

# DEVELOPING PROTOTYPE INTEGRATED READING MATERIAL FOR JUNIOR HIGH SCHOOL

**Ninis Khoirotunnisa**  
*SMP Maarif NU Benjeng*  
*niniskhoirotunnisa92@gmail.com*

## Abstract

Reading skill is mainly acknowledged as the most important skill to be mastered. It is not only overemphasized for developing English skill but also critical understanding skills of students. Various factors have certainly contributed to this study. The lack of students' interest became the main factor of the lowness of students reading skill. Besides the teaching material development required the balance of higher technology. This study aimed to optimize and accomplish the goal of learning reading which balance with the increasing of technology use as learning need nowadays by developing prototype integrated reading material for junior high school. To meet the objective of the study, the researcher used Research and Development as design of study involving need analysis, design, development, expert validation and try out. Questionnaire and interview were utilized as instrument in the field of need analysis. The result of development organized the prototype integrated reading material through PamanPinter-CALLs which developed in longtion auto run combining with adobe audition, hot potatoes, hangaroo, macromedia flash, and microsoft power point. It contained vocabulary corner, reading corner, audio corner, comprehension corner, and writing corner which covered pre-reading activity, whilst reading activity, and post reading activity. This was validated by three experts and tried out through students discussion and questionnaire. Finally the result might be utilized to help teachers and students in teaching learning reading using PC computer or smartphone. This prototype integrated reading material is able to employ in the home and in the class even individually or in group. So students can improve their reading skill autonomously by the guidance from the teachers before. Further, this program suggested to be developed in other any level. This program is more completed with speed reading correction to evaluate students speed reading and pronunciation correction to help students to have self-learning in pronunciation.

**Keywords :** *Integrated Reading Material, PamanPinter-CALLs, Prototype Material*

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## 1. Introduction

Reading has significant contribution toward the improvement of English skills and components. But it also contributes toward any fields that need reading proficiency such as social, medical, cultures, etc. It is essential skill to develop students' critical understanding and to expand knowledge of the language, cultures and the world. Therefore, reading skill should be

constantly developed.

The result of PISA in 2009 told that more than 50% students from six-level reading skill still in second level. The rank was in 56<sup>th</sup> of 65 countries. The rank was lower in the result of PISA 2012. It ranked 57<sup>th</sup> of 65 countries. Those results significantly proved the lowness of students reading skill in Indonesia.

The lack of students' interest to read is

the main factor of those results. Students are more fascinated with electronical access than book. Internet and smartphone became their every time synthesis to enjoy. Unfortunately, students still cannot utilize it well. In addition, to meet the enhancing technology development teachers found difficulties in organizing teaching media and material. Those became challenge for English teacher especially.

Based on those facts, researcher attempted to develop prototype integrated reading material for junior high school based on Computer Assisted Language Learning (CALL) which will help students and also teachers in learning teaching process.

## **2. Literature Review**

In line with the objective of the study, this article reviews related previous research on the combination of reading development and CALL.

### **2.1 The Aspect of Reading**

Burns, Roe, and Ross: 1984: There are two components of reading act, they are reading process and reading product. Reading process is a method to reach the objective of reading. Reading product is the communication of thought between the writer and the reader.

### **2.2 Strategy of Reading**

Loew (1984) stated that there are many strategies of reading. They might be linking ideas, paraphrasing, summarizing, guessing, and tolerating ambiguity. In other related study, Grellet (1981) indicated that reading is an active

skill. It involves guessing, prediciting, checking and asking oneself question continuously.

Furthermore, Chastain (1988) asserted that teachers should explain the way to skim, to find main idea, to develop and modify hypotheses, and to correct as well as learn from errors before students' first reading task. In addition, he also suggested to know how to use reference and connecting words to relate among sentences and paragraphs; to practice time reading to improve reading speed; to use scanning and skimming techniques to preview reading materials, to predict what the selection was about, and develop expectation in the content of the text.

### **2.3 Integrated Reading Skill**

Integrated reading skills recognized as the function of learning input of reading to conduct learning output in other skill (Jacob, 1999). Those like the combination of reading and writing. From reading process, students can formulate new questions and prediction and take it as comprehensible input to produce output in writing skill.

### **2.4 Reading Comprehension for Junior High School**

According to Burn, Roe and Ross (1996: 255), there are two types of comprehension.

They are literal comprehension and high order comprehension or further comprehension including: Interpretive Comprehension, Critical Comprehension, and Creative Comprehension.

Reading comprehension of Junior High School is in literal comprehension. It mainly

focuses in identifying information which is clearly stated in the text from the beginning to the last paragraph.

### 2.5 Developing Material

Material means everything that utilized in teaching learning. Pinter, 2006 argued that developing material is needed to know students need toward English based on the competence which they want to master.

### 2.6 Reading and CALL

Reading and Computer Assisted Language Learning (CALL) is appropriate corelation in improving reading skills. Computer and reading are able to help develop students' reading skills (Kemp, 1993; Chun 1997; Singhal; Hancock, 1999).

Authentic reading material is considered as inappropriated material. It should be balance with factual context. In addition, MEA or ASEAN economic society considered that authentic material is not required because Indonesian society will communicate more with ASEAN society or Asian Pasific society. So, learning culture and domestic subjects became necessary to promote Indonesia through reading material. It made the English context also changed. This issue became the theoritical framework to develop reading material with software and its assesment in order to promote Indonesia to MEA or enormous scope in the future. This is also beneficial for English learning in Indonesia which will develop English skills demanded in this era.

### 2.7 CALL Principle and its Model in English Learning

Basic principle in developing CALL material in learning English are a) the suitability with object and curriculum. b) the use of software for goal of study and its evaluation. c) ease of access to software for students. d) The use to improve English skills. e) The efficiency time and place. f) providing material back up for the other possibility happened. This will be developed into three phases based on development principle (Egbert ;2001 and Beatty 2003).

## 3. Method

### 3.1 Research Design

This study utilized Research and Development (R&D) model initiated by McGriff (2000) namely the mdified ADDIE model. It is aimed to develop an integrated prototype reading material through Computer Assisted Language Learning (CALL) named as PAMANPINTER-CALLs. The development process encompassed six phases.



Figure 1. Four development phases of integrated reading Pamanpinter-CALLs

### 3.1 Need Analysis

Generally, this questionnaire will analyze two essential needs focused in students in SMP Ma'arif NU Benjeng and MTs An Nuriyah Ngepung.. Firstly, target needs or the objective of integrated reading skills and also learning needs or the needs of learning activity which written in this need analysis. These will be given to all of tenth grade students from SMP Ma'arif NU Benjeng and MTs An Nuriyah Ngepung by random sampling technique.

This need analysis consisted of a) background and objective learning of integrated reading skills of students, b) the activities of integrated reading skills, c) evaluation forms of integrated reading skills, d) manual implementation of integrated reading skills.

In this study, interviews were openly conducted with English teachers both. Some of the important things in question are related to teachers' attitudes and knowledge about integrated reading skills learning materials even related with CALL, the contents of material is integrated reading skills in the media CALL, teaching aids, reading integrated learning activities that have been held in CALL, structuring models the difficulty level. Because the number of teachers are clear and limited, then the sampling model is purposive. On the same occasion the researchers also collected information relating to required documentation such as syllabus, lesson plans, as well as reading text books that had been used. So at this stage the researchers not only do the data collection in the form of answers to the teachers but also collect other data which are primarily document.

Furthermore, the collected data was analyzed descriptively for later, then mix it with the obtained data from students. This is expected to carry complete information needs of students and teachers element.

### 3.2 Design Instruction

In this phase, the researcher draft the design integrated reading skills learning. Collected information included standard competence, basic competence, the themes and topics of learning, degree of difficulty, the media, and learning activities and learning evaluation model, all of which will be mapped very clearly in draft form.

The end of result at this stage is complete drafts of the English teaching model which is clearly sequenced from Pre-reading activity, Whilst reading activity, and Post reading activity and evaluation activities Reading skills. All are intended to help facilitating teachers and students in learning integrated reading skills and be able to help improve the students' English skills

### 3.3 Development of Prototype Material

This study developed the prototype integrated learning reading skills based on the draft that has been developed in the previous stages. Integrated learning model reading skills, materials, learning activities, and evaluation of learning will be integrated in CALL form (named after the prototype PamanPinters-Calls). Therefore, the three process of course is described in detail of prototype.

Prototype learning task based also comes with a

media CALL named (PamanPinters-CALLs) and evaluation tools automatically in various formats English skills of the activities integrated reading skills that have been granted previously required to facilitate the learning process both inside and outside the classroom.

### **3.4 Focus Group Discussion**

In this stage, the researcher conducted an analysis of the material integrated reading skills, learning evaluation along with auto integrated reading skills feedback, as well as the manual for the use of a prototype that has been developed in the form of focus group discussion followed by all the English teachers who came from SMP Maarif NU Benjeng and MTs An Nuriyah Ngepung, and practitioners of English of the University of Muhammadiyah Gresik.

The purpose of this focus group is looking for suggestions for improvement that related with the materials, procedures, activities, and formats, manuals, evaluation already developed before the material is tested in the classroom and outside the classroom.

### **3.5 Prototype Try Out**

Prototype try out in this study conducted by applying these materials in Class 8 in SMP Ma'arif NU Benjeng and MTs An Nuriyah Ngepung. As a choice sample of this trial, researcher chose on class from each school. Trial material will be divided into two parts. So each part will be spread in those different schools. In every class, researcher and teacher collaborate to form group discussion. Students analyze the prototype material in detail with

their group. They will consider the material regarding to the difficulties and effectiveness of the material.

The concept of the test application is used to see how the prototype integrated learning reading skills material which will be applied in media CALL (PamanPinters-Calls) can be effectively be used properly and can improve student achievement.

The researcher also gives the questionnaire for the participants to know what the missing part of the material is. The important purpose of giving the questionnaire is to get the feedback from the participants toward the material and for the better improvement.

### **3.2.6 Revised Final Prototype Product**

The researchers tried to see the prototype integrated reading skills material that has been developed based on the findings and the input that comes from the results of a prototype test. All sorts of feedback and improvement is needed before a final product prototype was launched. Therefore, researchers are trying to test prototype products with extreme caution regarding to the observance of students' group discussion implementation procedures comprehensively. After going through this stage, the final product can be used and published as well for students and teachers' interactive reading software for teaching learning reading.

### **Result of Need Analysis**

In the field of need analysis, the reseacher did observation, interview with 4 English teachers

of junior high school and give questionnaire to the students of 8<sup>th</sup> grade which conducted the target need and learning need. Besides the researcher also adjust the result with curriculum, syllabus, textbooks, material that have been used in English learning previously. The students' questionnaire consisted of ten questions. Meanwhile, the questionnaire was given to students in 8th grade of SMP Maarif NU Benjeng and MTs An Nuriyah Ngepung.

### **The Result of Questionnaire**

The first question focused on the contribution of reading skill toward other English skills and components such listening, speaking, writing, pronunciation, vocabulary and grammar. 71 of 74 students and 4 teachers stated that reading contributed to other English skills and components. 15 students of 71 considered that reading skill especially contributed in listening, speaking and writing. And the 16 students claimed it contributed in vocabulary and grammar specifically. While the rest 3 students answered that reading has no contribution for other skills and components.

Teaching reading method became the second questions' topic. There were 26 of 74 students and 2 of 4 teachers preferred teaching reading for the purpose of integrated skills simultaneously. And 18 students and the rest teachers preferred to focus on reading skill in teaching learning reading. Meanwhile other students and teachers mostly liked to have teaching reading method through read, correct, and answer comprehension question through individual and collaborative learning.

The third question concerned on the objective of teaching reading previously. From the five options reading skill, comprehension, speed reading, phonetics and phonemics awareness, the first and the second option correspondingly placed 24 and 50 students. Meanwhile, 50% teachers stated that the objective of teaching reading was just comprehension and the rest 50% concerned on reading manner itself.

The fourth question focused on reading assessment. Related to assessment forms, 46 students students claimed that reading comprehension was the most important aspect. The rest, 14 students implemented reading skill assessment and other 14 students concerned on summarizing the content of the passage. Meanwhile, 2 of 4 teachers stated that they implemented written test in teaching reading evaluation. And the rest, they evaluated students by performance test through discussion and presentation.

The fifth item focused on respondents' expectation toward the objective of teaching reading. There were 20 students expected that the goal of teaching reading should be reading comprehension. The rest 23 students focused on how to read the text and other 31 students concerned on vocabulary toward the difficult words from the text and pronunciation.

The sixth question relied on the use of CALL or reading software in teaching reading. It showed that 20 of 74 students and most teachers use mobile phone for the offline dictionary. But 3 of 4 teachers did not use any CALL program for the teaching reading.

The seventh question discussed on respondents' expectation toward the development of reading and CALL. The result revealed that 100% students and 100% teachers expected to develop reading software completed with pre-reading exercise, reading text and its pronunciation, auto assessment and scoring for the purpose of integrated skills which could be operated in mobile phone and computer.

The eighth question discussed on reading objective. It showed that 7 students wrote timed or speed reading monitor as their reading objective. And 17 students relied on reading manner. The rest 20 students responded reading comprehension and vocabulary tasks. The other 30 students responded writing activity, speaking, listening, grammar, and vocabulary exercises. But they also admitted that to reach those skills is not easy objective.

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The tenth question focused on reading passage topics that they prefer to discuss. It was found that 58% students prefer to discuss introducing self and other, party time, vacation experience in recount and tourism object in descriptive texts. Meanwhile, the rest students preferred to discuss legend and fable in narrative

stories.

### **The Result of Interview**

In the phase of interview, the researcher prepared twelve questions for each teachers. But the others could be emerged during interview. Besides the researcher also requested the teaching instruments such as the syllabus, lesson plan, text book which is utilized in teaching learning process.

The first questions conducted the teachers perception toward reading skills for other skills. Then teaching reading method which is preferably for students. The third was about the most essential teaching reading focus, such as reading skill, reading comprehension, reading speed, phonetic, awareness and phonemic awareness. So the next question was about IRA or International Reading Association. While the fifth question focused on any multimedia, application, or software used in teaching reading previously. Reading evaluation became the next question in this phase. Then, the seventh question involved technology development needed in teaching reading. Furthermore, the research asked about any seminar or workshop that have been participated by teachers and also teaching reading training specifically. Readability level was also talked in this study. And the last was about teaching reading goal and students' English text interest.

Based on those questions, the researcher found the teachers' perception towards reading skill. Reading skill is considered has enormous contribution for other skills and components, for example when students read English text,

students could get new vocabulary. By reading, teacher also could ask students to analyze the grammar and to present their reading comprehension in front of class. Those made teachers teach reading skill and other skills simultaneously. From the field of need analysis, the researcher obtained any findings. Teacher considered that reading skill has enormous contribution for other English skills or components. Those made them teach reading skill with other skill simultaneously. Teachers also often make discussion team for reading skill focusing on how to read and how they comprehend the text.

In evaluation, teachers do not only implement written test but also performance test like discussion and presentation. They rarely employed any reading software or technology in teaching reading. Therefore teachers expect that there will be reading software or technology helping students with reading manner and its evaluation automatically. Even the program which is able to evaluate students' comprehension. Teachers also admitted that they never participate reading training or workshop specifically.

Further, mostly students of junior high school interest was still in basical readability level within 200-400 words with familiar vocabulary. Furthermore, it was found that students like discuss about their experience in recount text, tourism in descriptive text and funny story, fable in narrative.

### **The Result of Design Instruction**

Before developing the prototype

material, the researcher did two phases. They are syllabus design and PamanPinter-CALLS prototype design. First, syllabus design was formulated through reviewing the existing syllabus with the result of need analysis. The result of target need concluded that mostly students and teachers expected to have reading software completed with pre-reading exercise, reading text and its pronunciation, and auto assessment for the purpose of integrated skills. Those are expected to help students in comprehending reading passage and difficult vocabularies from the passage.

In addition, the respondents revealed that they preferred the text within 200-400 words with 70% familiar vocabulary. The topics mostly same with previous syllabus in which became the central concern of reading comprehension.

Then, PamanPinter-CALLS was designed in longtion auto run which is combined with such application builder as like Hot Potatoes, Adobe Audition 1,5, Hangaroo, Microsoft Power Point and Macromedia Flash. It designed with elegant theme which is dominated with white and blue. White is the best combination colours which emphasize all colours. It provided the impression of simplicity and calmness. While blue described the purity of mind and creativity. Those could stimulate the students to be comfortable and spirit to have it. This also provide any English songs in each page to entertain the users as they want.

### **The Result of Developing Prototype Material**

In the development phase, researcher

employed longtion auto run combining with Adobe Audition 1.5, Hot Potatoes, Hangaroo, Ulead Video, Microsoft Power Point, and Macromedia Flash. The program was completed by audio to help students or user to have listening activity even self-listening. Besides it also has any relevant pictures to make students not to be bored in using it as well. The product could be used in PC and smartpone. It contained any libraries as the chapter. And it has any categories in each library.

The first category is vocabulary corner as pre reading activity. It helped students ready to have prior knowledge related to the topic of reading passage in each library. This category might have matching picture or vocabulary survey as students' preparation before whilst reading. It developed by Hot Potatoes mostly, and Hangaroo as well. Teacher could employ this category to stimulate students' responses and spirit through asking one by one or quiz in pre reading phase.

Further, the second category is reading corner. It contained the reading passage itself. The passages averaged 200 words minimally with 70% familiar words. It sometimes developed in Macromedia Flash even Microsoft Power Point. Teachers are able to utilize it to present the English text even to have students discuss. Teachers also could know students reading speed by having students to read loudly one by one.

Audio corner became the third category in each library. This provided the audio of reading passage from second category. This category employed Natural Reader application

and edited in Adobe Audition 1.5. This could help students as self-listening or listening as well. Therefore, students do not only learn reading skill but also listening skill simultaneously. Teachers also might use this category to have drilling activity as well.

The next category is comprehension corner. It might be multiple choice, short answer, essay that developed in hot potatoes program. It became post reading activity to evaluate how far students comprehension after having reading passage both in group or individually.

After having those categories, this program also facilitated writing corner. It was part of post reading itself. This developed in Macromedia Flash or Microsoft Power Point as well. Students could express their comprehension related to the topic in each library. This category sometimes couldn't give feedback immediately so when students utilize at home, they should ask teacher advise in the school.

### **The Result of Expert Validation**

Before conducting try out, the reseacher conducted validation of prototype material that has been developed. The validation was implemented by the experts in the field of technology and English education. This aimed to create an appropriated integrated reading prototype material which ease teachers' job in teaching reading and makes students joyful and motivated to learn reading.

The researcher employed three experts validation to validate her product. First expert is

the person who masters in English and experienced in publishing book. He was Dr. Yudhi Arifani, M.Pd. He is a qualified lecturer in Muhammadiyah university of Gresik. He has been publishing some researches and books. The second is the teacher in SMP Maarif NU Benjeng, Mulyono, S.Pd. He is senior English teacher that experienced in teaching reading. Then the person who ever developed android application and know well about developing application. He was Mr. Rizal Abidin, S.T as the third expert.

The validation relied on material relevance and software practicality. Based on those aspects, Dr. Yudhi Arifani, M.Pd said that the text structure should be edited and simplified to make students easier to comprehend the text, but the audio is too fast as the students can not repeat the word. In difficulty level, it was categorized in medium. Mulyono, S.Pd stated that material content was relevant with students' need combining with appropriated syllabus as well. This meant that PamanPinter-CALLs ready to use.

Whereas, in the aspect of software practicality, Rizal Abidin, S.T as the expert of IT said that PamanPinter- CALLS is easy to be applied by students of junior high school. It was averaged in high score. He suggested the researcher to change the background with the appropriated picture and completed it with backsound.

### **The Result of Try Out**

The reseacher tried out the product to 8th grade students in SMP Maarif NU Benjeng and

MTs An Nuriyah, Ngepung. After doing try out, the reseacher implemented material in discussion then gave the students questionnaire. 80% students said that they felt fascinated to pass the stages in the application and they could enjoy it individually. Another feedback was about the audio. They stated that the audio is too fast and difficult to comprehend it.

### **The Result of Prototype Material Revision**

After having expert validation and try out, the reseacher did the revision. The result of first expert suggested that the reseacher should simplify and edit text and make the pronunciation little bit slow than before. Meanwhile, the third expert suggested to change the background with the appropriate picture and completed with back sound.

Further, the researcher edited the audio and made it slower than before. The researcher also changed the background with students of junior high school picture as well. Furthermore, the researcher also edited the text as the first expert suggestion.

By the revision, this prototype reading material was ready to applied for students in junior high school both in the home and in the school with PC computer even smartphone.

### **Final Product**

After the researcher passed through any development procedure, the validated final product was ready to be used for the seventh grade of junior high school. This product was in the form of application that could be run on PC. It was developed using offline mode so it did not

require internet connection. The content of this reading application was completed with reading audio and its evaluation as well. It would automatically run after the driver was installed and the user logged into the program with the existing password from the administrator.

### **Conclusion**

To fulfill EFL teachers and learners needs to make teaching learning reading as meaningful ways, the researcher developed prototype reading material based on CALL system. The material is applied in PamanPinter-CALLS as the final product in this study.

From the beginning of study, the lack of students' motivation to read became main problem of this study. And EFL teachers got lack of technological teaching media in teaching reading.

Indeed, this prototype designed to find alternative solution to fill the gap. The product can be utilized as self-reading and collaborative reading for both inside and outside of classroom. Through this software, teacher could monitor student's individual reading skill, comprehension, vocabulary, pronunciation simultaneously through the software more comprehensively and accurately. In this software, students also could learn listening from audio corner in each chapter. It provided pronunciation audio of reading passage from each chapter.

In addition, as the objective of students' self-reading. This software also facilitated evaluation corner in which help students evaluate their reading comprehension

automatically. Then they also could express their idea in idea corner.

### **Recommendation**

From those conclusion, the researcher gave some recommendations to the teachers and next researchers. This product can be utilized in the class and also in the home by PC even smartphone.

For teachers, it is recommended to have this program in the reading class and also guide students to utilize it in the home. For the next researcher, this program should be developed in other any level. And this program is more completed with speed reading correction and pronunciation correction.

Referring to the overall outstanding prototype *PamanPinter-CALLS*, there is one problematic point on the error writing detector section which cannot detect users' integrated reading evaluation through writing skill automatically as it requires further ideal role from different background field of studies and specialists. Consequently, recommendation for further researchers to address this point would be worth contributing.

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