

# Developing an Android Application as Media for Learning Indonesian Language for Thai Students to Improve Their Motivation in Learning

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## ABSTRACT

This research aims at (1) developing android-based Indonesian language learning media for Thai students, (2) revealing the feasibility of the developed android-based Indonesian language learning media, and (3) revealing the effectiveness of the developed android-based Indonesian language learning media in improve the learning motivation of Thai students. This research was research and development referring to Borg & Gall. The data were analyzed using qualitative and quantitative descriptive analysis techniques. The population of the study was Thai University students studying in the City of Yogyakarta. The validators consisted of one material expert, one media expert, three Thai student as the subject of the small group test, and 20 students of large group trials. The findings show that the developed android-base learning media consists of three levels to be studied, each of which consists of three parts of video material and evaluation. The results show that the designed product met the feasibility criteria from the validation of media, material, users, and the result of main field testing. There is a significant increase in Thai students' learning motivation after using android -based Indonesian learning media with the significance value of less than 0.05 ( $p < 0.05$ ). Based on these results, it can be said that the developed android-base learning media is effective to be used as an alternative to improve Thai students' Indonesian learning motivation.

**Keywords:** android, Bahasa Indonesia, media, motivation, non-native, speakers

## INTRODUCTION

In this era of rapidly advancing technology, distance is not an obstacle to prevent the float of knowledge. With the power of the internet most of information about Indonesia can be spread easily around the world. That is one of many reasons why more foreigners want to study in Indonesia day by day. Universities in Indonesia are being accessed by many foreign students to continue their study of post graduate or even graduate degree.

The huge number of study permits applications sent by foreign students approves the increasing demand of learning

Indonesian language. Currently, the application is at a rate of about 150 to 500 requests per week. As reported by Republika on May 17, 2016, Director General of Institutional Science and Technology DIKTI, Patdono Suwignjo revealed that during the year 2016 there are 6,967 Letters of License published. Every year, many students from Thailand enroll in study in Indonesia from bachelor degree to doctoral degree. Most of them choose to study in KNB program, Darmasiswa, and pay the expenses by themselves or by scholarships. Data from Thailand's Southern Border Provinces Administration Center

(SBPAC) states that from 2014 there are 1000 students who enrolled in study in Indonesia. Most of them are studying in the state of Yogyakarta (DIY). As foreign students who begin their first year, they must be able to learn Indonesian language as a preparation or provision for lectures of their high education degree later. Preparation of language can reduce the barriers for students when they study their own special field in the next continuous years. But it is not that easy for foreigners, who have different backgrounds, especially Thailand students who have language and writing very different with Indonesian language, which creates many difficulties in their learning

An Indonesian language program has been provided for foreign students in various Indonesian universities, the learning process is accompanied by textbooks but it is not sure that provided learning is optimal. However, teaching foreigners a foreign language must also be accompanied by learning materials which are slightly different from other Indonesian language learning materials. It is undeniable that the Indonesian language learning for Foreign Speakers (BIPA) program differs from teaching Indonesian language learning and teaching generally.

In the real use of the language, the accuracy of the language used is still determined by various factors. In certain situations when language use takes place, such as speaking, for the sake of fluency and "accuracy" of communication, even errors in "accuracy" are not uncommon. Thus, the discussion that is used as an object in using Indonesian language must reflect something that is found or needed in real use (Nurgiyantoro, 2012: 398). The instructional material developed is expected to construct the knowledge possessed by the learner, so that he can build his own knowledge based on the knowledge he possesses. Based on the explanation above, it is very necessary to develop an interactive learning media in the form of an application in the form of "multimedia learning with

Android based on Indonesian language lessons to improve learning motivation for foreign speakers". Indonesian-based Indonesian learning media is in the form of interactive multimedia.

Aside from the fact that the development of mobile technology today is so rapid. One mobile device that is now commonly used is cellular phones. Nearly 90% of students already have one cell phone or even more than one. The more learners who have and use mobile devices, the greater the chance of using technology devices in the world of education. Learning media that utilizes cellular telephone technology is called mobile learning (M-Learning). Mobile learning is one of the alternatives of of learning media developing. The presence of mobile learning is intended as a complement to learning and provides the opportunity for learners to learn material that is less mastered anywhere and anytime (Wirawan, 2011: 22-23).

The mentioned aspect makes researchers have the will to develop an Android-based m-learning application as an Indonesian language learning media for Thai students to improve their learning motivation. The media to be developed is in the form of interactive multimedia which includes graphics, text, video, and audio that will be used from the basic level to the advanced one. The application is applied to foreign students specifically Thai students to test its effectiveness. This application was chosen for those who have not been able to speak Indonesian well, thus according to the researcher this approach is expected to increase students' motivation in understanding the subject matter in accordance with the knowledge they have.

## **LITERATURE REVIEW**

The word media comes from Latin *medius* which literally means middle, intermediary or introduction (Arsyad, 2011: 3). Media is the plural form of the word *medium*. According to Heinich et. al. and Ibrahim (Daryanto, 2010: 4) medium can be

defined as an intermediary or introduction to the communication from the sender to the recipient.

According to Budi (2002: 109), in generally, multimedia is defined as a combination of text, images, graphic art, animation, sound and video. Various media are combined into a unity of work that will produce information contained high value of communication. This means that even information can not only be viewed as a printout, but also can be heard, forming simulations and animations, which can arouse by the interest and have high graphic arts value in the presentation. The findings of the research conducted by Muhammad (2015) say that the use of interactive multimedia in the learning process can improve the students' participation and achievement.

Rovai et al. (2007) also reveal that students who learn with learning media can have their motivation increased more strongly than traditional learning. Learning media that utilizes cellular telephone technology is called mobile learning (M-Learning). Mobile learning is one of the

alternatives of learning media developing. The existence of mobile learning is intended as a complement to learning and provides opportunities for learners to learn material that is less mastered wherever and whenever. (Wirawan, 2011: 22-23) This aspect is reinforces the findings of the research conducted by Jeng et al. (2010) on mobile technology, it shows that mobile technology has the advantage of providing convenience in contextual learning, in accordance with the daily lives of students.

## MATERIALS & METHODS

### 1. Research Procedure

This research method used was Research and Development (R & D). The product that will be produced in this research is the development Android application as an Indonesian language media learning for Thai students . The research approach used in this study was research and development, refers to steps and procedures of Borg & Gall to design a learning media, it 's consists of ten major steps. The process of this research is as follows:

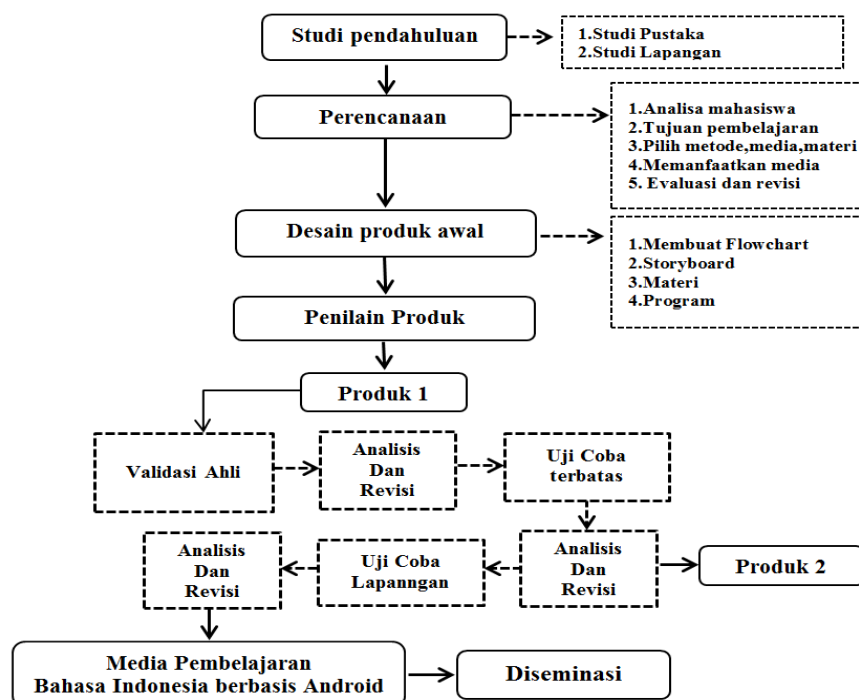


Figure 1: Research and Development model of the results of Borg & Gall Modification

### 1.1 Preliminary Research:

The literature study was carried by examining theories and sources regarding the development of Android-based Indonesian language learning media and preparing software that will be developed in the research product. The field study was then conducted by observing and interviewing several students at the Yogyakarta State University. This is to find out the problems and difficulties in Indonesian language learning.

### 1.2 Planning

Planning started by analyzing students' problems, learning objectives, selection of methods, collection of resources related to the product being developed, preparing a draft media display, gathering content, graphic and animation materials that are in accordance with the material and characteristics of foreign students.

### 1.3 Developing of the Initial Product

The steps taken in developing the initial product are as follows. Material Formulation, making flowcharts and product storyboards, product development.

### 1.4 Evaluation of the Product

The step taken in product validation is the validity test by one material expert and one media expert. The next step is to revise the product and small groups try out, as well as field trials.

### 1.5 The final product

The final product is the result of the field trial is Learning Media Indonesian-based Android then product dissemination.

## 2. Research Subjects

Students at Yogyakarta State University. The subjects were 3 people to test the small group and 20 students for the large group.

## 3. Data Collection Techniques and Instruments

Data collection techniques used in this study were in the form of observation, questionnaires, and documentation. The instruments were questionnaire of media expert feasibility, questionnaire of material

expert feasibility, student feasibility questionnaire, and Motivational learning questionnaire before and after using learning media.

## 4. Data Analysis Technique

This research employed both qualitative and quantitative data which were analyzed using the descriptive statistic. Qualitative data resulted in the form of comments and suggestions for improvement of materials and media experts which then were analyzed and described explicitly for the developed products.

### 4.1 Descriptive statistics analysis

For quantitative data, to be read in the form of structured information. The data obtained from the qualitative product quality assessment sheet was then converted into quantitative data with a scale: as shown Table 1 below.

Table 1 Assessment Scoring Guidelines

Qualitative Data	Qualification
5	Very Good ( SB )
4	Good ( G )
3	Satisfactory ( C )
2	Deficient ( K )
1	Poor ( KB )

### Calculating the mean score by using the pattern

Table 2. Patter of the Mean Score

Score	Value	Category
$Xi+1,80SBi$	$<X$	A Very Good
$Xi+0,60SBi$	$<X \leq Xi+1,80SBi$	B Good
$Xi-0,60SBi$	$<X \leq Xi+0,60SBi$	C Satisfactory
$Xi-1,80SBi$	$<X \leq Xi-0,60SBi$	D Deficient
	$X \leq Xi-1,80SBi$	E Poor

Expansions:

$Xi$  = Ideal mean;  $SBi$  = deal standard deviation;  $X$  = Actual Score

$SBi = (1/6)(\text{the highest score} - \text{the lowest score})$

$Xi = (1/2)(\text{the highest score} + \text{the lowest score})$

The pattern above was used to convert the score to the product assessment sheet.

### 4.2 Learning Motivation Analysis Techniques

The data that have been obtained from the field were analyzed to test the hypothesis. Before testing the research hypothesis, a prerequisite analysis test was conducted. These prerequisites include:

#### 4.2.1 Normality test

Normality test was carried out using a sample test of Kolmogorov-Smirnov (One Sample Kolmogorov Smirnov) in the SPSS 17.00 for Windows program. In the output of One Sample Kolmogorov Smirnov Test seen in the Asym line. Sig. If the value is less than the significance level of 5%, then the data is not normally distributed, on the contrary if the significance value is more or equal to 5% then the data is normally distributed (Muhson, 2009).

#### *4.2.2 Homogeneity Test*

Homogeneity test was done before and after treatment. Homogeneity testing was carried out by using Levene's test analysis using SPSS 17.00 for Windows. Homogeneous requirements if the probability (sig) > 0.05 and if the probability (sig) is < 0.05 then the data is not homogeneous (Ali Muhson, 2009).

#### *4.2.3 Hypothesis testing*

The test used to test the hypothesis in this study is the t-test. The t-test was used to determine the difference in significance between the before and after groups. The test used is:

##### *a. Paired sample t-test*

Paired sample t-test was used to test whether the sample has the same mean or not. The testing of this hypothesis is used to prove whether there is a significant difference between the learning motivation of Thai students before and after using the Android-based Indonesian learning media. The hypothesis is accepted if the probability value is  $\leq 0.05$  and the hypothesis will be rejected if the probability value is  $> 0.05$ .

## **RESULT/ DISCUSSION**

Developing an Android application as an Indonesian language learning media for Thai students to increase learning motivation. The application product was developed in the Android package (.apk) format using Adobe Flash Professional Cs 6 software scrip software 3. Indonesian language learning media products have been developed. The learning media produced were validated by material experts, media experts, small group try out and field try

out. Media research was conducted to determine the quality and effectiveness of Android-based Indonesian language learning products. The feasibility of the product developed can be seen from the criteria based on the assessment of the media aspect with the value of the whole there is an average score of 3.4. This score is in a good range (B). In the aspect of material outcomes in all aspects there is an average score of 3.6. This score is in a very good range (SB). Media assessments from students from field tests obtained results in all aspects of getting an average score of 3.4. This score is in a good range (B). Thus, this Android-based Indonesian language learning media product is feasible to be used and disseminated to users.

The learning media developed also have an influence and a difference in the improvement of student learning motivation between before and after use. This is evidenced by the research data obtained in a field trial of 20 Thai students studying in the city of Yogyakarta. To find out the differences in the improvement of student learning can be seen from the results of the Paired Sample T-test analysis there is a significant value of 0,000 and shows that the significance value is less than 0.05 ( $p < 0.05$ ). It can be concluded that there are differences in the improvement of learning motivation before using the Android-based Indonesian learning media and after using the Indonesian language learning media. This is similar to that conveyed by Roland Leser, Baca and Uhlig (2011: 184-192) that investigations that study learning supported by media or multimedia learning can increase positive motivation. Amine, Chelleli & Boutkhil (2012) proved that the use of technology in learning provides many benefits for students and can also increase motivation for students. In Bialo (1996) research shows that the use of learning media can motivate students and improve students' attitudes toward learning and have a significant positive effect on student achievement.

## CONCLUSION

Indonesian language learning media has the characteristics of interesting visualization, equipped with photos, animation, sound, video and practical. This application can be used anytime and anywhere. In addition this application has a variety of evaluation questions so that users can learn material without being bound time, place and can improve the memory of the material.

The development of Android-based Indonesian language learning media based on the results of research conducted by material experts, media experts, and Thai students included in the category of very good and good. Thus, Indonesian language learning media products are suitable to be used as learning media in the process of learning Indonesian. This learning media has differences in the improvement of learning motivation before using Android-based Indonesian language learning media and after using Indonesian language learning media. The development of the Indonesian language learning media based on Android above, can be concluded that the application of Indonesian language learning media can be used as an alternative media for Indonesian language learning to improve learning motivation and can overcome the problem of low interest of Thai student learners.

## REFERENCES

- Amine, B.M., Chelleli B., & Boutkhil G. 2012. Using Multimedia to Motivate Students in EFL Classrooms: A Case Study of English Master's Students at Jijel University, Algeria. *Malaysian Journal of Distance Education* 14(2), 63–81
- Arsyad, Azhar. 2011. *Media Pembelajaran*. Jakarta: PT Raja Grafindo Persada
- Bialo, E.R., & Jay, S.K. 1996. The effectiveness of technology in school: A Summary of recent research. *Journal SLMQ*, 25(1), 1-14.
- Borg, W.R. & Gall, M.D. Gall. 1989. *Educational Research: New York: Longman*.
- Jeng, Y.-L. Wu, T.-T., Huang, Y.-M., Tan, Q., & S.J. 2010. The add-on impact of mobile application in learning strategies: A review study. *Education Technology & Society*, 13(3), 3-11.
- Leser R., Baca, A & Uhlig, J. 2011. Effectiveness of multimedia-supported education in practical sports courses, *Journal of Sports Science and Medicine* 10, 184-192.
- Muhson, Ali. 2009. *Diktat Aplikasi Komputer*. Yogyakarta: Universitas Negeri Yogyakarta
- Muhson. 2011. *Diktat Analisis Butir Soal*. Yogyakarta: Universitas Negeri Yogyakarta
- Oetomo, Budi Sutedjo Dharma. 2002. *E-education; Konsep Teknologi dan Aplikasi Internet Pendidikan* (Yogyakarta: Andi). hal. 109.
- Rovai, A.P., Ponton, M.K., Wighting m.j., & Bakar, J.D. 2007. A Comparative Analysis of student Motivation in traditional Classroom and E-Learning Courses. *Journal International on E-learning*, 6(3), 413-432.
- Wirawan. 2011. *Evaluasi Teori Model Standar Aplikasi dan Profesi, Contoh Aplikasi Evaluasi Program: Pengembangan Sumber Daya Manusia, Program Nasional Pemberdayaan Masyarakat (PNPM) Mandiri Pedesaan, Kurikulum, Perpustakaan, dan Buku Tes*. Jakarta: Raja Grafindo Persada.
- Daryanto. 2010. *Media Pembelajaran*. Yogyakarta: GavaMedia.

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