DEVELOPMENT OF WEB-BASED COMPUTER-ASSISTED LANGUAGE LEARNING IN ENGLISH INTENSIVE COURSE

R Manda¹, H Nurlaila², W B Indri³

¹Department of Informatics Engineering, Faculty of Engineering, Universitas Negeri Gorontalo, Indonesia
²Department of English Language Education, Faculty of Language and Culture, Universitas Negeri Gorontalo, Indonesia

¹manda.rohandi@ung.ac.id, ²nurlaila_husain@yahoo.co.id, ³indri_wirahmi@yahoo.com

Abstract. English Intensive course (IC) program is aim to prepare students in receiving high-level English material in the next semester. The material in IC textbook consist of 4 language skills (reading, writing, listening, speaking), grammar, vocabulary and pronounce. Although with 4 credits per day and 3 session a week, students ability in English was still unsatisfactory. This research aim to develop a Web-Based Computer-Assisted Language Learning (WBCALL) as a learning media that complements IC textbook, so it could increase student motivation to learn English and to support the creation of more pleasant learning atmosphere. WBCALL application that have been developed is the type of “Do what I tell you” application, which is an application that controls the students activities in drills, exercises, quizzes, and tests, and then the application will notify the answer is correct or incorrect. This application contains 7 main themes with 4 language skill. The trial result of WBCALL application to English department students showed that the use of WBCALL application in learning IC is very useful and helpful in understanding the material, because the presence of WBCALL application, students could learn IC material both inside and outside the classroom, so that could impact on increasing students motivation in IC learning.

1. Introduction

Intensive Course (IC) is a specific subject taught to the students of English Department, Letters and Culture Faculty, State University of Gorontalo. It has 12 SKS that must be enrolled at semester I. Language skills and language components cover in the topics of IC. They are displayed thematically. IC aims to prepare the students to have a higher level of English knowledge for the next semester. The students only have two opportunities to join this program. If they fail then they have to transfer to other departments.

At the beginning, IC textbook used was bought from Universitas Negeri Malang. In 2014, the lecturers tried to formulate IC materials and produce IC textbooks in order to reduce the cost. The textbooks comprised language skills (speaking, writing, reading and listening) and language components (grammar, vocabulary and pronunciation). In the process of teaching IC, the lecturers found that the textbook was not enough for the students to learn IC because they only studied when
they were in the classroom. Even though the lecturing was conducted 3-4 days in a week (a meeting equals 4 SKS), still the students felt difficulties to study the whole topics in IC. Ideally, a textbook should be completed by an interactive learning media. Definitely, learning English as a foreign language needs additional learning media, which is attractive and interactive to increase students’ motivation. Besides, the use of an interactive media will create more interesting learning situation.

The way to complete IC textbook is by using web-based computer-assisted language learning (WBCALL). This is a mode for the students to explore themselves while self-studying and provide an access to the online data resources [1]. WBCALL can be applied as a complement of IC Textbook. Hence, the students can access this outside the classroom and increase their English ability as well. WBCALL will be an interactive media because it provides hyperlink document multimedia and as a tool where computer is its communication media (Computer-mediated communication). WEB can support the lecturers to integrate WEB resources to the classroom activities [2][3]. This paper aims to develop WBCALL as a learning media to complete IC textbook in order to increase students’ motivation in learning English and to create more enjoyable learning atmosphere.

2. Computer-Assisted Language Learning (CALL)
CALL is a term used to describe the computer as a part of language learning[4]. Levy[5] figured out that CALL as “the search for and study of applications of the computer in language teaching and learning”. In addition, Chapelle[6] defined that CALL is the area of technology and second language teaching and learning. Furthermore, Beatty[7] stated that CALL is a learning process using computer for increasing one’s language ability. The materials used in CALL could be specific ones for language learning and they can adapt with computer-based material such as text, video, sound, and animation.

The use of computer for learning purposes was started in 1960s. Furthermore, in 1970s, CALL revolution as the result of research development regarding the use of computer for linguistic purpose and created a comfortable circumstance in language learning. In the beginning of 1980s, CALL spread to the schools and provided in the public. Computer technology development, either hardware or software, have affected CALL evolution. The bigger the storage media, the faster the computer delivers multimedia documents. Consequently, CALL can motivate the students in language learning; time and space become flexible and support students’ self-studying.

CALL has certain characteristics in methodology. Gündüz[4] explained them as follow:
1. The use of various class interaction
2. Information transfer, transferred activity, information limit and problem-solving activity
3. The practice of accuracy and influence
4. The operation of computer.

The types of CALL application are as follow:
1. The application “Do what I tell you”. This leads students and teachers to follow what computer instructs. It controls teachers and students activities in doing tasks, quizzes, and tests. Afterward, it will display whether the answers are correct and incorrect and provide another chance if their answers are incorrect.
2. The application “Guest what was there”. This leads the students to choose one word and to match with the other seen words. The minimal number of words for answering the question comprehensively will be displayed after the text.
3. The application “can I help you?” The computer is treated as a tool that obeys all users’ commands.
4. The application “how do I get out of this?” This consists of certain activities such as game, simulation, puzzles and almost of them are not for language learning.

Warshauer and Healey[8] explained integrity between skill and its activity, as follow:
1. Reading skill
2. Writing skill
3. Speaking skill
4. Listening skill
5. Grammar development

3. Web-Based Computer-Assisted Language Learning (WBCALL)

The development of internet technology such as World Wide Web gives a great contribution for language learning. Web-based learning teaching process is considered more interactive than paper-based one. Hypermedia as a characteristic of WEB increases CALL capability by leading the students to find out their own learning and providing an access to the source of online database[1]. Besides, web-based CALL can increase students’ motivation and offer them an interactive learning experience. Son[9] revealed that web-based CALL is web-based language learning exploring materials, learning sources, certain application, and tools. Figure 1 shows Web Enhanced Language Learning (WELL) as an example of web-based CALL that aims to raise people awareness about the use of WEB in language teaching of high education.

![Figure 1. Web Enhanced Language Learning (WELL).](image)

It is very important to design WBCALL activity to maximize the process of language learning. Son [1] recommends certain WBCALL activities, as follow: (1) creating prelude activity of web by adapting previous interactive language tasks; (2) task-based web activity using various web sources; (3) teacher’s activity in creating web is based on language tasks considering students’ condition. Figure 2 is an example of WBCALL Activities for ESL Teachers and Learners (http://www.usq.edu.au/users/sonjb/projects/wbll/).

![Figure 2. WBCALL Activities for ESL Teachers and Learners (Son, 2008).](image)
4. Identification of IC Textbook

IC textbook covers 7 major topics. Each topic will be identified and chosen as a content of WBCALL containing language skills and language components. Content selection involves researchers and lecturers. It is completed by tasks and their answers. Moreover, questionnaire as a research instrument was given to the 25 students of IC program. It aimed to find out the effectiveness of WBCALL and students’ responses towards the quality of WBCALL.

5. WBCALL Development

5.1. Use Case Modelling as a System Design.

Use case modelling is a set of diagrams and texts describing how the user interacts with the system[10]. In addition, this operates to analyse the functional need of system[11]. Use case diagram consists of actor, use case, association, and system dependence. The type of WBCALL created by this use case is the application of “Do what I tell you”. Through this, the students have to follow the application’s commands. It controls students’ activities to finish tasks and quizzes and let them know whether the answers are right or wrong. In this application, actor refers to the student. It has 5 use case; they are for listening IC audio, answering questions, checking answers, reading IC English texts, logging in to the system. Use case diagram of WBCALL is shown on figure 3. In use case diagram system of WBCALL, the students can log in to the system, listen or read IC material before answering questions. They also have a chance to check answers.

![Figure 3. Use case Diagram of WBCALL](image)

5.2. The Implementation of WBCALL System.

Before creating application, system will be developed and implemented to program code. Next figures show the display of system output. Before using the application, student have login by typing his name firstly. Figure 4 shows user’s login form.

![Figure 4. User login form](image)
The form of reading and listening skill contains IC materials that consist of 7 big themes and cover language skills and language components. Figure 5 displays the example of IC material for reading and listening skills.

![Figure 5](image)

**Figure 5.** The example of IC material for reading and listening skills.

The form of writing skill practice will display blue colour in the text box if student don’t answer the question and red colour for wrong answer. Figure 6 and 7 indicate writing skill tasks form.

![Figure 6](image)

**Figure 6.** The textbox will display blue colour if student don’t answer question.

![Figure 7](image)

**Figure 7.** The textbox will display red colour if student have wrong answer.
Students’ answers could be true-false or written forms. The answers will be checked based on answer key. Green colour will appear for correct answer whereas red colour is for incorrect one. Figure 7 and 8 is the display of checking students’ answer.

![Figure 7](image1.png)

**Figure 7.** Students answer checked in true-false form.

![Figure 8](image2.png)

**Figure 8.** Students answer checked in written form.

3. **The Try-Out of WBCALL**

This phase was done for 50 students of English Department divided into 2 groups and supervised by two lecturers for each. They used WBCALL application interchangeably. Students’ computer browser accessed through LAN was applied to run WBCALL application. The steps are as follow:

1. At the beginning, the lecture explained WBCALL, the procedures and the features
2. Students started to apply WBCALL
3. Lecturer taught IC material in WBCALL and students paid attention while operating.
4. Students tried to answer every number of tasks before moving to the next one. In addition, they can see all scores after completing all tasks

After try-out phase, questionnaire and interview were applied to the students to get their opinions and feedbacks towards the quality of WBCALL for user interface, the visualization, or the audio. The questionnaire has 12 questions applying score range for number 1 as the lowest score to number 4 as the highest one. The result showed that 21 students (84%) choose number 4 to reveal how important WBCALL is and only 4 students (16%) chose number 3. The easiness to operate WBCALL was responded variously. There were 15 students (60%) choose number 4 and 10 students (40%) marked number 3. The user interface was very interesting for 13 students (52%) marked by choosing number 4, 9 students (36%) chose number 3 and 3 students (12%) chose number 2. Additionally, there were various responds for the quality of audio. 12 students (48%) thought it was very good by choosing
number 4, 11 students (44%) preferred number 3 and 2 students (8%) graded number 2. Students’ opinions about the scope of language skills and language components showed that 15 students (60%) preferred number 4, 9 students (36%) answered number 3 and only 1 student (4%) chose number 2. For the quality of listening audio, there were 13 students (52%) chose number 4, 11 students (44%) chose number 3 and only 1 student (4%) chose number 2. Students’ responds towards writing skill showed that 19 students (76%) preferred number 4, 9 students (24%) marked number. For reading skill, the students responded variously. There were 18 students (72%) chose number 4, 5 students (20%) preferred number 3 and 2 students (8%) marked number 2. Moreover, language components covered in WBCALL were responded diversely. There were 10 students (40%) chose number 4 and 15 students (60%) preferred number 3 for responding grammar material whereas 10 students (40%) marked number 4 and 15 students (60%) preferred number 3 for vocabulary material. For pronunciation material in WBCALL, 12 students (40%) chose number 4 and 13 students (52%) chose number 3. Additionally, students’ responses towards their simplicity to comprehend IC material through WBCALL application showed distinct reaction. There were 22 students (88%) thought that WBCALL was really helpful to understand IC material and led them to choose number 4 whereas only 3 students (12%) preferred number 3.

**Table 1.** Summarizes the students’ responses towards the use of WBCALL

| Question                                      | Score                                      |        |        |        |        |
|-----------------------------------------------|--------------------------------------------|--------|--------|--------|--------|
|                                               | 4   | 3   | 2   | 1   |        |
|                                               | students amount | %    | students amount | %    | students amount | %    | students amount | %    |
| 1. The importance of WBCALL in IC class      | 21  | 84  | 4   | 16  |        |
| 2. The easiness of using WBCALL              | 15  | 60  | 10  | 40  |        |
| 3. The look of WBCALL user interface         | 13  | 52  | 9   | 36  | 3     | 12   |
| 4. The audio of listening                    | 12  | 48  | 11  | 44  | 2     | 8    |
| 5. The scope of speaking material            | 15  | 60  | 9   | 36  | 1     | 4    |
| 6. The scope of listening material           | 13  | 52  | 11  | 44  | 1     | 4    |
| 7. The scope of reading material             | 19  | 76  | 6   | 24  |        |
| 8. The scope of writing material             | 18  | 72  | 5   | 20  | 2     | 8    |
| 9. The scope of grammar material             | 10  | 40  | 15  | 60  |        |
| 10. The scope of vocabulary material         | 10  | 40  | 15  | 60  |        |
| 11. The scope of pronunciation material      | 12  | 48  | 13  | 52  |        |
4. Conclusion

The advance of WBCALL becomes the solution to complete IC textbook. This application enable the students to explore themselves when learning English. They can apply self-studying and practice outside classroom activities. The application CALL “Do what I tell you” is a type of WBCALL application developed to complete IC textbook. Through this CALL, the students must follow what was displayed on computer. Also, it controls students’ activities when accomplishing English tasks and quizzes. 7 big themes of IC textbook containing language skills (speaking, writing, reading, and listening) and language components (grammar, vocabulary, and pronunciation) are covered in CALL.

The try-out of WBCALL showed that the students were very interested while using WBCALL application. In addition, the quality of user interface, listening audio, and the content were very good based on students’ responses in questionnaire. They thought that the use of WBCALL in IC program were very helpful especially when they completed the tasks and quizzes. Besides, they can study not only in the classroom but also apply self-studying outside the classroom. When they can keep practicing English using WBCALL inside or outside the classroom, it will definitely raise their motivation and finally increase their score of IC program.

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