English e-Book for Elementary School Students: Research by Design Based on Whole Language Approach

Herlina Usman¹, Ika Lestari² Noldy Pelenkahu³

¹Universitas Negeri Jakarta, ²Universitas Negeri Jakarta, ³Universitas Negeri Manado
¹ herlina@unj.ac.id, ² ikalestari@unj.ac.id, ³ noldypelenkahu@ymail.com

Abstract: This study aims to develop an English Language Electronic teaching material model for five class in elementary schools based on whole language approach. Using the whole language approach, overall language teaching an integral part of four language skills which include reading, speaking, listening and writing. Whole language approach based on the understanding constructivism forms its own knowledge through an active role in learning as a whole or thoroughly and integrated in language skills. This research was conducted at the elementary school in Jakarta. The approach of this research is mixed methods research. The type of research used development by research. There are several stages of the mechanism for planning and compiling an English language teaching material model based on a whole language approach. In this study adapted from the model of Borg and Gall of Dick, Carey and Care. There are four stages in this research, (1) the stage of information gathering which includes a preliminary study and needs analysis, (2) the development of the draft which includes planning and developing the initial form the product, which includes expert testing / validation (expert judgment), one-on-one testing, small group evaluation, field testing, where in each trial a revision of the product developed is possible, and the last (4) finalization stage. The results of this study English language electronic teaching material models for the fifth grade elementary school based on the Whole language approach can be used properly and correctly in accordance with the needs of elementary school students.

Keywords: electronic teaching materials, English subject, whole language approach, development by research.

INTRODUCTION

The application of e-learning focused on visual of communicating information. E-book is a method be natural for humans to communicate automatically using all the information diverse and using different. learning everyday people can talk, write, listening and moving on the same time. Dimitrios Rigas et al, [2013]. E-book know as an electronic book or a digital book is the electronic versions of the book. A. Mualib, Embong, at all, [2012]. The basic components of e-book: namely, hardware software and file e-book. E-book based hardware that is portable electronic devices are made specially to read in the form of e-book to various form of publication. The electronic counterpart of a printed book, which can be viewed on a computer desktop or a portable device such as a laptop, or e-book readers. Maya, [2010] e-book is digital form of a printed book is can be seen through the computer or device portable as laptop or e-book reader equipment.

Some research used the e-books in class as a medium teaching [Tan, 2009] Christine, [2007]; Carty, [2000]; springer, [2007]. Some of research results in improving the effectiveness of the use of e-book. the learning process. Harris, [2011]. That e-book is a text and images are produced in digital form and can be read on the computer and other digital tools. Pertaining to e-book, the approach of language acquisition with a method of whole language, Goodman, [2005], Rigg, [1991] whole language one methods used in language acquisition which is the unity whole that cannot be separate. Rigg, [1991]. Whole language is rooted in the development of john Dewey, theory thinking about a social context, Vygotsky the theory of cognitive
development. Piaget, weaver, [2003]. Whole language provided learning facilities based on the understanding that kids learn naturally full joining.

Routman; [1991], Froese [990] Fisher, [1998]; Goodman [ 2005] seven signifying class the whole language which the class approach: 1] a whole language full of printed matter. 2] students learn through a model or example. 3] students work and study in line with the rate development. 4] students learn to share responsibility in learning. 5] of students engaged actively in learning. 6] students afraid to take risks and free experimenting. 7] student gets, [positive feedback systems] better than teachers and his friend. Wasik, Iannone, Campbell, [2012], another finding in the field is guidance about exercise is often confuse teaching materials they students in commits a test or exercise. Brown [1990] stated that whole language is a theory or approach to the learning of languages the full, lies in our language in context in teaching.

**METHOD**

This research is research and development, adapted Hannafin and peck of the 1998. There are three large this analysis, 1] needs analysis. 2] the design, at the in to the elements contained in the developed according to learning will design, 3] stage of three development and implementation of to produce early products and tested to ascertain whether or not it is in accordance, 3], the evaluation covering the beta-testing phase the revision of the products includes the validation the expert judgment, the one-on-one to one ( of one evaluation ), the clusters of small , the field

![Stage of Research Hannafin and peck of the 1998](Picture 1)

**Research Instruments and Data Collection**

Three types of data collection instruments were used, namely questionnaires, interview guidelines and tests (mastery test materials in the form of pre-test and post-test). The planning mechanism for developing an electronic teaching material model for English for elementary schools based on the Whole language approach can be seen in the flow chart of the research below.
The preliminary study and analysis

Review of documentation competence English to primary school, syllabus and teaching materials used.
Guidelines instrument interview for need analysis to know perception English teacher in primary school material of English used.

THE STAGE DESIGN
Planning and the develop an early form the product

The Stage of Implementation

FINISHING STAGE AND DISSEMINATION
Finalization and dissemination of research results
RESULTS AND DISCUSSION

The analysis of the research is to conduct an interview to English teacher primary school. There are four aspects of the content of the interview; material instruction, illustration and color each outlined in those questions. After evaluation interview clusters of small; explained, learning activities conduct by distributing to every student teaching materials that have been produced and revised based on the results of the test. Respondents felt that by filling the assessment of the questionnaire in the form of products. As for reference used in interpreting the assessment results of the quantitative data be qualitative on evaluation clusters of small as follows:

![Result of The Analysis Respondent](image)
The results with the average for most people 92.7%, criteria very good the results of the tryouts field. At the trial the ground follow enclose students who have followed evaluation one to-one evaluation and not involving students who have followed small group evaluation. The trial of the field was carried out by: [1] determine sample that will be used as many as 15 students; [2] prepares the environment, and the means of facilities required; [3] instructional in accordance with experience in the implementation of the teaching material [4] give the questionnaire to gather information about the quality of the process of learning and teaching material (5) has implemented pre- test and post- tests of instructional to know its effectiveness. The following recapitulation result pre - test and post - test.

Results of a test of normality through test lilifors by reason of the sum of the vials were taken less than 30. The criteria for testing in significance 5%. Level the significance of (a = 0.05) if a p-value (sig) ≤ 0.05 then Ho rejected and if the value of p-value (sig) > 0.05 then Ho accepted.

A hypothesis that tested as follows:

Ho = the normal distribution
H1 = distribution is not normal

Note that p-value [sig] pre-test of 0.200 > 0.05, p-value [sig] post-test 0.070 >0.05 , then Ho accepted. We can conclude by the experiment normality that data pre-test and post-test normal distribution. The results of the homogeneity on testing in significance standard 5%. Standard significance (a = 0.05 ) when value ( sig ) ≥ 0.05 so Ho rejected and if the ( sig ≥ 0.05 so Ho accepted. Hypothesis tested: as follows.

Ho = there are no differences variant data in distribution homogeneous
H1 = there are differences variant data distribution homogeneous

CONCLUSION

Research and development this produce products with wide utility of teaching materials e-book English based approach whole language to a five year grade student primary school. Developed by stages of the teaching material needs analysis to know the needs of teachers and students. The use of measures based on this research model instructional design by Hannafin and peck. There are four rare: (1) needs analysis is assessment or, as well as the design (2) at this stage covering the determination of the elements that need to be contained in application that will be developed in accordance with the design of learning, (3) that stage of development and the implementation of the, to produce the product the beginning which later tested to ascertain whether the outcome is in accordance or not, as well as the evaluation (4) covering trial phase and the revision of the product which includes / validation of the people of the test, one by one test, a small group of test, the field test, where in the tests of any possible the occurrence of revised the product which is developed.

In the end of the field visits to 15 students get the result of the percentage of the field test 92.7% then it can be concluded the material in the field tests have very good. Criteria. In the end also runs a pre-test and tests to know whether the material. analysis data using the pre- eksperiment pretest-posttest one groups design by doing some test that is the, normality the homogeneity and the paired sample. t-test. In the normality is known that p-value (sig) pre-test of 0.200 &gt; 0.05, then received. In the normality that data pre-test and post-test contribution. Normally in the homogeneity known that the (sig) 0.285 &gt; 0.05 , then received. We can conclude that there is no difference in the homogeneity variant, and data distribution. Homogeneous. Sample test on paired t= test
obtained increase tests formative students on the learning of languages the use of e-book after teaching English based whole language than average value pre-test 65.8 be 92.7. Later it was discovered that the (sig 2-tailed) of 0.000 & it 0.05, so H0 received. It can be concluded that in the sample paired t-test there are significant differences between the formative test on the pre-test post-test teaching materials and so effective. Based on the results of research and development and we can conclude that English teaching materials e-book based whole language to primary school student was very good and effective learning activities used in English in the classroom.

REFERENCES

Burns L.V.F, Garcia. (2018). Qualitative Data for Examining Fixed and Inheritance Concepts of Language Learning. A Search for the Stories behind Students' Motivation. Indonesian Journal of Applied Linguistics. 8(1), 121-130. Doi:10.175 09/ijal.v.8il.lk17

C. Stephanidis (Ed.): (2013). Posters, Part II, HCII 2013, CCIS 374, 567–571, 2013. Springer-Verlag Berlin Heidelberg

Chiu, P.-S., Su, Y.-N., Huang, Y.-M., Pu, Y.-H., Cheng, P.-Y., Chao, I.-C., & Huang, Y.-M. (2017). Interactive Electronic Book for Authentic Learning. Lecture Notes in Educational Technology, 45–60. doi:10.1007/978-981-10-5930-8_4

Encheff, D. (2013). Creating a Science E-book with Fifth Grade Students. TechTrends, 57(6), 61–72. doi:10.1007/s11528-013-0703-8

Erlina, Dian. (2016). Whole Language-Based English Reading Materials. International Journal of Applied Linguistics and English Literature, 5(3), 46-56. Retrieved from http://www.journals.aiac.org.au/index.php/IJALEL/article/view/2203

Gall, Meredith D. Joyce P. Gall dan Walter R. Borg. 2003 Educational Research: An Introduction. New Jersey: Pearson Education,

Gustafon, Kenth L dan Robert Maribe Branch, 2001. Survey of Instructional Development Model (Fourth Edition). New York: Eric Clearinghouse on Informartion & Technology Syracuse. Hüseyin Uzunboylu 877-0428 © 2012 Published by Elsevier Ltd. Selection and/or peer review under responsibility doi: 10.1016/j.sbspro.2012.06.903

H.Agdogan, et al. (2014). Mediterranean Journal of Social Sciences. 5(9), p.972.

Herlina. (2016). The Effect of Interest in Reading on Mastery of English Vocabulary with Fifth Grade Elementary Students. Studies in English Language and Education. 3(2), 188-202.

Hannafin, Michael J. Kyle Peck. (1998). The Design, Development and Evaluation of Instructional Software. New York: Macmillan Publishing Company.

Hsu, C., Lin, Y., Chen, M., Chang, K. and Hsieh, A. (2017), "Investigating the determinants of e-book adoption", Program: electronic library and information systems, 50(1), 2-16. https://doi.org/10.1108/PROG-04-2014-0022

Isaeni, Indri. (2018). An Increase in Learning Outcome Students is Through The Development of Archive E-Module Based on The Flipbook With Discovery Learning Model. JPBM (Jurnal Pendidikan Bisnis dan Manajemen). 4(3), 125-129. Doi: 10.17977/um003v4i32018p125

Ken, Goodman. 2005. What's Whole in Whole Language: 20th Anniversary Edition. USA: RDR Books.

Linda, Roza. (2018) Interactive E-Module Development Through Chemistry Magazine on
Kvisoft Flipbook Maker Application for Chemistry Learning in Second Semester at Second Grade Senior High School. Journal of Science Learning. 2(1). Doi: 10.17509/jsl.v2i1.12933

Ling-Ying, Huang. (2014). Learning to Read with the Whole Language Approach: The Teacher’s View. English Language Teaching, 7(5), 71-77. doi:10.5539/elt.v7n5p71

Maya, Mata. 2010. Berbisnis e-book di Kala Krisis. Jakarta: PT Elex Media Komputindo.

Pat, Rigg. 1991. Whole Language in TESOL. TESOL Quarterly. Vol. 25. No. 3, pp.521-239.

Ryan, Howard. (2016). Whole Language and The Fight For Public Education in the US. Research Journal of the National Association for the Teaching of English. 50(1): 60-71. https://doi.org/10.1111/17548845.2016.11912558

S.J, Rich. 2005. Restoring Power of Teacher: The Impact of Whole Language. Journal of Canadian Association for Curriculum Studies. Vol. 62 No. 7, pp.717-724.

Setiyo, Edi. 2018. Pengembangan Media Pembelajaran Berbasis Flash Flip Book pada Mata Kuliah Elemen Mesin 1 di Program Studi Pendidikan Teknik Mesin Universitas Sriwijaya. INVOTEK: Jurnal Inovasi Vokasional dan Teknologi, 18(1), DOI : 10.24036/invotek.v18i1.171

Suparno. (2017). Developmen of EBook Electronic Model to Increase Critical Thinking of Senior High School Students. Dinamika Pendidikan, 12(2), 198.

Tarigan, Henry Guntur. 2008. Membaca Sebagai Suatu Keterampilan Berbahasa. Bandung: Angkasa.

Tengeh, I Made. (2009). Desain Multimedia Pembelajaran. Singaraja: Universitas Pendidikan Ganesha.

Tengeh, I Made. (2014). Model Penelitian Pengembangan. Bali: Graha Ilmu.

Vaish, Viniti. (2014). Whole Language vs code-based skills and interactional patterns in Singapore’s early literacy program. English Language and Literature, 44(2), 199-215, doi: http://dx.doi.org/10.1080/0305764X.2013.863830

Weaver C. 2003. Understanding Whole Language, from Principles to Practice. Michigan: Irwin Publishing.