DEVELOPING THE ELECTRONIC BOOK USING AUTORUN PRO ENTERPRISE APPLICATION FOR VIRTUAL SPEAKING CLASS AT KOKSANGA SCHOOL THAILAND

Author
Retno Wulandari \(^1\), Paulina \(^2\)
English Education Program, Universitas Muhammadiyah Gresik
retnowulan_180403@umg.ac.id

ABSTRACT
The aim of the research is to develop an electronic book of learning speaking for the fourth grade of Koksanga primary school Thailand that is conducted virtually. The method used in this research is Research and Development method with the ADDIE model. It includes five phases: students’ need analysis, designing the prototype, developing the product, implementing the product, and evaluating the product. The instruments used are interviews, expert judgment rubric, and summative test scores conducted before and after the implementation. The results show that the e-book media has a very valid category both from material suitability in the score 87.78 and physical design suitability in the score 77.78. Moreover, the difference in students’ scores before and after the implementation of the e-book shows significant improvement from the mean score of 52.7 in the pre-test to 75.3 in the post-test, which is the improvement is 22.6. Therefore, it means that the electronic book is suitable for the fourth-grade primary students in improving their speaking skills.

Keywords: e-book, teaching speaking, online teaching
1. Introduction
Undeniably, English has evolved into a worldwide language utilized by most people to communicate in today's world. In Thailand, it becomes a lingua franca which means the function is as a communication language with non-English native speakers. Moreover, the use of English has become much more significant in the ASEAN Economic Community (AEC), where job seekers are required to have a high level of English proficiency to follow the technology development and global communication [1]. Thus, the Thai Education Ministry has made a policy of placing English as one of the compulsory subjects for all levels of education [2].

According to Kongkerd [3], though English has become one of the compulsory subjects in Thailand, many English teaching only concentrates on grammar and accuracy. In addition, most of the teachers deliver English lessons using the Thai language. As a result, many Thai learners have difficulties in learning speaking and listening. Based on the researcher’s observation at Koksanga school, speaking skill is the most crucial skill that pupils must learn to meet future world demands. To reach the goal, the English teachers should be good at teaching speaking. The teacher has to find appropriate ways for students to be able to master speaking [4].

The problem has worsened since the Coronavirus outbreak (Covid-19), which has become more massive in 2021. It has influenced many sectors, especially education. Some schools and universities worldwide have closed their offline activities following the government policy regarding social distancing. The pandemic forces many institutions to change their teaching-learning system into distance learning, particularly through online learning. One of the ways is conducting the virtual classroom, which unnecessary meets directly in the same place [5].

Thailand is one of the countries which has recovered fast from the pandemic. As a result, Thai schools have reopened schools to hold their activities. However, the teaching and learning implementation is conducted in two ways, offline and online. One of the schools that implemented blended learning is Koksanga School. Koksanga Primary School is a Thai primary school in Loei Province. It became one of the partners in a partnership program between the University of Muhammadiyah Gresik and the Loei Primary Educational Service Area Office 2. The main goal is to provide pre-service English teachers with teaching experience. Though the school activities are conducted offline, the English classes which Indonesian pre-service teachers teach are conducted online using the Zoom application due to the prohibition of travel abroad by the Indonesian government. Due to the condition, the researcher should find the most effective way to conduct online teaching.

Online teaching is a way of obtaining knowledge in a virtual setting using the internet. The teaching content is delivered online, and the use of the teaching module is adapted to the circumstances [6]. Furthermore, by using online teaching, teachers can teach without meeting the students directly. Therefore, the benefits of conducting online teaching can be adjusted with nowadays situation.

From the interview conducted with the English teacher at Koksanga School, the fourth-grade students' problem is speaking skills. It may come from the anxiety that students felt, as Asif [7] stated that anxiety is the main factor found among learners in developing speaking skills. The other problem comes from the use of the mother tongue in English classes which interfere with English
use. It is because communicating using the mother tongue is easier and naturally flows than using
the foreign language [8]. Another factor is the lack of motivation among the students. Motivation
is the internal aspect that has an important role in enhancing students’ interest in speaking English.
This factor is affected by unsupported learning atmospheres. The physical and psychological
atmosphere, including media support and learning resources, is important in promoting students’
activeness [9].

The use of technology has an important role since online teaching-learning. The technology
used is variance, such as teaching and learning media. One of the factors that might encourage the
teaching-learning process is teaching-learning media. According to Defa, Hadi, & Saragi [10],
good learning media should be suitable with the characteristics, needs, and usefulness in learning
activities. Because of the Covid-19 pandemic, the English classes were held online. Based on the
observation during the class, the researcher found that it was the first time the teacher conducted
an online teaching-learning process. Therefore, the teacher should use appropriate teaching media
such as an electronic book to encourage the teaching-learning process.

According to Hawkins in Sawyer [11], an electronic book is the content of a book made
available in an electronic format. It comprises text, pictures, or both that can be read on a computer
or other electronic device's flat-panel display. Based on the findings from Almunawaroh [12],
electronic book impacts in improving students’ motivation, performance in learning English,
reading comprehension, Covid-19 pandemic [13].

Finally, there are certain problems with the English teaching-learning conducted by the fourth-
grade students of Koksanga School and Indonesian pre-service teachers. The first problem comes
from the students’ speaking ability which most of them feel the anxiety of speaking English. They
are afraid of making mistakes in speaking. The second problem is the dominance of the use of
mother tongue, which can interfere with their habits in using English. The lack of motivation
among students to study English is the third problem. The last problem is the lack of teachers’
experience using technology for online learning, especially online teaching-learning media.

Therefore, to overcome the problems stated above, the teachers suggest using media to follow
the trend of online learning. The use of media which adaptable in nowadays conditions is truly
essential. For example, an electronic book can be a media to help the students’ speaking ability in
a virtual class. The electronic book can also help teachers explain in fun ways because it can be
designed by attaching interesting materials and exercises.

Thus, this study aims to develop an electronic book obtained as the media in virtual speaking
class at Koksanga school, Thailand.

2. Method

Research Design

Since the study is developing an electronic book, it employees Research and Development study
(R&D). Research and developmental studies aim to develop and generate products in the form
of materials, media, tools, and learning strategies to carry out learning in the classroom/laboratory
rather than to test theories.
The ADDIE model is the model utilized in this R&D approach. Analysis, Design, Development, Implementation, and Evaluation are the acronyms of ADDIE. This model ensures that learners reach the learning objectives and provides a simple procedure to design and develop materials.

![ADDIE Model](image)

**Figure 1.** *ADDIE Model*

As shown in Figure 1, the ADDIE is a general instructional design model with five phases. The following is an explanation of each phase of the ADDIE model:

1. **Analysis**
   The analysis phase is the most basic of all instructional design phases. Its goal is to find out in which there is a performance gap by defining the problem, determining the cause of the problem, and determining potential solutions, such as need analysis, goal analysis, and task analysis. As a result, the researcher interviewed the teacher to get data about the learners' and teachers' necessities, lacks, and wants during the Covid-19 pandemic. After interviewing, the researcher needs to review the learning plan based on the analysis results from the interview section. The results of this phase determine the next step.

2. **Design**
   The design phase is aimed to outline steps to reach instructional goals. The target population, description, learning analysis, creating objectives and test items, selecting a delivery system, and scheduling the instruction are all aspects of this step. In this phase, the researcher determined the appropriate teaching media based on the interview results. The most appropriate media is determined among others by using references from previous research. After determining, the researcher starts to design and create the prototype drafts.

3. **Development**
   In the development phase, the teaching media is developed based on the ideas in the design phase. Then, it needs to be certified by the appropriate experts. This phase is the next phase after the design phase is done. The media developed will be displayed and tested to see whether the media works well before the implementation phase.

4. **Implementation**
   This phase aimed to find out how effective or efficient instruction delivery is. In addition, the phase should help students understand the material, encourage their mastery of objectives, and
ensure that information is transferred from learning to goal-setting. The product was implemented in the prathom 4 (fourth-grade) of Koksanga School Thailand. The implementation was done once a week for two semesters. The researcher utilizes summative tests to evaluate the students speaking skills before and after the product is implemented, referred to as pre-test and post-test.

5. Evaluation

This phase aims to evaluate the instruction’s effectiveness and efficiency. Formative and summative evaluations are also possible to do in this phase. The researcher holds summative evaluation from the results in the previous phases. The results from the expert judgment and students’ summative scores determine the efficiency of the product developed.

The development of an electronic book for teaching speaking virtually was implemented at a primary school named Koksanga School in Thailand. It was implemented for the fourth-grade students, which consisted of 10 students. The e-book development procedure is shown in Figure 2 below:

3. Research Instrument

The instrument used in this research study is the interview, expert judgment rubric, and summative test scores conducted before and after the implementation. An expert judgment rubric is used as an evaluation tool to verify the media. It analyses two aspects: material suitability and physical design suitability. The product evaluation was conducted by an expert in Computer Assisted Language Learning (CALL) major. The data received were analyzed by using the qualitative descriptive analysis technique.

4. Findings

Students’ Needs Analysis
In the need analysis phase, the researcher interviewed an English teacher of the fourth-grade Koksanga School. The interview consists of six questions about the students’ problems, needs, and wants. The first question was about students’ problems in English class. The second was the motivation of students to learn English. The third question was the most complicated skill to learn
in their opinion. The fourth was the essential skill to teach during the class, which followed the existing curriculum. While the fifth question was involved the most problematic things in English. The next was about the media that the students wanted in the class. And the last question is related to the media used for the teaching-learning process, especially during this pandemic.

Based on those questions, it can be concluded that the students have problems with laziness, shyness, unmotivated, and fear in learning English in the classroom. English becomes one of the boring subjects in the class because it is difficult rather than their first language, Thai. In addition, the Covid-19 pandemic also makes the problem worse since they have limited activities in learning, which makes them feel lazier. Furthermore, speaking skill is promoted in English classes in Thai schools due to following today’s curriculum. Therefore, the use of their first language impacted their ability to learn English. Most of the students are shy and afraid of making mistakes when speaking English. The researcher obtained the information that students’ ability in speaking was categorized into medium and low.

Besides that, conventional media use is boring and inappropriate to use in the online classroom. During the Covid-19 pandemic, the teaching-learning process is conducted virtually. The change of the teaching-learning system from conventional learning to online learning also changed the media used. It is hard to adapt a new teaching media used which is appropriate to the conditions. Teachers still use conventional media for online teachings, such as printed worksheets that took photos then uploaded in group classes on the Line messenger platform. Even more modern is some of the teachers used video as the media to explain the material. The use of video learning has a positive result in increasing students' motivation, interest, and comprehension during the teaching-learning process [18]. Though the video is effective to use during the teaching-learning, teachers should implement more innovative teaching media to reach the student needs. Another reason is the unattractive activities for online learning, such as unavailable games, which the children like to play. Children learn by playing because they acquire critical language, cognitive, and socio-cognitive skills.

Based on the interview results above, it can be summed up that the students need to improve their speaking skills and solve the problems related to speaking by using the media that is appropriate to their needs. Due to this condition, the researcher should develop appropriate media that consists of the material that the students need. The material which the students need is related to speaking skills. In this case, the researcher is doing the learning plan review to determine the material's topics. From the results of learning plans reviews, the necessary topics consist of eight topics: introduction, parts of the body, animals, shopping place, food and drink, building, occupation, and free time was the appropriate based on the students’ characteristics and review collaboration from the researcher and the fourth-grade teacher of Koksanga school.

The Design of Media and Content
The media is determined to be implemented in the teaching-learning process based on interview results in this field. Based on the students’ need analysis, the electronic book is a good choice as one of the media in online classes. Therefore, interesting e-book needs to be developed to reach students’ needs. Some familiar platforms or software such as Canva, Kvisoft Flipbook Maker, and Autorun Pro Enterprise can be used as e-book creators. Canva is an online platform to create posters, presentations, brochures, logos, resumes, magazines, etc. It also can be one of the platforms to develop teaching media, especially an e-book. There
are some advantages of using Canva, such as having a variety of interesting designs and improving teachers’ creativity in designing media that can be used on PC or smartphone. However, there are some disadvantages, such as the PC or smartphone must be connected to the internet, there are some premium features, and it does not provide users’ friendly interface. The following application is Kvisoft Flipbook Maker. This application is easy to use, can convert PDF files into the more interactive form of an e-book. Meanwhile, this application cannot display video (MP4) and audio (MP3), and the display will only stand alone, which runs slowly if the file is big. From those applications, Autorun Pro Enterprise is the easiest to learn and use. Simply click, point, place, and test to create and edit autorun files for CD/DVDs.

Figure 3. Autorun Pro Enterprise display

Autorun Pro Enterprise provides 25 features: tab notebook, tab sheet, panel, group box, splitter, button, image button, fade button, scroll box, label, text, image, angle, fade label, shape, balloon, note, slide show, memo, rich text, web browser, media player, flash player, pdf player. It also provides features to put audio, picture, and video appropriate for teaching speaking. The feature of the link to connect with another application is also provided in this application. As the statement above, the use of Autorun Pro Enterprise has been determined to create electronic book media in this research.

In designing the electronic book, the researcher has drafted some topics according to the need analysis results. The topics that consisted in this e-book are eight topics which topic 1 to 5 is for the first semester, while topic 6 to 8 is for the second semester. The first topic is about introduction, the second is parts of the body, the third is animals, the fourth is shopping places, the fifth is food and drink, the sixth is building, the seventh is occupation, and the ninth is free time. The contents of each topic can be seen in figure 4 below.
Figure 4. Design of Content Material

It can be seen from the table above that each topic consists of pages of the learning goal, material, practice, and game. The learning goal is the goal that is hoped to reach by the students.
after the end of the topic. The goals for each topic are focused on students’ speaking skills as the result of need analysis.

The material page in this e-book is created in two ways, video and flashcard. The video consists of material that has been learned. It was designed to explain the material in each topic. The flashcard includes the target vocabularies as drafted on the learning goal in each topic.
Next is the practice button. It displays some speaking exercises such as role-play that support students' understanding of the material. Based on the need analysis result, the students need to improve their speaking skills, so they need more practice. Besides, the media of e-book is designed in interesting and understandable ways to be used in online learning.

The last button is the game button. It consists of various games such as guessing games, fill-in-the-blanks, quiz games, selecting the pictures, and arranging words. It is designed in interactive displays. Before playing the game, the students will face the rule of the game to make the students understand the ways of playing the game. In addition, the games also provide the correct answers, so students will know whether their answer is true or false. The prototypes above are then developed in the next phase.

The Development of Media
After designing the prototype of the e-book, then it develops based on the design phase result. The learning media, electronic book for the fourth grade of primary school is validated by an expert in Computer Assisted Language Learning (CALL) major. The validation is aimed to get the experts’ validation of the media. An expert judgment rubric is needed to validate the material suitability and physical design suitability. The expert gives a score and value based on the rubric explanation. The following table will show the score or value of the expert.

<table>
<thead>
<tr>
<th>Validators</th>
<th>Score</th>
<th>Criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td>Material Suitability</td>
<td>87.78</td>
<td>very valid</td>
</tr>
<tr>
<td>Physical Design Suitability</td>
<td>77.78</td>
<td>very valid</td>
</tr>
</tbody>
</table>
Table 1. Result of validation from the expert

The table above shows that the results score of material suitability is 87,78, categorized into very valid criteria. While for physical design, suitability shows 77,78, which is categorized into very valid. The material suitability consists of eight descriptors about the active approach in learning tasks, word choices in the target language, exercise content, challenging content, arrangement of the material, understandable material, student active involvement, and the scope of the material. While physical design suitability consists of five descriptors, they are the level order of the material, clear material mapping, the presentation of the material, attractiveness, and the use of proper text-based in the presentation of the material.

In addition, this phase develops the eight topics used for two semesters: introduction, parts of the body, animals, shopping places, food and drink, building, occupation, and free time. Each topic needs to be developed according to the prototype that has been designed. The development of each topic can be seen in table 2 below.

<table>
<thead>
<tr>
<th>Topic</th>
<th>Material</th>
<th>Activities</th>
<th>Learning Goal</th>
</tr>
</thead>
</table>
| 1. Introduction | 1. Introducing self | 1. Watching a video about introducing self  
2. Memorizing simple sentences about introducing self  
3. Practicing to introduce self in front of the class  
4. Playing ‘Train Words’ game, which students have to arrange words into a good sentence about introducing self | 1. To memorize simple sentences of introducing self  
2. To show their introduction in front of their friends |
| 2. Parts of body | 1. Vocabularies of parts of the body  
2. Counting parts of the body | 1. Watching a video about parts of the body  
2. Memorizing some vocabularies of parts of the body  
3. Doing role play about asking and giving information related to the number of our parts of the body  
4. Playing ‘Let’s play with the monster!’ game, which the students have to count Monsters’ parts of the body | 1. To memorize some vocabularies about parts of the body  
2. To tell the numbers of vocabulary |
| 3. Animals | 1. Kinds of animals based on the habitat  
2. Characteristics of animals | 1. Watching a video about kinds of animals based on their habitat  
2. Memorizing kinds of animals based on their habitat  
3. Practicing to guess the animals based on the characteristics that the students see | 1. To mention some kinds of animals based on their habitat  
2. To understand the |
4. **Shopping places**

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Kinds of shopping places and items sell on there</td>
</tr>
<tr>
<td>2.</td>
<td>Asking and answering about the plan to buy something</td>
</tr>
</tbody>
</table>

1. Watching two videos about shopping places and items sell on there
2. Memorize kinds of shopping places and items sell on there
3. Doing role play of asking and answering about the plan to buy something
4. Playing a quiz game ‘Where can you buy something?’, that the students have to choose the right shopping place that is appropriate for the items sold

1. To mention some shopping places and items sell on there
2. To tell about the plan to buy something.

5. **Food and drink**

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Kinds of food and drink based on the time categories</td>
</tr>
<tr>
<td>2.</td>
<td>Quantifiers</td>
</tr>
<tr>
<td>3.</td>
<td>Asking and answering about the plan to eat and drink something</td>
</tr>
</tbody>
</table>

1. Watching two videos about kinds of food and drink based on the time categories and the quantifiers
2. Memorizing kinds of food and drink based on the time categories and the quantifiers
3. Doing role play of asking and answering about the plan to eat and drink something
4. Playing a quiz game ‘Let’s play with quantifiers!’ which the students have to mention the quantifiers based on the pictures

1. To mention some kinds of food and drink
2. To tell what they want to eat and drink
### Table 2. Material Mapping

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>3. Telling the position of a place</td>
<td>3. Practicing to fill the blank sentences with the right words</td>
<td>3. Practicing to tell our free time activities</td>
</tr>
<tr>
<td>1. Watching two videos about kinds of public places and prepositions of place</td>
<td>4. Playing game ‘Guess what am I!’ that the students play to guess the occupation based on the characteristics given am. And the ‘Where do they work?’ game, the students play to answer the place provided based on the question given.</td>
<td>4. Playing ‘Guess what are the people doing?’ game, that the students have to guess what are the people doing in their free time based on the pictures</td>
</tr>
<tr>
<td>2. Memorizing vocabularies of kinds of public places and prepositions of place</td>
<td>1. To mention some vocabularies of occupation and the workplaces</td>
<td>1. To mention some vocabularies of free time activities</td>
</tr>
<tr>
<td>3. Practicing to tell the position of something</td>
<td>2. To tell someone occupation and the workplaces</td>
<td>2. To tell our free time</td>
</tr>
<tr>
<td>4. Playing the game ‘Where’s the location?’ which the students have to fill the blank sentences with the correct preposition based on the pictures</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Implementation of Product

The product was implemented in the fourth-grade students of a primary school named Koksanga School, Thailand. The researcher, as a pre-service teacher, implemented the electronic book for
teaching speaking. The activities were conducted once a week for two semesters which is the duration of each meeting is 30 minutes. There were eight topics had implemented, which each topic was done for four meetings. The researcher gave a pre-test before implementing the product. In the last activity, the researcher did a post-test to measure students speaking development after implementing the e-book media.

In table 3 shows the result from a score of summative tests from pre-test and post-test.

<table>
<thead>
<tr>
<th>No</th>
<th>Name of Students (Initial)</th>
<th>Score</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Pre-test</td>
<td>Post-test</td>
</tr>
<tr>
<td>1</td>
<td>PJ</td>
<td>67</td>
<td>87</td>
</tr>
<tr>
<td>2</td>
<td>PK</td>
<td>53</td>
<td>73</td>
</tr>
<tr>
<td>3</td>
<td>AD</td>
<td>40</td>
<td>67</td>
</tr>
<tr>
<td>4</td>
<td>WS</td>
<td>53</td>
<td>67</td>
</tr>
<tr>
<td>5</td>
<td>MS</td>
<td>53</td>
<td>73</td>
</tr>
<tr>
<td>6</td>
<td>KC</td>
<td>47</td>
<td>73</td>
</tr>
<tr>
<td>7</td>
<td>PW</td>
<td>47</td>
<td>73</td>
</tr>
<tr>
<td>8</td>
<td>TJ</td>
<td>47</td>
<td>67</td>
</tr>
<tr>
<td>9</td>
<td>NP</td>
<td>73</td>
<td>100</td>
</tr>
<tr>
<td>10</td>
<td>SG</td>
<td>47</td>
<td>73</td>
</tr>
<tr>
<td></td>
<td>Mean Score</td>
<td>52,7</td>
<td>75,3</td>
</tr>
</tbody>
</table>

**Table 3. The Result Score of Summative Test During the Implementation**

From the table above, the pre-test mean score was 52,7, the post-test mean score was 75,3, and the improvement score was 22,6. The students in the pre-test who got a score of <70 were nine students. Only a student got >70. After implementing the electronic book of speaking for the fourth-grade primary school, there was a significant improvement in the score. Students who get <70 were three, the other seven students were >70.

Evaluation of Product

In this phase, all the phases done before are evaluated to determine if the aim of the research has been met and establish the efficiency of the project/product. Based on the result of the data from the expert judgment and the students' summative scores before and after the implementation, it can be concluded that the quality of the electronic book of speaking for the fourth-grade primary school is categorized as a good media for learning speaking virtually. The electronic book has good criteria for delivering appropriate and suitable words for speaking, facilitating learning new vocabularies as the fundamental of speaking, and providing interesting materials to develop speaking skills.

From the result of students' summative scores before and after the implementation of the product, it can be concluded that there are significant improvements from before the implementation with after the implementation. It means that the use of an electronic book becomes the media that is appropriate for teaching speaking virtually.
5. Conclusion
Based on the development of the electronic book of teaching speaking for the fourth-grade primary school, the need analysis shows that the students need media that encourage their speaking skills in the virtual classroom. The interview results with the teacher and learning plan reviews were used to design and develop the material. An expert judgment rubric score was also be used to validate the material. During the implementation of the e-book, the researcher conducted a summative test which aimed to know the students’ performance before and after the implementation. Evaluation is done by looking at the expert’s judgment rubric and students’ summative test scores. From the evaluation phase, it can be concluded that the quality of the electronic book of learning speaking for the fourth-grade primary school is categorized as a good media for learning speaking virtually.

References


F. Asif, “The Anxiety Factors among Saudi EFL Learners: A Study from English Language Teachers’


joko Prayudha.S, “Video Based Learning as a Media for Teaching English during Pandemic


