time management skills." was given the highest mean score of 4.63 and S.D. of 0.54 whereas Item 12, "The learning process was the same in class and online." was rated the lowest among all 30 items of the questionnaire with the mean score of 4.28 and S.D. of 0.78; its mean score was thus the lowest one in this category.

Based on the data from the 4-item Lessons Category, the students' level of

learning satisfaction in this final category was also rated as of the high level with the total mean score of 4.40 and S.D. of 0.05. Noticeably, Item 13, *“I believed that learning online outside of class was more motivating than a regular class.”* was rated with the highest mean score within this category (mean = 4.45 and S.D. = 0.68) while Item 16, *“The course resources and materials for this online class were easily accessible”* was rated with the lowest mean score in this category (mean = 4.35 and S.D. = 0.62).

## 1.2 Results of Students' Learning Achievement

- Individual students' pretest and posttest scores of experimental group

The results revealed that every student or 100% of the students in the control group had improved in learning achievement in the posttest. The improvement scores ranged from 0.25 point as the lowest to 1.75 points as the highest. In the experimental group, the results exhibited that 39 out of 40 students had improved in

their learning achievement in the posttest. The improvement scores ranged from 0.25 point as the lowest to 1.75 points as the highest.

- Pretest and Posttest Comparison within the Groups

The mean scores of pretest and posttest of the control group were 7.08 and 7.89 respectively, resulting in the mean difference of 0.81. In the experimental group, the mean scores of pretest and posttest were 7.54 and 8.32 respectively with the mean difference of 0.78. The statistical significance values ( $p$ ) of both groups were lower than .05 ( $P \leq .01$ ) which indicated that there was statistically significant increase in the learning achievement scores of both control group and experimental group. However, the mean difference between the pretest and the posttest of the control group (0.81) was higher than that of the experimental group (0.78).

- Pretest and Posttest Comparison between the Groups

**Table 1** Comparison of pretests and posttests between the groups

Test	Group	Mean	Mean Difference	Standard Deviation	Sig (2-tailed)
Pretest	Control	7.08	0.46	0.64	0.00**
	Experimental	7.54		0.52	
Posttest	Control	7.89	0.43	0.71	0.01**
	Experimental	8.32		0.69	

From the table above, the pretest mean score of the experimental group ( $\bar{X} = 7.54$ ) was higher than the pretest mean score of the control group ( $\bar{X} = 7.08$ ), resulting in the mean difference of 0.46. The 2-tailed significance value ( $p$ ) was lower than .05 ( $P \leq .01$ ) which pointed out that there was statistically significant difference of the pretest mean scores of these two groups. The posttest mean score of the experimental group ( $\bar{X} = 8.32$ ) was also higher than the posttest mean score of the control group ( $\bar{X} = 7.89$ ) which resulted in the mean difference of 0.43. The 2-tailed significance value ( $p$ ) was lower than .05 ( $P \leq .01$ ) which indicated that there was statistically significant difference of the posttest mean scores of these two groups.

## 2. Analysis and Results of Qualitative Data

The core themes from the focus group discussion responses were summarized according to eight structured questions.

- Almost all students felt that online class was convenient and they could do the exercises and activities whenever they had free time with any kinds of devices to search for information and sources of knowledge by having teacher to support and peers to collaborate with one another to complete the tasks via online communication.

- Most of the students liked the system, the safety, the fairness of a scoring system and the physical features of online lessons of the MOODLE course since they were able to practice a variety of exercises and activities and language skills.

- The majority of the students remarked that the online class helped improve their reading and writing skills, pronunciation skills together with vocabulary knowledge. A variety of exercises, tasks and activities online helped enhance the students' all kinds of language skills especially reading and writing skills.

- Several students preferred learning on the online class than learning in a normal class since he had a lot of time to learn and complete all exercises and activities.

- A few students stated that there was no stress or limitation in learning online. In a normal classroom, they usually had stress and did not study fully due to some limitation of time and learning anxiety.

### Discussion

The following section was to discuss the major findings according to the research objectives.

- Students' learning satisfaction towards online instructional media

The results obtained from the post-survey questionnaire revealed that the use of online instructional media had a positive effect on the tertiary level students' learning satisfaction level. The highest mean score was for the item indicating that online learning offered them convenience. This result was supported by the data collected from the focus group discussion. The majority of the students confirmed their satisfaction towards online instructional media in regards to its convenience, a variety of lessons, opportunity of peer collaboration, teacher support, a variety of knowledge accessibility, to name just a few.

The above finding would be corresponding to the studies by Amandu, Muliira & Fronda (2013); and Xu & Mahenthiran (2016). These studies also explained how online learning positively influenced and enhanced students' satisfaction as well as retention of the material. Moreover, the results of these studies also proved positive experience of online instruction and students' interaction to do things in an online class using the MOODLE course.

2. Students' learning achievement with and without online instructional media

Regarding the data collected from the students' achievement scores in both control group and experimental group, it showed that the mean score of pretest in the experimental group was significantly higher than that of the control group with the mean difference of 0.46. After the treatment using the MOODLE course for eight weeks, the mean score of posttest in the experimental group was still significantly higher than that of the control group with the mean difference of 0.43.

The finding of improvement in students' learning achievement using online instructional media was parallel to the study conducted by Suppasetsee (2010). In this study, several advantages of the online learning or MOODLE system

were highlighted. He claimed that MOODLE facilitated instruction and the students tended to have higher learning achievement, self-reliance, collaborative culture and lifelong learning skills.

Nevertheless, by examining the students' achievement scores in details, it was surprising that the mean difference between the pretest and the posttest of the control group (0.81) was higher than that of the experimental group (0.78). In other words, the control group exhibited a higher improvement in the posttest.

Based on the students' responses on focus group discussion, online learning also possessed some limitations. Firstly, there was no answer key provided in the online class; therefore, the students did not know which choice was the right answer. Also despite having the teacher available online almost all the time, some students still complained that sometimes they experienced lack of immediate teacher support. In other words, occasionally it was difficult to get the correct answers from the teacher immediately while learning online. Several students mentioned that online class was not suitable for the students who did not like doing exercises and activities or the ones who were basically not good at English since they would not make any attempt to learn

by themselves but only copied the answers from their peers, and of course eventually learned nothing from the online course. With these aforementioned constraints, it would be assumed that solely online learning might not be clearly more effective than traditional classroom learning.

This point of view led to the blended learning style with a balance between learning in a classroom and learning online. According to Pappamihel & Walser, (2009), traditional ways of language acquisition are inadequate in today's world and the learners in the 21st century were very aware of the internet and other topics about technology. Language education should not be confined only in the classroom. With the blended learning, the students are empowered to learn and to communicate with others across the globe in real time; however; with the teacher's support and guidance.

This was supported by the students' responses on the focus group discussion. Apparently, the students preferred 50% learning in a classroom and 50% learning online. In other words, they still would like to have an interaction with the teacher and to consult with the teacher when they made mistakes. In addition, the blended learning would be helpful and suitable for the

students who did not use any social network 24/7. In this way, they would not miss any important information given by the teacher. Based on the students' remark; therefore, it would not be exaggerating to claim that the blended learning; in other words, the mixture of traditional learning and online learning would be an ideal way of learning for the 21<sup>st</sup> Century.

### Suggestions and Recommendations

The recommendations for further study can be provided as follows.

- To conduct similar research with a larger sample size and a greater variety of participants with more varied educational, economic, and geographical backgrounds would prove more fruitful and gain better perspectives of the impact of online instruction on teaching and learning English as a foreign language.

- To conduct longitudinal studies with a longer time frame would be worthwhile since the investigation in terms of students' development, changes, and improvement would be extended for more reliable and valid data.

- To have a more in-depth information and understanding of the subjects' backgrounds, personal beliefs, motivational factors, and their experience

with technology in education would be helpful in understanding how they interact with technology and learning.

- To expand research instruments of mixed methodology with a broader and deeper reach as well as more inclusion of teacher-researchers or educators in development of online instruction will help shed some light on other areas of concern.

Three research objectives had been addressed in this study, with actual teaching in support of an online instruction (MOODLE course) for independent learning of English in tertiary level education. The use of both quantitative and qualitative data and results helped the researchers to clearly assess the students' learning satisfaction and achievement by using online instructional media. The results of the study revealed that implementing online instruction for an EFL reading and writing course had a positive effect on tertiary level students' learning satisfaction and also their increased achievement scores obtained in this study indicated a good potential of this alternative teaching method. With all of the obtained results, this alternative instruction was expected to give benefits to EFL students, teachers and also administrators in any teaching and learning contexts. This online instruction should then be applied more



widely by any interested teachers to support learning outcomes and permanent language the students toward the goal of successful competence.

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