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The Effectiveness of Web-Based Lesson in Teaching Conjunctions

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Abstract. This study is part of an on-going research conducted with the purposes to study the outcomes of the web-based lesson on conjunctions and to examine students' learner-centered development when the web-based lesson is operated as supplementary instruction. The sample group comprised 19 students enrolling English writing III in the first semester of the academic year 2011 at Khon Kaen University, Thailand, chosen by convenience sampling. The research instruments were the web-based lesson provided lessons and exercises on conjunctions, pretest and posttest, questionnaire, and behavioral checklist. The students spent eight weeks to complete all activities online. The data were analyzed by SPSS. The findings of the study reveal that the web-based lesson increased the students' grammatical knowledge on conjunctions and the students reflected moderate attitudes towards learning through the web-based lesson. In addition, during learning via the web-based lesson, the students lacked of both self-motivation and discipline which are inconsistent with the quality in learner-centered approach.

Keywords: conjunctions, learner-centered approach, web-based lesson

1. Introduction

With today's education, the Internet enhances learning by providing a new powerful, flexible, and efficient tool [13]. The vast information retrieval from the Internet displays in hypermedia format regarded as one of the most important uses of the Internet is for education [11]. The Internet combines knowledge over the world together within the environment of websites which present educational activities covering all levels in every subject [22]. Moreover, learning and teaching through the Internet makes courses more attractive and interactive with students [13].

One of the new learning innovations relying on the online world is web-based instruction. The web-based instruction uses the Web as a tool to transfer instruction to audience living in other places [5]. It creates education on the Web as a medium in learning and contact [15] and combines both today's technology and instructional design methodology to increase learning effectiveness, together with solving problems of time and places [7][19]. Besides, web-based instruction is also known as a hypermedia-based instructional program creating learning environment which encourages and develops people' knowledge by accessing to resources and information available in the World Wide Web [5].

Many attempts have been observed the use of the Internet and Web, especially web-based instruction, in language learning and teaching [3][8][17][22]. They found the development of language use and the positive attitudes from their students when applied the web-based instruction to classroom. With this reason, employing the web-based instruction should be nourished students' language skills, so in this study the web-based instruction was used to develop students understanding on grammar.

As reviewed by many researchers [2][10][14][16][21], one of the errors in grammar comes from conjunctions. Thai students have two main problems in using conjunctions. Firstly, they do not know the relationship between both clauses, so they form sentences with incorrect conjunctions and in wrong position [10][16] and sometimes omit conjunctions [2]. Secondly, interference from students' mother tongue

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language also creates incorrect use of conjunctions. Although English writing style differs from Thai writing, students always think in Thai when writing in English [14]. As a result, they use conjunctions incorrectly; for instance, they write 'although' together with 'but' within a sentence. Another related problem to interference is fragment sentences since students separate clauses with a full stop instead of a comma [21]. Similarly, as explored by the researcher, those problems also occur with the English major students of Khon Kaen University.

To foster students' understanding on conjunctions through technology, the approach supported is the learner-centered approach. This approach helps learners study by themselves and apply their knowledge to their daily life, and it is effective approach to develop learners' motivation and achievement [9]. Since the approach allows learners to construct knowledge themselves, it presents the connection between knowledge and learners at the same time [12][24]. In addition, this approach extremely emphasizes on how learners learn [24]. The concept of the approach focuses on learners' choice and the power between teachers and learners [12]. Consequently, learners can choose what and how they want to learn. Furthermore, it is a shift from traditional classroom where teachers are the center of classes to a classroom where learners are empowered. As a result, teachers' role is as a guide in learner-centered classroom. Because of the shifted role, students under this approach require a lot of responsibility which is possibly indicated by students' participation [4]. They increase their responsibility for their own learning, and then become active learners [20][23].

In connection with the information above, the researcher was interested in employing web-based instruction under the learning behavior of learner-centered approach with the aim to develop students on a grammar point of conjunctions. In this study the web-based lesson was used as a supplementary instruction since the contents, conjunctions, provided additional resources besides traditional classroom, so learners will study in a classroom and find extra information related to their course on the Web [7]. To sum up, this study was to investigate the outcomes of the web-based lesson on conjunctions and to examine students' learner-centered development when the web-based lesson is operated as supplementary instruction. This could be a way to provide web-based instruction as a supplementary lesson and help students improve their understanding on conjunctions.

2. Method

2.1 Sample Group

The sample group consisted of 50 students enrolling 411341 English Writing III in the first semester of the academic year 2011 chosen by convenience sampling. They were non-native speakers with different levels of English proficiency. However, when the first activity administered online, 45 of them joined the study. During learning through the web-based lesson, the number of the students declined. Some of them skipped important activities such as posttest and questionnaire while some accessed too few exercises or lessons to collect data. Therefore, at the end of the study, only 19 students finished mostly all required data.

2.2 Instruments

Web-based lesson on conjunctions. The web-based lesson embedded into the e-learning Website of Khon Kaen University was designed by the researcher with the attempt to help students develop their grammatical knowledge on conjunctions. The web-based lesson functioned as supplementary instruction, so the sample group was not forced to participate in the web-based lesson activities. The contents in the web-based lesson were divided into six lessons for six weeks, and were created by Microsoft PowerPoint because of uncomplicatedness and convenience to include picture and clip. Furthermore, the web-based lesson provided exercises for students so that they would complete five exercises after studying each lesson. The exercises were created by Hot Potato program which facilitates in designing exercises and uploading in e-learning system. Besides, the web-based lesson included communication channels such as e-mail, forum, and blog for the students to connect to others. Students created their community in those channels for asking questions, receiving answer, giving feedback, and sharing information they find or interest about conjunctions.

Pretest-Posttest. This study was conducted online, so students accessed to the Internet in order to complete both pretest and posttest via the web-based lesson. The contents of the tests were designed to cover all types of conjunctions from all lessons in the web-based lesson to investigate the development of students' proficiency.

Questionnaire. The questionnaire to explore attitudes towards the web-based lesson was also embedded in the e-learning website and was designed into five-point Likert rating scale.

Behavioral Checklist. Since all students' performances during accessing the web-based lesson were collected in the e-learning, their behaviours were recorded in the behavioural checklist constructed to evaluate the learning behaviour of users weekly. It was administered during students participating in the web-based activities in the first lesson, and recorded the activities students performed focusing on access information which explores students' using behavior. The activities will be counted into the quantity of times students performed the activities through the web-based lesson.

3. Results

3.1 The Effectiveness of the Web-Based Lesson

The effectiveness of the web-based lesson was indicated by comparing the different score between pretest and posttest. In this study, it was found that the difference of the mean score between pretest and posttest was 9.57 and had a statically significant different at the 0.05 (Table 1). The figures showed that the web-based lesson developed and built on students' learning efficiency. It possibly surmised that the students' improvement might be affected from the learning condition since students relaxed during learning and practicing through the web-based lesson with less competition with friends. This assumption is consistent with the idea that students learn better in online environment [3][13][19]. Furthermore, practices and exercises in the web-based lesson also contributed to the increase of students' proficiency. The web-based lesson provided lessons and exercises so that the students could keep practicing and reviewing them since they would get immediate feedback from each exercise they accessed. Consequently, the web-based lesson could be an effective material to help the students increase their understanding on conjunctions.

Table 1: Result from the pre-posttest

	Mean	Std. Deviation	Std. Error Mean	t	df	Sig.	Explanation
Pre-Posttest	9.57895	2.65237	0.60850	15.742	18	.000	$P < 0.05$

3.2 Attitudes towards the Web-Based Lesson

According to the questionnaire, it was found that the students had moderate attitudes towards the web-based lesson on conjunctions ($\bar{X} = 3.21$). Regarding each item, the students viewed that learning conjunctions through the web-based lesson was not difficult (3.36). However, they seemed to neither enjoy learning (2.63) nor did they think it helped them understand the content knowledge better (3.11), so they did not show enthusiasm on learning (3.11). Surprisingly, the students agreed that the web-based lesson could make learning and teaching activities more interesting (3.53). Besides, they did not feel worry (3.05), had fair concentration on learning via the web-based lesson (3.16), and the web-based lesson increased students' interest on learning English (3.32). Nevertheless, the students did not interact with friends enough through the channels (3.16), and felt less responsible for learning (3.16) although they still wanted to learn other aspects of English (3.47) and other subjects (3.42) through the web-based lesson (Table 2).

The enjoyment in learning from the students might come from the design of the web-based lesson since presentation techniques can keep the students' interest up [18]; however, the web-based lesson contained a lot of detail with a few clip and pictures. As a result, the students were not interested and did not show much responsibility for their learning through the web-based lesson. This could be due to the fact that the web-based lesson was provided as supplementary instruction, and there was no strong commitment enough between teacher and students. The students accessed the web-based lesson without any force; consequently, they seemed to be uninterested in joining the web-based lesson although they earned additional extra points.

Therefore, without strong commitment between teacher and the students, the students were lazy, either took less responsibility or paid less attention to practice on the web-based lesson [6].

Although the students' attitudes towards the web-based lesson on conjunctions were moderate, the students agreed that the web-based lesson made learning and teaching activities interesting, increased interest in learning English as well as desire to learn other English aspects and subjects through the web-based lesson. The web-based lesson was an additional resource besides classroom activities that provided lessons and exercises with both immediate feedback and incorrect points' clarification. With its feedback and correct forms, it could increase students' interest in learning. Furthermore, the web-based lesson was fascinated the students in learning since they experience learning through technology. Hence, feedback, along with online resource like the web-based lesson, could help students learn better [1][13].

Table 2: The students' attitudes towards the web-based lesson on conjunctions

Items	Mean
1. Learning English via the web-based lesson on conjunctions is difficult.	3.36
2. I enjoy learning English via the web-based lesson on conjunctions.	2.63
3. Learning English via the web-based lesson on conjunctions helps me understand the lesson.	3.11
4. I am more enthusiastic when learning conjunctions via the web.	3.11
5. The web-based lesson on conjunctions makes learning and teaching activities interesting.	3.53
6. I get worried when learning English via the web-based lesson on conjunctions.	3.05
7. I lack concentration when learning English via the web-based lesson on conjunctions.	3.16
8. Learning via the web-based lesson on conjunctions increases my interest in learning English.	3.32
9. I interact with friends during learning from the web-based lesson (e.g., e-mail, forum, blog).	3.16
10. Learning through the web-based lesson helps me become more responsible for my own learning.	3.16
11. I want to learn English in other aspects (e.g., grammar, listening, reading, writing) through the web-based lesson.	3.47
12. I want to access to the web-based lesson to learn other subjects besides English (e.g., history, Japanese, German, French).	3.42
Summary	3.21

3.3 Learner-Centered Development

The result from the behavioral checklist revealed some learning behaviors under the learner-centered approach the students have developed, including responsibility and self-motivation.

Responsibility. In this study, the students did not seem to become a learner-centered enough in web-based instruction environment. There were only 19 from 50 students joining the web-based lesson. Besides, the 19 students did not complete all lessons and exercises. This showed that the students were not responsible for their learning while this was indicated as a quality in the learner-centered approach in which the participation is as important as the outcomes of study [4].

Another demonstration of the students' lack of responsibility was presented in Figure 1. The period of study were extended from 7 weeks to 8 weeks due to no access in week three. In addition, the students were triply reminded to participate at week four, six, and seven by an e-mail sent from the researcher to inform them about the new uploaded lesson at week four and soon ended activities at week six. Although the students' access times were highly increased in week seven which supposed be the last week of the study, most of the students still did not complete many activities. This was the reason to lengthen one more week to give them time to finish the activities. This result pointed that the students were lack of responsibility and needed to be motivated which was inconsistent with the statement that students under learner-centered approach should actively engage in all activities and raise their responsibility [20].

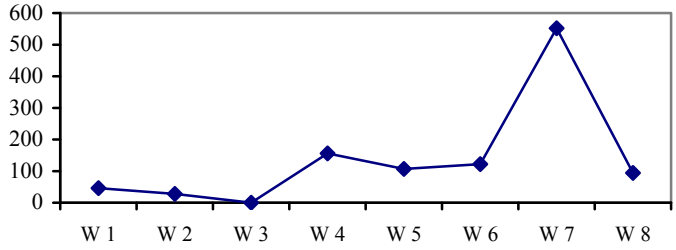

Fig. 1: The students' access times

Self-Motivation. Students under learner-centered approach need more intrinsic motivation. An example of intrinsic motivation can come from the direct test on what they learned on the course [23]. Nevertheless, this study did not provide the direct test on conjunctions for the students, but they could apply what they learned in the web-based lesson to the course to develop their writing skill and also helped increase the scores of their writing exam. The intrinsic motivation in this study was implicitly presented, so many of them did not notice this point and ignored participating in the web-based lesson.

Even though extrinsic motivation seemed to be explicitly informed, the result was almost the same as motivating with intrinsic motivation. The students who joined the web-based lesson were promised to get extra points if they completely finished all activities. However, it appeared to be ineffective to use extrinsic motivation like the extra points from their teacher. These points were included in participation part which was a few points comparing to other grading criteria parts (e.g. 20% for each mid-term and final examination and 50% project assignments); thus, this few points is almost nothing. This study therefore suggests that using extra points as a motivation was not successful [6].

4. Conclusion

The web-based lesson on conjunctions could increase students' knowledge of English. However, the overall attitudes towards learning through the web-based lesson were neutral, but the web-based lesson made and learning and teaching activities interesting. Besides, the students did not present themselves as a learner-centered since they lacked of both self-motivation and discipline.

To develop online learning via web-based lesson, web-based lesson should be well-designed with various multimedia, and the points from web-based lesson participation should be separated as unique without including with other grading parts. Besides, students should be tested directly to the contents in the web-based lesson.

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