Implementing Mobile Assisted Language Learning in Rural Schools for Enhancing Learning Opportunity

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0356

The Asian Conference on Education 2013

Official Conference Proceedings 2013

Abstract

There are gaps between students in rural school and urban school in Indonesia relating to motivation and interests in learning English as a second language in Indonesia. In fact, the students in rural area typically achieve an English proficiency less than students in urban school. There are some factors impact the rural students motivation and interest in learning English including socio economic background of students, learning materials and after school programs. In order to increase an individual's foreign language proficiency, spending cost and time are required and mostly students in rural couldn't afford these requirements. The aim of this research is to increase rural students' motivation and interest in learning English by implementing Mobile Assisted Language Learning (MALL). Since currently a mobile phone becomes a pervasive technology in Indonesia, almost all people carry mobile phone even in rural areas. Mobile phone would be used to facilitate language learning. In second language learning, high intensity of learning is required and learning via mobile phone can serve for that, learning can take place everywhere and every time. The MALL system gave a great impact in increasing student's learning opportunity, motivation and interests in learning English in a rural school in Indonesia

Keyword: Education for All, English, Independent Learning, Mobile Assisted Language Learning

Introduction

In this globalization era, everyone should has English language competency in order to compete in the working world, because nowadays English has become a common communication tool in the world not only in international business, education but also in nearly every context of humans life. WallstreetInstitute(2013) presents nearly 70 countries and 10 International organizations use English as an official language after their mother. Unfortunately, according to English Educational Institutions "English First" (EF) announced the report of English Proficiency Index (EPI) English Language proficiency of Indonesian is still low based on their first comprehensive report (EPI, 2011) for 44 countries where these countries are not English as their first language. As a fact, Indonesian high school students' test score for English National Examination are quite low (Yusuf, 2012). Despite the English is being taught since in the Elementary school in Indonesian.

Moreover, there are competencies gap of English between students in the rural areas and in urban area. English competency of students in rural are quite low compared to students in urban areas. There are some factors influences the English competency gap such as local facilities and demography background of the students. These factors are able to influence the students' motivation, interests in learning English. While in second language learning needs high intensity of learning which correlates to the way of an individual's learning.

Figure 1 Junior High School SMP PGRI 01 Karangploso, Malang, East java Indonesia

Therefore in order to improve the rural students' English competency requires the learning strategy which can enhance the students' motivation, interests and engagement in learning. The high intensity of learning requires the media that can facilitate learning. The media that will be utilized in the learning should be easy to find with affordable price and everyone has it. The media that could meet the criteria is a mobile phone. A mobile phone has computing capability and has feature similar

to a personal computer has. The advantage of this media is easy to carry, so it can provide a mobile learning. The learning can take place at everywhere and anytime.

Currently number of mobile devices users are keep increasing each year such as mobile phone, tablet, ipad and so on. According to data of *Wireless Intelligence* in Santoso (2012) said number of Indonesian mobile phone have reached 250 million subscribers and at the sixth position as large number of subscribers in the world. Based on the fact, Indonesia is entering a mobile age era, which the number of mobile phone subscribers almost equal to the Indonesian population. It means everyone has a mobile phone or everyone carries more than one mobile phone. Almost all Indonesian population are networked and interconnected.

Meanwhile, number of internet users in Indonesia are also increasing 58 % compared to the data of 2012. Indonesian in the third place of internet access users in the world (Tempo, 2012). 70 % of those users are accessed the internet from mobile devices (VivaNews, 2013). Based on these facts, utilizing a mobile devices into teaching and learning as a challenge and an opportunity.

The research was the initiate project in implementing mobile phone into learning English in rural are. The objective of the research was to observe the effect of Mobile Assisted Language Learning application in increasing learning opportunity, interests and motivation of rural area students in learning English. It was a study case, the research project was undertaken at Junior High School SMP PGRI 01 Karangploso Malang, East Java Indonesia during Mei 2003 until November 2013 (Figure 1). The school located in the Ampeldento village in Karangaploso Regency. The research method incorporated Instructional System Design ADDIE model with System Development Life Cycle (SDLC). Based on the preliminary research, all students have a mobile phone with various type and brands. The category of students' mobile phone type are feature phone and smartphone. 90 % of the students have a feature phone type with java based and the remaining was Smartphone. The students was actually have the potential media that can be utilized for learning.

1. Related Works

The mobile devices more affordable for Indonesian people now days. The function of the mobile devices not only for communication purposes however for entertainment, hobby, social networks, business and education. Despite the penetration of mobile phone in Indonesia is increasing, unfortunately its implementation into teaching and learning still low. Whereas mobile learning which utilizes mobile devices is future learning innovation.

In the early emergence of mobile phone, all the education practitioners in the world had focused on the utilization of the mobile phone into teaching and learning. A mobile learning enable to increase and expand the learning opportunity (UNESCO, 2005). In fact, some countries in Africa had succeed to integrate mobile devices in their formal education. A mobile phone had utilized to improve and enhance learning delivery in their classroom. In addition, a mobile phone also had been used to improve students' learning performances (UNESCO, 2012).

Based on the theory of Kukulska-Hulme dan Traxler (2005), mobile learning has an attributes that contribute to its term, namely: spontaneous, personal, informal, contextual, portable, ubiquitous (available everywhere) and pervasive. These attributes refers to the mobile term itself so when it is utilized in education, it could be serve the learning occurs everywhere and anytime.

Many research findings concerning the successful implementation of mobile devices into teaching and learning have been published in journals or magazines. One of the research findings of the benefits of mobile learning had been published by Atwell, et al(2009). Atwell stated that the utilization of mobile phone into teaching and learning impact to :

- encourage and support learning at any time of day, in any location including in college or school, at home, in the workplace, on field trips and in transit
- make learning more convenient, accessible, inclusive and sensitive to learners' individual needs and circumstances
- make learning more interesting, more enjoyable and therefore more attractive to learners
- encourage non-traditional learners and learners who have not succeeded in traditional education to engage in learning and to improve their self-confidence and self-esteem
- help to overcome the digital divide between those learners who have broadband access at home and those who do not
- help teachers to provide differentiated learning activities to suit different learning

The research findings that had been conducted by Haag (2011), concluded that the technology accessed by mobile technology in teaching and learning have a great impacts on the students' test score achievement and performances compare to the learning accessed by personal computer (e-learning). According to Tella (2003), a mobile devices enable to develop the cognitive competence of students and motivated the students to learn.

Chen, et al(2008) conducted the research concerning the utilization of mobile phone in language learning, it is called Mobile Assisted Language Learning (MALL). Chen utilize MALL for vocabulary learning at a school in Taiwan. His research findings shows the students enjoy the learning process because the students can easily access the learning content and conduct exercises at everywhere and anytime. Some students interested in the limited screen of mobile devices since the content is easily to manage compare to other media.

Research Methodology

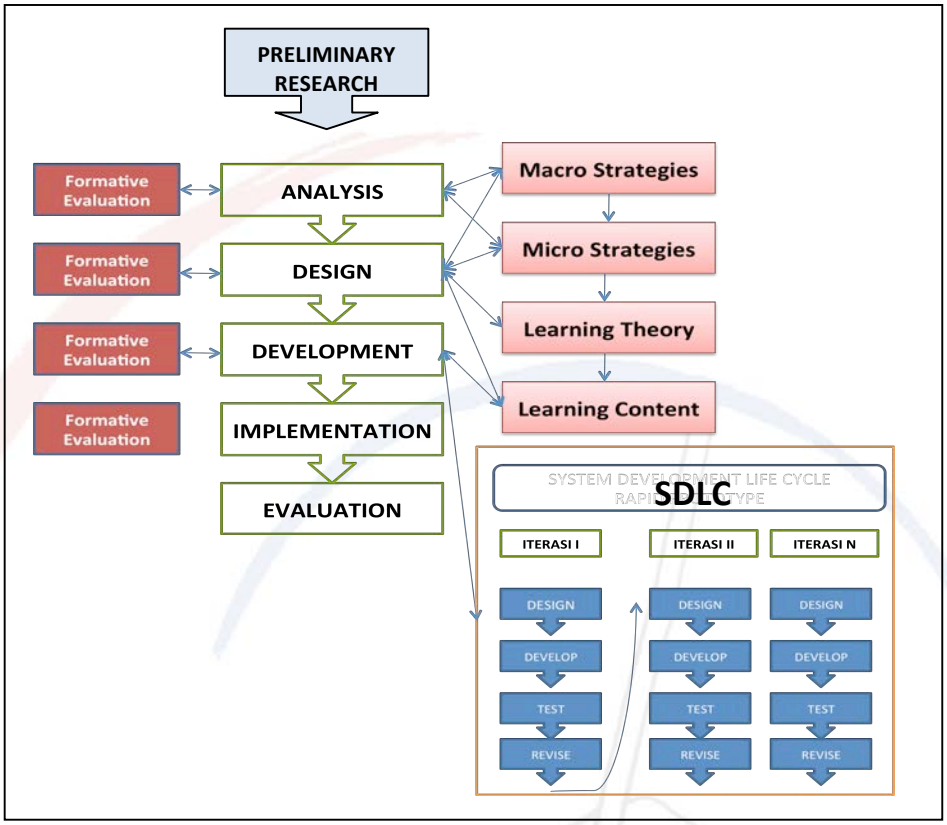


Figure 2 Research Methodology

In order to design and develop Mobile Assisted Language Learning (MALL) which provided English as a learning content, in general the research was follow Instructional System Design Model (ISD) which followed ADDIE model and the development of mobile application used System Development Life Cycle (SDLC). The outline of research methodology as shown in Figure 2.

The acronym of ADDIE is Analyze, Design, Development, Implementation and Evaluation. The research follows the phase of ADDIE acronym. The ADDIE model offers some benefits in designing instructional system, the benefits relating to cost effectiveness, time saving, and effective learning.

Before following the research phase of ADDIE model, the preliminary research had been conducted. It was intended to determine the feasibility of the study related to the research procedures and other things which were still unclear. In this stage, the subject, object and location of the research were determined as well through observation of the case study relating to problems that encountered in the research field and the literature review.

Other benefit of ADDIE model is in each phase has a formative evaluation. It cannot allow the designer to continue to the next phase before conducting formative evaluation. In the formative evaluation stage consists of:

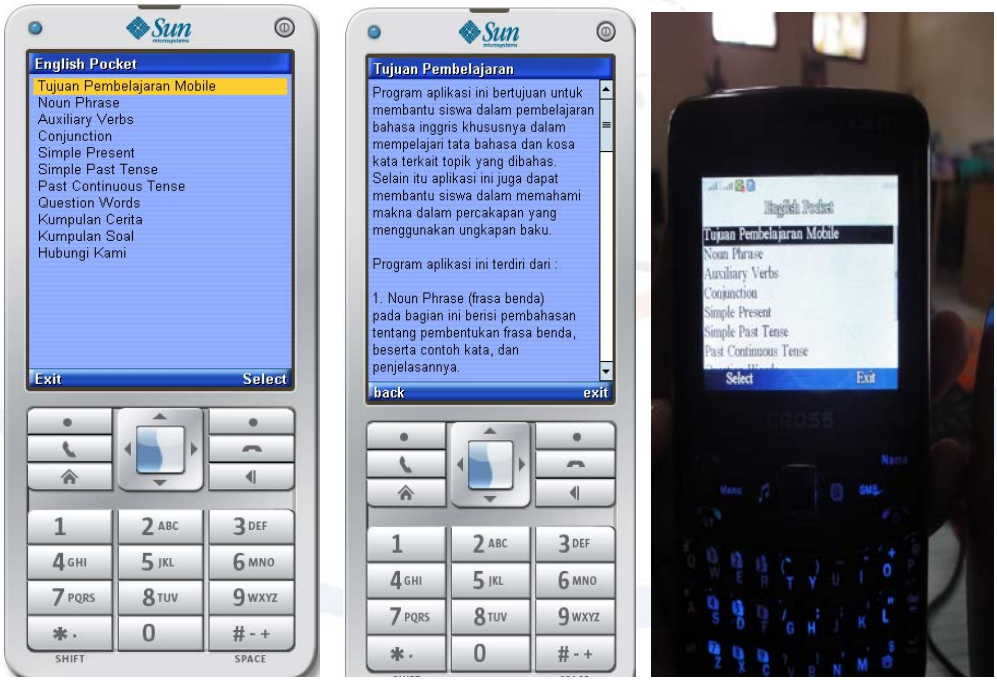
1) Experts review
2) One to one evaluation
3) Small group evaluation

In the phase of Analyze, the characteristics, learning performances, learning style of the students, learning content, media were observed and analyzed. These data would be used to determine the macro strategy, micro strategy and learning content in the next phase of Design. In the Design phase, learning content and story board for learning and interface were designed. In Development phase the mobile application were designed concurrently by following the SDLC with rapid prototype model as shown in Figure 2. After passing the formative evaluation in Development phase, the MALL system were implemented. And the last phase of the research was Evaluation phase. In the last phase the limitations and the research constraints were evaluated.

2. Findings and Discussions

The research project incorporated the English teacher to develop the learning contents. The content were developed based on the consideration of the limitation of a mobile devices, screen and memory storage. Therefore, the content should be written concisely, clearly and has a small size in the storage memory.

The MALL application was developed by using java ME as shown in the emulator in Figure 3. Figure 3(a) and 3(b) are using Java Emulator during the development process. Figure 3 (c) is the real application that have embedded in the student's mobile phone. The content based on the text application considering the limited space of students' mobile memory storage.



(a) **(b)** **(c)**

Figure 3 MALL application

Not all schools in Indonesia allow their students carry mobile devices into the classroom. Every school has a regulation. In Junior High School SMP PGRI 01 Karangploso, the school does not allow the students to take the mobile devices into the classroom. If the students carry the mobile phone to school, they have to collect their mobile devices in the school's mobile devices counter store as shown in Figure 4. After school the students can take their mobile devices back to their home.

Number of respondents of the research were 37 students of second graders students of Junior High School SMP PGRI 01 Karangploso Malang East Java, Indonesia with sampling selected criteria. Only 10 % of respondents were taking English course after school. Since most of the students from low income family. 90% of mobile customers in Indonesia use pre-paid billing. The pre-paid system allows the customers to purchase the airtime at first time. Most of the students buy the airtime only Rp.20.000 IDR ($ 2 USD) per month. Therefore only 23 % of students have ever used their mobile devices for internet access, the remains were using their mobile phone for text messaging and calling.

The MALL application was a standalone application. The students did not use the network for accessing the application. 85 % agree that mobile application is easy to use. 74% of respondent used the MALL system twice a day and they used it in leisure time and 93.75 % of respondents could learn everywhere and anytime by using the MALL system. These data prove that by facilitating the learning through mobile phone can increase the learning opportunity for students. 100 % of respondents agree that the MALL system enable to help them to increase their English Competency. 97 % of respondents are interesting to use this MALL. 86 % of respondents claimed that they could learning individually. In order to accessed the complex learning materials which consists of image, audio/video and more complete materials, 77.4 % of respondents were willing to buy a more sophisticated mobile devices.

Figure 4 The School's Counter Store of Mobile Phone

3. Conclusions

The number of mobile phone users in Indonesia has equaled to Indonesian population. It means that almost all Indonesian people have mobile phone or each person have more than one mobile phone. Unfortunately, the implementation of this mobile phone into teaching and learning are still low. Almost all school in Indonesia prohibits their students to take the mobile phone to school for many reasons, for example the students will be get distracted by this devices, they could not concentrate to their lesson.

The research project had proved the positive impacts of the implementation of mobile phone in the classroom. The research findings shows that the MALL application could increase the learning opportunity, interest and motivation of students in learning English. Since the learning can take place at anywhere and anytime. The students believe that it is an innovative way to enhance their learning performances especially in English language competency.

There were some constraints in conducting this research project concerning the students' mobile devices itself which could not support the application and the school regulation which prohibited the students to carry mobile phone to school.

Acknowledgements

The researchers would like to thank to Indonesian Ministry of Education and Culture, Indonesian Higher Education (DIKTI) by the scheme of Research Excellence of Higher Education who had granted us the research fund for conducting the research project. Special thanks to the teachers of Junior High School SMP PGRI 01 Karangploso who had fully supported us to conduct research in their school.

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