E-Module Development with Kvisoft Flipbook Maker Application on Economics Material to Improve Students' Critical Thinking Abilities

by Mila Suci Windiarti

Submission date: 13-Sep-2024 08:30AM (UTC+0700)
Submission ID: 2452535476
File name: Artikel_International_Mila_1.pdf (714.73K)
Word count: 5766
Character count: 31898

E-Module Development with *Kvisoft Flipbook Maker Application* on Economics Material to Improve Students' Critical Thinking Abilities

Mila Suci Windiarti [1], Kir[illegible]im Baroroh [2]
[1,2] Faculty of Economics and Business, Yogyakarta State University

Adress : Jl. Colombo No.1 Karangmalang Yogyakarta 55281
Corresponding Author: milasuci.2021@student.uny.ac.id

Abstract : *This study aim[illegible] determine (1) the design of an e-module model with the Kvisoft Flipbook Maker [illegible]lication in economics learning to improve participants' critical thinking skills. Educate, (2) the feasibility of e-modules with the Kvisoft flipbook maker application in economic learning to improve participants' critical thinking skills. learners, (3) students' learning responses to electronic module (e-module) with the Kvisoft flipbook maker application in economics learning for participants Educate, (4) how effective is the use of e-modules with the Kvisoft Flipbook Maker application for critical thinking skills of students in learning .This research is a development research with R&D model. The research sample is SMPN 28 Purworejo class VIII students totaling 92 divided into 2 groups, namely the experimental group, and the control group , the control class uses printed e-modules . Data analysis techniques use normality tests, homogeneity, hypothesis testing, further testing, and effect size.T[illegible] research results show (1) The experimental class showed that the gain in critical thinking skills of students in the experimental class was 0.8, which means that the gain value in the experimental class was in the range of values (<g>) > 0.7, which is in the high category, in the control class the gain value 0.5 which means the gain in the first and second control classes is in the range of 0.7 ≥ (<g>) 0.3 is in the medium category, (2) the e-module suitability from the assessment of material experts is 5.47 and 5.55, media experts 4.46 with very good and good categories, (3) the student response is good as seen from the results of the content suitability of 4.27, language 8.41, usefulness 8.68, and graphics 8.57 are at a value above 4, (4) the results of the effect size analysis with the Interpretation Effect Size category show that using the Kvisoft Flipbook Maker e-module is effective in increasing critical thinking skills by 70.8 %.*

Keyword : *kvisoft f lipbook maker, critical thinking*

INTRODUCTION

Material junior high school economics is extensive material there is activity everyday that often implemented . Participants educate must Can conclude And look for solution from material economy . Material the economy discussed activity economy And perpetrator economy require participant educate For think critical For look for problem And existing solutions especially If associated with problem on life everyday . Participants educate must Can develop material economy And analyze the existing answer .

There are six basic elements of critical thinking that must be developed in learning according to focus, reason, conclusion, situation, clarity and thorough examination. The first step of critical thinking is to focus on the problem or identify the problem well, find out what the real problem is and how to prove it. The next step is to formulate arguments that support the conclusion, find evidence that supports the reason for a conclusion so that the conclusion can be accepted or in other words the reason given must be in accordance with the conclusion. If the reason given is correct, then it must be shown how strong the reason can support the conclusion made.

The difficulty that is often faced by most students is in interpreting various economic concepts and principles because they are required to be able to interpret economic knowledge accurately and not vaguely. The ability of students to identify and interpret economic concepts is clearly an important prerequisite for the use of concepts to solve economic problems related to concepts. the.

Learning that does not involve students actively causes an imbalance in the cognitive, affective and psychomotor abilities of students. Most of the students are also unable to connect what is learned with how the knowledge will be utilized or used. Of course, this tends to make students accustomed to using only a small part of their potential or thinking ability and makes students lazy to think and accustomed to being lazy to think independent.

varied teaching materials, which made students less able to carry out learning. like just race on book And No active in solve problem . This makes students become monotonous. in the learning process with the presentation of written discussions on the board and the books they use, students are seen having fun chatting with their deskmates. The use of information technology in learning has not been fully maximized as a learning medium or learning resource. Teachers only use books as a learning resource. The use of LKS teaching materials and textbooks makes learning run one way. The tendency to use LKS and textbooks has not been able to maximize students' critical thinking skills.

Another problem found is that the test questions given to students mostly only reach the cognitive domains of remembering (C1), understanding (C2), and application (C3). Questions in the cognitive domains C1 and C2 are low-level thinking questions, therefore students need to be trained to solve high-level thinking questions so that they become accustomed to thinking critically. Therefore, it can be concluded that the test questions created do not necessarily measure students' critical thinking skills. This means that teachers never give or create tests that measure students' critical thinking skills. The implication is that students' critical thinking skills will be weak because the questions created only contain cognitive domains C1, C2, and C3.

For overcome problems that occur on should be teacher provide facility interesting learning . Facilities the Can in the form of module learning . Learning modules packaged using learning media are teaching materials that are systematically and attractively arranged, covering the content of the material, methods and evaluations to be used independently so that students can achieve the expected competencies. Along with the development of technology, the development of teaching materials can motivate students to be more active with *software* that produces teaching materials and learning media that can be studied independently and

attractively such as electronic modules. If in general it is a collection of papers containing text and images, this module contains digital information that is not only in the form of text or images but also videos and music. The benefits of using *e* -module media as a learning resource in the learning process include, it can increase the knowledge in the classroom, can stimulate students' thinking, attitudes and behavior. Students can broaden their knowledge by studying additional materials provided in *the e-* module, in addition there is also a re-discussion of the material provided in the classroom. The support of facilities such as projectors and the permission to bring their own laptops and cellphones makes learning with information technology easier.

Kvisoft f lipbook maker is the right program when used in learning media. This application provides facilities that will help users to produce intuitive learning media. This application provides many options in providing *highlights* such as active movement, video, images, and sound so that the media created is more interesting for students.

Based on the explanation above, the researcher is interested in studying the development of e-modules with the *Kvisoft Flipbook application . maker* in economic learning to improve students' critical thinking skills.

LITERATURE REVIEW

a. Defenition of Modules

Teaching materials according to Widodo and Jasmadi (Kusumam, A., Mukhidin., Hasan, B., 2016) are a set of learning tools or facilities that contain learning materials, methods, limitations, in order to achieve the expected goals, namely achieving competence with all its complexities. Teaching materials (Prastowo, 2015 :17) is all material that is arranged systematically, which displays a complete picture of the competencies that will be mastered by students and used in the learning process with the aim of planning and reviewing the implementation of learning.

Module is one of the learning media in the form of a script or printed media that is often used by teachers and students in learning activities. According to Majid, 2011 : 176 "A module is a book written with the aim that students can learn independently without or with teacher guidance " . According to (Depdiknas, 2008: 3) states that a module is a set of independent teaching materials that are presented systematically so that students can learn independently without depending on others because it has been equipped with instructions for self-study.

From the explanation in above it can be concluded that the module is a teaching material that is systematically arranged using language that can be easily understood by students according to their level of knowledge and age, so that they can learn by themselves (independently) with minimal assistance or guidance from educators. The development of science and technology always influences learning media such as modules. Modules are made to increase students' motivation and enthusiasm for learning, such as increasing students' critical and creative thinking skills.

The module allows students to learn more independently according to their abilities, experience and mastery of the material that has been obtained with or without supervision from the teacher. Systematic writing allows students to understand the module in their own way and can measure how far their understanding of the material being studied. So that students become more interested in the material being studied and improve critical understanding according to their respective thoughts and like the economic learning process that is oriented towards the meaningfulness of learning and effectiveness in everyday life.

b. Defenition of electronic modules

The development of information and communication technology towards the 20th century has shifted to the digital era. Information and publications that were originally only documented and disseminated through printed sheets of paper, are now starting to use electronic media as an alternative replacement. In the world of education, the use of information and communication technology in learning is known as *e-learning* . One form of presenting learning materials in digital or electronic format is *an e-book* .

Electronic books or commonly known as *e-books* are displays of information or manuscripts in book format that are recorded electronically using data storage media and can be opened and read using a computer or electronic book reader (*e-book viewer or e-book reader*). The development of *e-book technology* encourages the integration of print technology with computer technology in learning activities. Various printed learning media, one of which is modules, can be transformed into electronic form, giving birth to the term electronic module or known as e-module.

Referring to the terms related to modules and electronics, it can be defined that an electronic module is a form of presentation of independent teaching materials that are systematically arranged and presented in electronic format that is equipped with video tutorials, animations or audio to enrich the learning experience.

c. Characteristics of Electronic Modules

Modules as independent learning media have various characteristics. The characteristics of printed modules can be used as a reference for electronic modules. A module can be said to be good and interesting if it has the following characteristics (Depdiknas, 2008 :3-5)

1. *Self Instructional* ; namely through this module a person or student is able to learn by themselves, without depending on other parties.
2. *Self Contained* ; that is, all learning materials from one competency unit or sub-competency studied are contained in one complete module. The purpose of this concept is to provide students with the opportunity to study the learning materials thoroughly, because the materials are packaged into one complete unit.
3. *Stand Alone* (stand alone); namely the module developed does not depend on other media or does not have to be used together with other learning media. By using the module, students do not depend on and have to use other media to study and or do assignments on the module. If it still uses and depends on other media besides the module used, then the media is not categorized as stand-alone media.
4. *Adaptive* ; the module should have high adaptive power to the development of science and technology. It is said to be adaptive if the module can adjust to the development of science and technology, and is flexible for learning. By paying attention to the acceleration of the development of science and technology, the development of multimedia modules should remain " *up to date* ". An adaptive module is one where the content of the learning material can be used up to a certain period of time.
5. *User Friendly* ; the module should be friendly to its users. Every instruction and information display that appears is helpful and friendly to its users, including the ease of users in responding, accessing according to their wishes. The use of simple language, easy to understand, and common terms in life is one form of *user friendly*

d. E-Module

The development of data and correspondence innovation towards the end of the twentieth century gradually shifted the Gutenberg era with its printing press and replaced it with computerized time. Data and distribution that were originally only

reported and distributed through printed paper, are now starting to utilize electronic media as a substitute for choices in the realm of schooling. Innovation in the use of data and correspondence in learning is termed *e -Learning* . *E-learning* refers to learning by utilizing electronic *gadget administration* (Elyas, 2019) .

One type of display of learning materials in a computerized or electronic configuration is a digital book. An electronic book, which is called a digital book, is an exhibition of data or text in a book design that can be recorded electronically by utilizing a *hard circle, diskette* , album, or *glimmer plate* and can be opened to be read using a PC or electronic book reader. digital book observer or digital book reader (Sitepu, 2006:142) .

Electronic modules are electronic variants of printed modules that can be used by PCs that are set with essential programming. E-modules are also learning devices (*gadgets*) that contain materials, procedures, requirements, and assessment techniques that intentionally and strangely achieve ordinary abilities indicated by the level of difficulty electronically. E-modules are also called electronic modules, which are presentations of information in the form of book designs that are displayed electronically using hard circles, diskettes, groupings or fire plates and can be understood using a PC or also users in electronic books. (Priyanthi et al ., 2017) .

Accessing electronic media by students has various advantages and qualities. When viewed from the advantages of electronic media itself, it can make the learning cycle really interesting, intuitive, must be able to be anytime and anywhere and can work on the nature of learning (Prasetya, 2017) E-module is a type of introduction to independent learning materials that are deliberately coordinated in express learning units, presentation of electronic formats, where each learning action is related to the relationship as a subject topic that makes students more instinctive about the program, which is equipped with an instructive account introduction about exercises, activities, and sounds to energize the learning experience (Kemendikbud, 2017: 3).

Electronic modules are included in learning media. Media is a component of learning resources as well as a physical carrier, which contains teaching materials that can encourage students to learn in their environment. The scope of learning media includes tools, materials, visual effects, and facilities and infrastructure used in learning. (Syamsidar et al., 2018) . Initially, media was considered as a tool for teachers to explain topics. The first aid tool applied was a visual aid. Around the middle of the

20th century, the use of visual effects was complemented by audio aids, which reached audio-visual aids (Hamdani, 2011 :249)

RESEARCH METHODS

This research is a type of *Research and Development* (R&D) research. The research model used in this study is the development model compiled by Thiagarajan et al., namely the 4-D Model. The 4-D Model is also known as the instructional development model, so called because this approach divides the instructional development process into four stages. The 4-D development stage consists of the *Define stage* , *the Design stage* , *the Develop stage* , and *the Disseminate stage* . The purpose of this study is in the form of an economic e-module product that is developed to provide improvements to thinking skills. critical students of class VIII of SMP Negeri 28 Purworejo.

RESULTS AND DISCUSSION

The field trial aims to determine the feasibility and effectiveness of *the Kvisoft Flashbook - based economic e-module product. maker* in improving critical thinking skills. Before entering the GLM test, first conduct a classical assumption test: normality test and homogeneity test. The subjects of the field trial were students of class VIII SMPN 28 Purworejo. The classes used in the field trial consisted of classes VII I B , and VIIIC (Control), VIII E (experiment). The experimental class is a group that is given treatment using the e-economic module based on *kvisoft f lipbook. maker* , control class is a group that is given treatment using school modules that are commonly used by teachers in schools. *Pretest* and *posttest scores* of critical thinking skills in 3 different classes and different treatments. The *pretest* and *posttest results* that have been obtained are then tested using GLM to see how much influence the effectiveness of e-modules based on *kvisoft f lipbook maker* has on economic learning in improving students' critical thinking skills.

The average results *of the pretest* and *posttest* of critical thinking skills in the three field test classes are presented in Table 29. Complete *pretest* and *posttest* data can be seen in Appendix 27. It was found that the average *pretest value of critical thinking skills in the experimental and control classes were* $_{e}$ = 59.0 , $\bar{X}_{k}$ = 56.5, respectively . The average $\bar{X}$*posttest* value of critical thinking skills of students in the experimental and control classes were $_{e}$ = 93.3 , $\bar{X}_{k}$ = 79.7 , respectively.$\bar{X}$

Table 1. Average Results *of Pretest* and *Posttest* of Students

Group	Critical Thinking Skills		
	Pretest	*Posttest*	*Gains*
Experiment	59.0	93. 3	0.8
Control	56.5	79.7	0.6

gain value results are then analyzed using statistical tests to see the effectiveness value of using e-modules. The effectiveness of e-modules can be detected, but first, statistical test prerequisites are carried out, including normality tests. And homogeneity test . This study uses the ANOVA (analysis of unit variation) statistical test and prerequisites.

1. Normality Test

Gain score results then analyzed using statistical tests to see the effectiveness value of using e-modules. This study uses the ANOVA statistical test (multivariate analysis) statistical tests and prerequisites .

Table 2. Results Normality *Shapiro Wilk*

Class	*Gains*	Df	Sig.
Experiment	0.8	48	.118
Control	0.6	48	.131

Based on Table 30 shows that the data comes from a normally distributed population, as seen from the Sig. value of 0.05. Can seen *gain* value means <0.05 then the data is it is said normally distributed . For gain score value more tall on posttest results .

2. Homogeneity Test

The homogeneity test is conducted to see whether the groups to be compared come from a population that has homogeneous or the same variance. The group is said to be homogeneous if the Sig value> 0.05, thus to find out, the *Levene Statistics test is conducted* . In the homogeneity test, the data used is the gain data from the experimental class, and control . The following are the results of the homogeneity test analysis shown in Table 3.1 .

Table 1Results of Homogeneity Analysis

	df 1	df 2	Sig.
Based on Mean	1	94	.082
Based on Median	1	94	,102

Based on the results shown in Table 3.1, it can be seen that the Sig. value < 0.05 is 0.082 and 0.102 , which means that the groups to be compared come from populations that have homogeneous or equal variance.

3. Hypothesis Testing

Hypothesis testing is carried out if the prerequisite analysis test has been met. Because the results of the analysis of *the gain of students' critical thinking skills are distributed and homogeneous, then in order to see the differences in the results of students' critical thinking skills using the kvisoft f lipbook* -based economic e-module *maker* , e - module and school module then parametric analysis can be carried out GLM-ANOVA test.

The results of the GLM aim to test whether or not there is a difference in *the pretest-posttest scores* of critical thinking skills in each experimental and control group .

H_o : There is no difference in critical thinking ability *gain scores* in each group.

H_a : There is a difference in *gain scores* critical thinking skills in each group.

Based on the ANOVA test, the significance result was 0.00 . less than 0.05 so it can be concluded there are differences in each experimental group And control. The existence of this difference shows that the changes in scores in each group differ significantly in critical thinking skills .

4. Advanced Test

Changes in scores can mean an increase or decrease, therefore further testing is carried out.

H_o : There is no increase in critical thinking ability *gain scores in each group.*

H_a : There is an increase in critical thinking ability *gain scores in each group.*

Based on Table 3 3 , the sig value is 0.00 for each indicator and each class so that the sig value is <0.05 so that it can be said that there is a significant increase between the critical thinking ability *gain scores* in each class. In critical thinking ability, *the Mean Differences* (MD) value for the experimental group And control of 303 , and - 303. Based on this value, it shows that from towards group experiments that have negative values. So it is known that the average experimental *gain score* is higher than the control *gain score* . So there is a significant increase

between *the pretest-posttest scores* of each group's critical thinking skills. The complete analysis results can be seen in appendix 30 .

Table 4 . *Pairwase Comparrisons*

Class (I)	Class (J)	Sig.	Mean Difference (IJ)
Experiment	Control	.000	0.302
Control	Experiment	.000	-0.302

.

Based on table 3.2, it is found that the critical thinking skills of students in the experimental class are significantly different from those in the control class, as evidenced by Sig= ,000 < 0.05 .

5. ***Effect Size***

Use of e-modules based on *kvisoft f lipbook maker* effective on critical thinking skills obtained from the results of the *Between-Subjects Effects test* on GLM. After conducting *the Effect Size Interpretation,* the next step is to compare the average score obtained from the results of *the effect size analysis* with the *Effect Size Interpretation category* . The results of the analysis can be seen in Table 3 3 below . The complete results of the analysis can be seen in Appendix 3 3 .

Table 5 . Test of *Between-Subject Effects*

Source	F	Sig.	Partial Eta Squared
Class	420,321	0,000	.708

Table 3 3 shows the large effective use of *the Kvisoft Flipbook* e-module. *maker* in improving critical thinking skills. Based on these data, it can be concluded that the use of e-modules based on *kvisoft f lipbook maker* of 70.8 % based on the interpretation of *the effect size is in the* category of very strong effects in improving students' critical thinking skills. The use of e-modules based on *kvisoft flipbook maker* provides effectiveness to critical thinking skills obtained from *the results of the Univariate Test Contrast Type* on GLM. The complete analysis results can be seen in Appendix 3 4 .

CONCLUSION

1. The design of the economic e-module based on *the Kvisoft Flipbook Maker* that was developed has been feasible to improve critical thinking skills, reviewed from the feasibility assessment by the validator, showing that the product developed based on

the material and media aspects is in the good category with the assessment of product feasibility through student responses in each field trial based on the practicality aspect of use showing an increase and entering the good criteria.

2. *Kvisoft Flipbook* - based Economic E-Module *maker* produced by experts material 5.47 and 5.55, while media experts 4.46 and 4.62 with category very Good And Good .
3. Student responses to *the Kvisoft Flipbook Maker -based economic e-module* effective in improving students' critical thinking skills, as proven by the results of the experimental class being higher than the control class. Results *gain* ability think critical participant educate on class the resulting experiment of 0.8 which means mark *gain* on class experiment is at on range value (<g>) > 0.7 is on category high , on class control First And second is 0.5 which means gain on class control First And second is at on range value 0.7 ≥ (<g>) 0.3 is on category currently
4. The level of effectiveness obtained from the implementation of e-modules falls into the very high category. strong . Results analysis *effect size* with category *Interpretation of Effect Size* show effective use e- module *kvisoft flip ipbook maker* in increase ability think critical as big as 70 , 8 %.

REFERENCES

Adrianti, K., Asrizal, & Putra, A. (2018). The influence of integrated science teaching materials on the theme of respiratory and excretion health containing digital era literacy on the competency of class VIII students at SMPN 15 Padang. *Pillar of Physics Education* , *11* (3), 169–176.

Ahmad Rifa'i. (2019). *Management of Skills Programs in Islamic Senior High Schools (Case Study in State Islamic Senior High School 1 Ponorogo)* . State Islamic Institute of Ponorogo.

Alec, F. (2008). *Critical Thinking: An Introduction* . Erlangga.

Allen, M. J., & Yen, W. M. (1979). *Introduction to Measurement Theory* . Brooks/Cole Publishing Company.

Annisa, N., & N. (2023). Application of Literacy-Based Teaching Materials to Improve Reading Skills of Slow Learner Students in Elementary Schools. *Jurnal Elementaria Edukasia* , *6* (3), 1467–1473. https://doi.org/https://doi.org/10.31949/jee.v6i3.6399

Anwar, I. (2010). *Development of Teaching Materials* . UPI Directory.

Arikunto, S. (2013). *Research Procedures. A Practical Approach* . Rineka Cipta.

Arry, D., Jacobs, L., Sorensen, C., & Razavich, A. (2010). *Introduction to Research in Education* . Cengage Learning.

Asmi, AR, Dhita, AN, Surbakti, B., & Hudaidah, C. (2021). Development of E-Module Based on Flip Book Maker Character Education Material for Pancasila Course Learning MPK Sriwijaya University. *Journal of Social Science Education* , *27* (2), 1–10.

Aunurrahman. (2016). *Learning and Teaching* . Alphabet.

Awalsyah, A., S. Sarwi, and SS (2018). Development of Student Worksheets (LKS) Assisted by Kvisoft Flipbook Maker to Develop Students' Scientific Skills. *Upej Unnes Physics Education Journal* , *7* (3), 28–35.

Baharuddin, & Wahyuni, EN (2010). *Learning and Teaching Theory* . Ar-Ruzzyamin.

Barbara K Given. (2002). *Teaching to the Brain's Natural Learning Systems.* Association for Supervision and Curriculum Development .

Barth, J. L. (1990). *Methods of instruction in social studies* (3rd ed.). University Press of America.

Daryanto. (2012). *Educational Evaluation* . PT. Rincka Cipta.

Dawson, K., & Kovalchick.ed, A. (2004). *Education And Technology* . ABC-CLIO.

Ministry of National Education. (2008a). *Guidelines for Developing Teaching Materials* . Ministry of National Education, Directorate General of Primary and Secondary Education Management.

Ministry of National Education. (2008b). *Government Regulation of the Republic of Indonesia No. 19 of 2005* concerning National Education Standards . Ministry of National Education.

Ministry of National Education. (2010). *Electronic Module Development Guide* . Directorate General of Higher Education, Ministry of National Education.

Elyas, A. (2019). Use of *E-Learning* Learning Models in Improving News. *Editions* , *56* (4), 1–11.

Ennis, H., & Robert. (1995). *Critical Thinking* . University of Illinois.

Farisi, A., Hamid, A., & Melvina. (2017). The Influence of Problem Based Learning Model on Critical Thinking Skills in Improving Student Learning Outcomes on the Concept of Temperature and Heat. *Student Scientific Journal (JIM) Physics Education* .

Franco, A., Butler, H., & Halpern, D. (2015). *Teaching Critical Thinking to Promote Learning. In The Oxford Handbook of Undergraduate Psychology Education* . Oxford University Press.

Fristadi, R., & Bharata, H. (2015). Improving Students' Critical Thinking Skills with Problem Based Learning. *National Seminar on Mathematics and Mathematics Education UNY* , 597–602.

Habibi, B. (2017). *Development of Interactive Multimedia Learning Media Using Kvisoft Flipbook Maker based on Ethnomathematics* . UIN Raden Intan Lampung.

Hake, R. (1999). *Analyzing Change/Gain Scores* .

Hambleton, & Swaminathan, H. (1991). Item Response Theory (Principles and Applications). *Springer Science+Business* .

Hamdani. (2011). *Teaching and Learning Strategies* . CV Pustaka Setia.

Hanif, M. (2020). The Development and Effectiveness of Motion Graphic Animation Videos to Improve Primary School Students' Sciences Learning Outcomes. International. *Journal of Instruction* , *13* (4), 247–266.

Hastuti, PW, Nurohman, S., & W, S. (2018). Development of Science Worksheets Based on Science Issue Inquiry to Improve Critical and Scientific Thinking. *Attitude. Journal of Physics* .

Kuswana, WS (2011). *Taxonomy of Thinking* . PT. Rosdakarya Youth.

Laura. (2014). *Teaching Strategy* . Salemba Medika.

Mahanal, S., Zubaidah, S., Sumiati, I., Sari, T., & Ismirawati, N. (2019). RICOSRE: A learning model to develop critical thinking skills for students with different academic abilities.

International Journal of Instruction , *12* (2), 417–434.

Majid, A. (2011). *Learning Planning Developing Teacher Competency Standards* . Remaja Rosadakarya.

Mooi, E., & Sarstedt, M. (2011). *A concise guide to market research.* Springer Heidelberg Dordrecht London .

Mukminan. (2012). *Educational Technology for Improving the Quality of Learning* .

Mulyaningsih NN & Saraswati, DL (2017). Implementation of Digital Book Learning Media with *Kvisoft Flipbook Maker* . *Journal of Physics Education* , *5* (1), 25–32.

Nitko, A., & Brookhart, S. (2011). *Educational assessment of students* (6th ed.). Pearson Education.

Nurhasanah, & Sari. (2020). Physics E-Module Based on Contextual Teaching and Learning Using the Kv *isoft Flipbook Maker Application* to Improve Science Literacy of Grade XI High School Students. *NATURAL SCIENCE: Journal of Research in the Field of Science Education* , *6* (1), 29–40.

PKD Lubis, et al. (2021). Teaching Materials Development Using Kvisoft Flipbook maker Application in Creative Economy Courses with 4-D Model Design. *Proceedings of the International Joined Conference on Social Science (ICSS 2021)* .

Prasetya, I. (2017). Development of E-Modules in Software Modeling Subjects for Grade XI Using Problem Based Learning Models at SMK N 2 Tabanan. *Journal of Technology and Vocational Education* , *14* (1), 96–105.

Prastowo, A. (2015). *Creative Guide to Making Innovative Teaching Materials* . Diva Press.

Priyanthi, K., Agustini, K., & Santyadiputra. (2017). Development of E-Module Assisted by Problem Solving Oriented Simulation in Data Communication Subject (Case Study: Grade XI TKJ Students of SMK Negeri 3 Singaraja). *Collection of Articles for Informatics Engineering Education Students* , *6* (1), 40–49.

Purwanto. (2011). *Evaluation of Learning Outcomes* . Student Library.

Putri, RA, Uchtiawati, S., & Fauziyah, N. (2020). Development of Interactive Flip Book Learning Media Using Kvisoft Flip Book Maker Based on Local Arts and Culture DIDAKTIKA. *Journal of Educational Thought* , *26* (2).

Ramdani, R., Rahmat, M., & Fakhruddin, A. (2018). E-Learning Learning Media in Islamic Religious Education Learning at the Upi Bandung Model Laboratory High School. Indonesian. *Journal of Islamic Education* , *5* (1), 47–59.

Republic of Indonesia. (2003). *Law of the Republic of Indonesia Number 20, Year 20023,* concerning the National Education System .

Rosana, D., & Setyowarno, D. (2016). *Applied Statistics for Educational Research* . UNY Press.

Sanaky. (2013). *Innovative Interactive Learning Media* .

Sapriya. (2011). *Social Studies Education; Concepts and Learning* . Rosdakarya Youth.

Siregar, LF, Pandiangan, N. &; Sumanik, NB (2021). Students' Learning Difficulties in Online Learning on Hydrocarbon Topics. *PENDIPA Science Education Journal* , *5* (3). https://doi.org/https://doi.org/10.33369/pendipa.5.3.412-420

Sitepu, B. (2006). *Compilation of Textbooks* . Verbum Publishing.

Situmorang, M., Yustina, Y., & Syafii, W. (2020). E-module development using kvisoft flipbook maker through the problem based learning model to increase learning motivation. *Ournal of Educational Sciences* , *4* (4), 834–848.

Situmorang, M. et al. (2020). E-Module Development using Kvisoft Flipbook maker through

the Problem Based Learning Model to Increase Learning Motivation. *Journal of Educational Sciences* .

Slameto. (2010). *Learning and Factors that Influence It* . Rineka Cipta.

Suarsana, IM, and GAM (2013). Development of Problem Solving Oriented E-Modules to Improve Students' Critical Thinking Skills. *National Journal of Informatics Engineering Education* , *2* (3), 193–200. https://doi.org/10.23887/janapati.v2i3.9800.

Sugianto, D., Abdullah, A., Elvyanti, S., & Muladi, Y. (2013). Virtual Module: Multimedia Flipbook Maker Basic Digital Techniques. *Invotec Journal* , *9* (2), 110–116.

Sugiyono. (2013). *Qualitative Quantitative Research Methods and R&D* . Alfabeta Publisher.

Sukardi. (2012). *Educational Research Methodology* . PT Bumi Aksara Sunariyah.

Sumanik, NB et al. (2021). Flip Book Maker Based Water Chemistry E-module Development as a Distance Learning Alternative. *Proceedings of the International Joined Conference on Social Science (ICSS 2021)* .

Susilana, R., & Riyana, C. (2008). *Learning Media* . CV WacanaPrima.

Syah, M. (1995). *Educational Psychology: A New Approach* . Rosdakarya Youth.

Syamsidar, S., Maruf, M., & Hustim, R. (2018). Physics Learning Based on Edgar Dale's Cone of Experience on Elasticity and Statia Fluid Material. *Journal of Physics Education, Muhammadiyah University of Makassar* , *6* (1), 1–12.

Thiagarajan, K., & Semmel. (1974). *Instructional Development for Training Teachers of Exceptional Children. Minneapolis, Minnesota: Leadership Training Institute/Special Education* .

U. Setyorini, Sukiswo, BS (2011). Implementation of Problem Based Learning Model to Improve Critical Thinking Skills of Junior High School Students. *Indonesian Journal of Physics Education* , *7* , 52–56.

U Neisser. (1976). *Cognition and Reality: Principles and Implications of Cognitive Psychology* . San Francisco.

Vembriarto. (1985). *Introduction to Module Teaching* . Paramita Education Foundation.

Wayan Suwatra, Agus Suyatna, UR (2018). Development of Interactive E-Module for Global Warming to Develop Critical Thinking Skills. *International Journal of Advanced Engineering, Management and Science* , *4* (7).

Wayudi, M., Suwatno, & Santoso, B. (2020). Analysis Study of Critical Thinking Skills of High School Students. *Journal of Office Management Education* , *5* (1), 67–82.

Weijun Liang, & et al. (2020). Development And Evaluation Of A Webquest-Based Teaching Program: Students' Use Of Exploratory Talk To Exercise Critical Thinking. *International Journal of Educational Research* .

Wibowo, E., and Pratiwi, DD (2018). Development of Teaching Materials Using the Kvisoft Flipbook Maker Application for Set Material. *Decimal: Journal of Mathematics* , *1* (2), 147–156.

Wibowo, MH (2019). The Influence of Flip Book Learning Media on Visual Learning Styles of Class X TKI Students of Smkn 1 Boyolangu. *Journal of Education And ICT* , *3* (1), 22–29.

Wibowo, & Pratiwi. (2018). Development of Teaching Materials Using the Kvisoft Flipbook Maker Application for Decimal Set Material. *Mathematics Journal* , *1* (2), 147–156.

Widoyoko, EP (2011). *Research Instrument Preparation Techniques* . Learning Library.

Wright, K., Franks, A., Kuo, L.-J., McTigue, E., & Serrano, J. (2016). Both Theory and Practice: Science Literacy Instruction and Reading Theory. *International Journal of*

Science and Mathematics Education , *14* , 1275–1292. https://doi.org/https://doi.org/10.1007/s10763-015-9661-2

Yamin, M. (2013). *Strategies and Methods in Learning Models* . GP Press Group.

Yusmanila, Hasra, A., & Razi, P. (2017). Development of Teaching Materials in the Form of Contextual Physics Modules on Fluid Material in Physics Learning in High Schools. *Gravity: Scientific Journal of Physics Research and Learning* , *3* (2), 134–147.

Yusuf, T. (2013). *Learning Theory in Practice* . Alauddin University Press.

Zuliar, E., & Darmansyah. (2020). Development of Multimedia-Based E-Modules with the Kvisoft Flipbook Maker Application for Science Subjects for Grade VIII Junior High School Students. *Innovation Technology on Education* , *2* (1), 1–9.

E-Module Development with Kvisoft Flipbook Maker Application on Economics Material to Improve Students' Critical Thinking Abilities

ORIGINALITY REPORT

19%	15%	16%	4%
SIMILARITY INDEX	INTERNET SOURCES	PUBLICATIONS	STUDENT PAPERS

PRIMARY SOURCES

1	Luki Aswar. "Kompetensi Guru dan Kaitannya dengan Pengembangan Media Interaktif", Open Science Framework, 2021 Publication	2%
2	Zonny Amanda Putra, Arwizet K, Bulkia Rahim, Rahmat Azis Nabawi. "The Practicality of Learning Module Based on Jigsaw-Cooperative Learning Model in Media Education Course", INA-Rxiv, 2018 Publication	1%
3	e-journal.hamzanwadi.ac.id Internet Source	1%
4	Submitted to Universitas Bengkulu Student Paper	1%
5	ijisrt.com Internet Source	1%
6	Diah Puji Lestari, Supahar, Paidi, Suwarjo, Herianto. "Effect of science virtual laboratory	1%

	combination with demonstration methods on lower-secondary school students' scientific literacy ability in a science course", Education and Information Technologies, 2023 Publication	
7	I Nasrulloh, D Rahadian, S H Bariah, Y Purwanti, K A N Imania. "Development of an electronic book epub 3.0 as a learning resource for blended learning IPA Terpadu", IOP Conference Series: Materials Science and Engineering, 2021 Publication	1 %
8	123dok.com Internet Source	1 %
9	Iis Tarsiyah, Abdul Hakim, Laili Komariyah. "The effect of guided inquiry learning model oriented multi-representation on multi-representation ability of senior high students in temperature and heat chapter", AIP Publishing, 2022 Publication	1 %
10	journal.unesa.ac.id Internet Source	1 %
11	Submitted to IAIN Metro Lampung Student Paper	1 %
12	journal.umpo.ac.id Internet Source	1 %

13	journal.umg.ac.id Internet Source	1 %
14	eprints.uny.ac.id Internet Source	1 %
15	Submitted to IAIN Kudus Student Paper	1 %
16	Nuryuliana Nuryuliana, Anti Kolonial Prodjosantoso. "Development of Integrated Assessment Instrument to Measure Critical Thinking Skills and Self-Efficiency in Acid-Base Concept", JTK (Jurnal Tadris Kimiya), 2021 Publication	1 %
17	mudarrisa.iainsalatiga.ac.id Internet Source	1 %
18	journal.ia-education.com Internet Source	1 %
19	journal.uniku.ac.id Internet Source	1 %
20	seminar.uad.ac.id Internet Source	1 %
21	uijrt.com Internet Source	1 %
22	www.atlantis-press.com Internet Source	1 %

Exclude quotes	On	Exclude matches	< 1%
Exclude bibliography	On		