

DEVELOPING INTERACTIVE LEARNING MULTIMEDIA FOR TEACHING DESCRIPTIVE TEXTS READING TO GRADE VII STUDENTS OF SMP NEGERI 1 NGENPLAK

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Abstract: This educational research and development (R & D) aimed: 1) to discover the needs of Grade VII students of SMP Negeri 1 Ngemplak in terms of learning descriptive texts reading, 2) to discover the characteristics of appropriate interactive learning multimedia that can be used to support the teaching and learning process of descriptive texts reading in SMP Negeri 1 Ngemplak, 3) to develop the appropriate interactive learning multimedia for teaching descriptive texts reading to Grade VII students of SMP Negeri 1 Ngemplak. The subjects of the study were Grade VII students of SMP Negeri 1 Ngemplak with 32 students of Class VII-A as the sample of the population. The research procedure followed the ADDIE model proposed by Taylor (2004) with some modification. The instruments used were the needs analysis questionnaire and the expert judgment rating scale. The data analyzing technique used was the quantitative data analysis. The research findings showed that the product was appropriate to be implemented. The mean score of the materials was 3.6 while that of the media aspects is 3.58. Both scores were valued as “Very Good”.

Keywords: *research and development, interactive learning multimedia, descriptive texts reading*

Abstrak: Penelitian *Research and Development* ini bertujuan untuk: 1) mengetahui kebutuhan siswa kelas VII SMP Negeri 1 Ngemplak terkait pembelajaran membaca teks-teks deskriptif, 2) mengetahui karakteristik multimedia pembelajaran interaktif yang layak dan dapat digunakan untuk mendukung proses belajar mengajar membaca teks-teks deskriptif di SMP Negeri 1 Ngemplak, 3) mengembangkan multimedia pembelajaran interaktif untuk mengajarkan membaca teks-teks deskriptif kepada siswa kelas VII SMP Negeri 1 Ngemplak. Subjek penelitian ini adalah kelas VII SMP Negeri 1 Ngemplak dengan 32 siswa Kelas VII-A sebagai sampelnya. Prosedur penelitian ini mengikuti model ADDIE (Taylor: 2004) dengan beberapa modifikasi. Instrumen yang digunakan adalah kuisioner analisis kebutuhan dan skala pengukuran penilaian ahli. Teknik analisis data yang digunakan adalah analisis data kuantitatif. Hasil penelitian menunjukkan bahwa produk yang dihasilkan layak untuk diimplementasikan. Skor rerata dari materi dalam produk tersebut adalah 3,6 sedangkan dari segi media adalah 3,58. Kedua skor tersebut bernilai “Sangat Baik”.

Kata Kunci: *penelitian dan pengembangan, multimedia pembelajaran interaktif, membaca teks-teks deskriptif*

INTRODUCTION

Motivation and independence are two of many important factors influencing students' learning habits that nowadays often get underrated. Students who are not motivated in learning will somehow not be able to learn something autonomously. The lack of motivation might be caused by several factors such as the students are not interested in the subjects.

In another case, even when the students are already interested in the subjects, the materials, media and/or activities in the class might not be quite various that the class seems to go monotonous. As results, the students get bored easily during the lesson. It will somehow decrease their motivations in learning as the time goes by.

When it comes to learning materials, most teachers tend to use textbooks and/or other printed ones. However, the activities using them do not seem interactive to the students because most teachers asked them to read some texts and answer the questions following them. Teachers

should notice this problem before it goes out of hand and start to innovate the learning materials and the media.

Innovating the learning materials and media seems not too hard to do regarding there are enough facilities in the classroom due to the improvement of the technology that can be used aside from the textbooks such as laptop computers, LCD projectors, and speakers.

Teachers can also use a kind of media called multimedia during teaching-learning process to deliver the materials. Richards and Schmidt (2002) define multimedia as combined different media which can be accessed by computer in the forms of text, sound, still or moving images to fulfill a purpose. The combination seems to be more interactive for the students since they can use it individually.

Interactive multimedia can somehow make the students be more active in learning because there is more to do than just writing down the explanation from their teachers. The main problem that may be found in this matter is the availability of such

media that is still limited. The difficulty of finding suitable interactive learning multimedia makes most teachers do not use them.

The same problem happened in SMP Negeri 1 Ngemplak. Based on the personal observation done by the researcher, it was found that most of the Grade VII students were interested in learning English. It was proved by the amount of the students joining the extracurricular subject of English. However, the students did not seem active enough during the teaching-learning process, especially in reading skill.

To solve the problem, developing media that can be used by the students to learn it autonomously is needed. As mentioned previously, one of the solutions is developing interactive multimedia. Interactive multimedia seem promising in helping the students learn reading, especially descriptive texts reading, in an interesting way. This serves as the base for the researcher to conduct the study in developing interactive learning multimedia to be used for

teaching descriptive texts to Grade VII students of SMP Negeri 1 Ngemplak.

RESEARCH METHOD

This research was classified as educational research and development (R & D). The subjects were Grade VII students of SMP Negeri 1 Ngemplak with 32 students of Class VII-A as the sample of the population. The research procedure followed the ADDIE model proposed by Taylor (2004) with some modification.

The steps were conducting the needs analysis, designing a course grid, flowcharts, and a storyboard, developing the first draft of the interactive learning multimedia, evaluating it by conducting an expert judgment, and revising the draft based on the suggestions and corrections which were obtained from the evaluation.

The instruments used were the needs analysis questionnaire and the expert judgment rating scale. The collected data from the needs analysis were then analyzed quantitatively in forms of frequency and percentage

while the data which were obtained from the expert judgment were analyzed through the descriptive analysis.

RESEARCH FINDINGS AND DEVELOPMENT

The researcher employed quantitative data analysis to gather the data. The data from the needs analysis were presented in the forms of frequency and percentages. There were 32 respondents who were the students of Class VII A of SMP Negeri 1 Ngemplak. For the needs analysis, there were 20 close-ended questions in which the students were allowed to choose one or more options for each question.

The researcher found that most students' goal of learning English is to prepare them for higher education levels (41.18%). It was also found that the students learnt reading skills to be familiar with the spelling of English words (35.85). In terms of the difficulties of learning English, more than half of the students (55.81%) stated that their limitation in reading

English texts was regarding the difficult and unfamiliar words that they found in the texts.

The students' preference regarding the reading input was that from interactive learning multimedia (37.29%), textbooks (27.12%), and the internet (23.73%). Meanwhile, the topics of the input texts that they preferred were about music and entertainment (52.27%). The students preferred the descriptive texts about animals (36.17%), people (34.04%), and things (21.28%). More than half of the students preferred texts with some pictures as the model of the English input texts (53.33%) with the lengths of each text was about 100-150 words (53.66%). In learning descriptive texts reading, the students preferred the description given in the texts was about animals (36.17%).

Regarding the multimedia design, the students preferred blue to be the background color of interactive learning multimedia (45.65%). The font style that the students preferred was Times New Roman (38.64%). The navigation buttons of interactive

learning multimedia that the students preferred were those which use an easy and simple system (50%). The students thought that the back sound of the interactive learning multimedia was sometimes needed (56.25%). They also thought that the answer keys are also sometimes needed (46.88%) while the translation of the language was needed (53.13%).

It was also found that arranging words into a meaningful sentence was the activity that the students preferred to enrich their knowledge about English grammar (40.91%). Meanwhile, the technique of teaching reading that the students preferred was using suitable media (e.g. laptop computers, LCD projectors and so on) to explain reading materials (40%).

The role of the teacher that the students liked the most was explaining the steps of doing a task (57.14%) while the role of the students that they preferred was actively participating during the teaching and learning process in the class, such as in a game or discussion (59.52%). Regarding the task, the students decided that it should

be done in a small group which consists of 3-5 students (38.18%).

After conducting the needs analysis, the researcher designed the interactive learning multimedia. There were three parts in this step. The first part was developing the course grid. The second part was designing the flowchart, and the last part was creating the storyboard. There were three developed units. Each unit consisted of 10 activities, a reflection, a summary, a fun page, and a vocabulary list. The first unit, entitled “Dani Is Very Kind”, provided the students with the activities to learn descriptive texts about people. The second unit, entitled “I Walk My Dog Every Morning”, provided the students with the activities to learn descriptive texts about animals. The second unit, entitled “I Have a New Guitar”, provided the students with the activities to learn descriptive texts about things.

The developed interactive learning multimedia consisted of five main menus including Competencies, Contents, Setting, Help, and About.

The first draft of the product was validated through an expert judgment. The expert was Ella Wulandari, S.Pd., MA. The total mean from the expert judgment related to the materials is 3.6. According to the four-scale Likert scale which was adapted from the Quantitative Data Convention proposed by Suharto (2006: 2-53), the mean value is categorized as very good because the position is between the intervals $3.25 \leq x \leq 4$.

Regarding the content appropriateness of the interactive learning multimedia, the mean of it is 4 which is categorized as “Very Good”. The mean of the language appropriateness is 3 which the value belongs to “Good” whereas the mean value for the presentation appropriateness is categorized as “Very Good” as it reaches 3.8 for its mean.

The total mean from the expert judgment related to the media aspect is 3.58. According to the four-scale Likert scale which was adapted from the Quantitative Data Convention proposed by Suharto (2006: 52-53),

the mean value is categorized as very good because the position is between the intervals $3.25 \leq x \leq 4$.

Regarding the screen display appropriateness of the interactive learning multimedia, the mean is 3.25 which is categorized as “Very Good”. The mean of the appropriateness for the multimedia elements is 3.4 which is also considered as “Very Good”. The mean related to the program navigation a value 3.67 which belongs to “Very Good” whereas the mean value for the appropriateness of the interaction and feedback is categorized as “Very Good” as its mean reaches 4.

Some suggestions from the expert were used as the basis in revising the first draft related to the materials including the activity, the examples of the language features, the grammar mistakes, and the complexity of the instructions. Regarding the media aspects, there was no revision so the first design was used in the final draft. The revised draft was then considered as the final draft of the product.

The materials were developed based on the theory of teaching reading proposed by Richards (2015). The materials in each unit were arranged according to the stages of reading process which include pre-reading, while-reading, and post-reading. In the pre-reading stage, the students activated their background knowledge related to the topic of the unit.

Following the kinds of pre-reading activities proposed by Crandall (1995) in Richards (2015: 459-460), the materials in each unit were completed with the titles, chapter headings, indentations, as well as some related visuals and other text displays. It was used to give an overview about the unit to the students. The arrangement of the developed materials was categorized as interactive processing. The pre-reading activities applied bottom-up processing. It was one of the models of reading processes proposed by Nunan (1993).

In terms of the students' goals, it was found that they wanted to learn

English to prepare them for higher education levels and to be able to communicate using English in daily life. In response to it, various texts were featured as the materials. The developed materials also provided various learning inputs such as texts, pictures, audio and videos. According to Vaughan (2003), such inputs were considered as the elements of interactive multimedia.

Based on the findings of the needs analysis, it was showed that students wanted various activities to be involved in the developed materials. Therefore, the developed materials provided learning activities. These kinds of activities were based on Brown (2004) about formal assessment of reading. Since the students thought that translation was needed, the user guide was designed to be bilingual so that they understand it easily.

In terms of the learning inputs, the application was completed with texts, pictures and unit illustrations, audio (as in the overview and vocabulary of each unit), and a video in Unit 3 Fun Page. According to

Stemler (1997), those inputs were categorized as the elements of interactive multimedia.

For distributing the application which had been developed, the researcher put a copy of it in a Compact Disk (CD). This copy was then given to the school. The school can install the application in the computer laboratory or in the students' laptop computers. Although it was developed to be used in self-learning process, it is possible for the teachers to use the application in the classroom in some cases.

CONCLUSION

Considering the data from the expert judgment, it could be concluded that the developed interactive learning multimedia was appropriate to be implemented in self-learning process of descriptive texts reading done by Grade VII students of SMP Negeri 1 Ngemplak. In terms of the materials appropriateness, the total mean from the expert judgment related to the materials is 3.6. its value is categorized as very good. Regarding the content

appropriateness of the interactive learning multimedia, the mean of it is 4 which is also categorized as very good. The mean of the language appropriateness is 3 which the values belongs to good whereas the mean value for the presentation appropriateness is categorized as very good as it reaches 3.8 for its mean.

Regarding the appropriateness of the media aspect, the total mean from the expert judgment is 3.58 which its value is categorized as very good. For the screen display appropriateness, the mean is 3.25 which is categorized as very good. The mean of the appropriateness for the multimedia elements is 3.4 which is also considered as very good. The mean related to the program navigation a value 3.67 which belongs to very good whereas the mean value for the appropriateness of the interaction and feedback is categorized as very good as its mean reaches 4.

After analyzing the data from the expert judgment, the researcher revised the materials of the interactive learning multimedia by considering the

suggestions and corrections given by the expert. In terms of the media aspects, there is no further revision so the researcher applied the first design of the media in the final draft.

The corrections and suggestions given by the expert were in terms of the materials including the activity that focuses on the structure of descriptive texts, the example to explain the language features, the instructions of the activities, the complexity of the instructions, and the grammar. The revised draft was then decided to be the final draft of the product of the research.

From the explanation above, it could be concluded that the interactive learning multimedia was appropriate to be implemented in self-learning process of descriptive texts reading done by Grade VII students of SMP Negeri 1 Ngemplak. However, it does not mean that the materials had been perfect because some improvements are needed when it is applied in different time. Regarding the distribution of the product, it was packed in a Compact Disk (CD) which

served as the final product of the research. The CD was distributed to the target school.

REFERENCES

- Alessi, S. M. and Trollip, S. M. 2001. *Multimedia for Learning: Methods and Development* (3rd Edition). Massachusetts: Allyn and Bacon Pearson Education Company.
- Alyousef, H. S. 2006. Teaching Reading Comprehension to ESL/EFL Learners. *Journal of Language and Learning* 5(1).
- Brown, H. D. 2001. *Teaching by Principles: An Interactive Approach to Language Pedagogy* (2nd Edition). New York: Longman.
- Brown, H. D. 2004. *Language Assessment: Principles and Classroom Practices*. New York: Pearson Education.
- Cameron, L. 2001. *Teaching Languages to Young Learners*. New York: Cambridge University Press.
- Celce-Murcia, M. 2001. *Teaching English as a Second or Foreign Language* (3rd Edition). New York: Heinle & Heinle.
- Constantinescu, A. I. 2007. *Using Technology to Assist in Vocabulary Acquisition and Reading Comprehension*, *TESL Journal*, 8(2).
- Gall, M. D., Gall, J. P., & Borg, W. R. 2003. *Educational Research: An*

- Introduction* (7th Edition). Boston: Allin & Bacon.
- Grabe, W. & Stoller, F. L. 2011. *Teaching and Researching Reading*. Harlow: Pearson Education.
- Grellet, F. 1981. *Developing Reading Skills*. New York: Cambridge University Press.
- Harmer, J. 2001. *The Practice of English Language Teaching* (3rd Edition). London: Longman Group Ltd.
- Heinich, R. et al. 2002. *Instructional Media and Technologies for Learning* (7th Edition). Upper Saddle River, NJ: Prentice Hall.
- Hutchinson, T. and Waters, A. 1987. *English for Specific Purposes: A Learning-Centered Approach*. Cambridge: Cambridge University Press.
- Kamat, V. & Shinde, J. 2009. *Enrichment of Learning Experience of Rural Children through Interactive Multimedia*. Retrieved on March 7, 2018 from http://wikieducator.org/images/5/5a/PID_598.pdf
- Khoo, C. C. 1994. *Interactive Multimedia for Teaching, Learning and Presentations, Proceedings of the Second International Interactive Multimedia Symposium*, p. 230-236. Retrieved on February 24, 2018 from <http://ascilite.org/archived-journals/aset/confs/iims/1994/km/khoo.html>
- Mishra, S. & Sharma, R. C. 2005. *Interactive Multimedia in Education and Training*. Philadelphia: Idea Group Publishing.
- Nahar, S. 2016. *Developing Interactive Multimedia for Short Functional text Reading for Grade VIII of SMPN 4 Yogyakarta in the Academic Year 2015/2016: A Thesis*. Yogyakarta: Universitas Negeri Yogyakarta
- Nation, I. S. P. 2009. *Teaching ESL/EFL Reading and Writing*. New York: Routledge.
- Neo, M. et al. 2008. *Students' Perceptions of Interactive Multimedia Mediated Web-Based Learning: A Malaysian Perspective*. Retrieved on March 5, 2018 from <http://www.ascilite.org.au/conferences/melbourne08/procs/neo.pdf>
- Nunan, D. 1993. *Introducing Discourse Analysis*. New York: Penguin English.
- Pinter, A. 2006. *Teaching Young Language Learners*. Oxford: Oxford University Press.
- Richards, J. C. 2015. *Key Issues in Language Teaching*. Cambridge: Cambridge University Press.
- Richards, J. C. and Renandya, W. 2002. *Methodology in Language Teaching*. New York: Cambridge University Press
- Richards, J. C. & Schmidt, R. 2002. *Longman Dictionary of Language Teaching and Applied Linguistics* (3rd Edition). London: Pearson Education.
- Stemler, L., K. 1997. Educational Characteristics of Multimedia: A Literature Review. *Journal of*

- Educational Multimedia and Hypermedia, 6(3/4), 1–16.
- Suharto, G. 2006. *Pengukuran dan Penilaian Hasil Belajar Bahasa Inggris*. Yogyakarta: P3B UNY.
- Taylor, L. 2004. *Educational Theories and Instructional Design Models: Their Place in Simulation*, Retrieved on March 3, 2018 from <http://www.84michaelstreets.com/sites/all/libraries/Documents/Educational%20Theories%20and%20Instructional%20Design%20Models.pdf>
- Turk, C. 2003. *Effective Speaking: Communicating in Speech*. British: Spon Pres.
- Vaughan, T. 2008. *Multimedia: Making It Work* (7th Edition.) New York: McGraw Hill.