

INTERACTIVE E-MODULE: THE ECONOMIC LEARNING SOLUTIONS IN HIGH SCHOOL DURING THE COVID-19 PANDEMIC

Syahrul Munir¹, Wahyu Fitrianti², Rizza Megasari³

^{1,2}Economic Education Program, Faculty of Economics and Business, Universitas Negeri Malang, Indonesia

³Economics Development Education, Universitas Kebangsaan Malaysia, Malaysia
e-mail: syahrul.munir.fe@um.ac.id

ABSTRACT

The purpose of research and development of this Interactive e-module is to provide a solution for studying Economics in high school in the sub-subject Basic equations of Accounting in online learning during the Covid 19 Pandemic. This interactive e-module research and development activity adopts the Borg & Gall (2003) model which consists of 7 stages (needs analysis stage, initial draft development, validity test, draft revision, group trial, and revision stage). The results of research and development show that this Interactive e-module discusses three learning module units containing Economics material with the sub-subject of Basic Accounting Equations which is equipped with several interesting interactive features such as QR Code, music, YouTube videos, quiz applications, and games as support. students learn. This interactive e-module is very appropriate to be used as a solution for learning Economics during the Covid 19 Pandemic.

Keywords: *e-module, interactive, economic learning, fun games*

Received: 05 November 2022

Accepted: 10 Desember 2022

Published: 14 Desember 2022

INTRODUCTION

The Covid-19 pandemic has had a major impact on various sectors of life in Indonesia, including the education sector. This was also explained to the United Nations (UN) that the education sector is one of the sectors affected by the COVID-19 pandemic (Purwanto, et al, 2020). All levels of education are 'forced' to adapt suddenly to learning from home through online media. The Ministry of Education and Culture then responded to this with the issuance of Circular No. 4 of 2020 concerning the implementation of Education Policies during the Emergency Period for the Spread of Covid-19. One of the provisions is learning from home through online/distance learning to provide a meaningful learning experience for students, without being burdened with the demands of completing all curriculum achievements for grade promotion and graduation.

Changes in the implementation of these learning activities of course bring changes to the interaction between teachers and students. Interaction between

teachers and students is no longer done face-to-face (directly) but through long-distance communication using digital means/online platforms (online) with inadequate preparation (Salkiah, 2020). Applications commonly used by educators in online teaching during the Pandemic include the Zoom application, GoogleMeet, Microsoft Teams, Skype, and others. This is in line with Rosali's research (Rosali, 2020) that during the Pandemic learning was mostly done online using various applications, including the virtual class application such as Google Meet, Zoom, Schoology, Google Classroom (Narimo, et al., 2022), even social media platform like Facebook, Instagram, TikTok, to live stream teaching, and messenger-based such WhatsApp and Telegram (Karima & Mustofa, 2022).

Whereas asynchronous learning environments are not appropriately structured, synchronous learning environments are structured in the sense that students attend live lectures, there are real-time interactions between educators and learners, and there is the prospect of quick feedback. In this kind of learning environment, the educational material is not presented as live lectures or courses; instead, it is accessible through various learning systems and online discussion groups. Under these conditions, providing instant feedback or a rapid answer is impossible (Littlefield, 2018).

This transformation of learning activities requires teachers to be more creative in delivering material in learning activities. This is because, in the implementation of online learning, there are many obstacles, both technical and demographic, such as remote locations, unstable network constraints, limited internet quota, limited supporting tools (laptops and cellphones), and monotonous learning. The results of Suprapmanto's research (Suprapmanto, 2021) confirm that the problems that arise during online learning are limited devices for online learning, unstable internet connection, busy parents, information that does not arrive, and children's boredom during online learning.

Although there are so many problems experienced in online learning, a teacher, of course, needs to try to minimize them. Teachers must make various adjustments starting with teaching materials, and media, and applied to learning models to build effective online learning (Mustofa & Riyanti, 2019). In a survey on the implementation of online learning during the COVID-19 pandemic conducted by Saiful Mujani Research and Consulting (Yunianto, 2020), information was obtained that the majority of the students (92%) experienced problems and barriers. It is challenging to produce content that not only meets curricular requirements but also engages students (Kebritchi et al., 2017). E-learning program quality is a significant obstacle. In the government's educational policies, e-learning programs are not specified clearly. There are no quality, quality control, e-resource development, or e-content delivery standards.

The preliminary survey conducted by researchers in several schools in East Java showed that learning during the Pandemic was carried out online and offline (blended learning). Learning is done by utilizing teaching materials available in schools and the internet, textbooks, learning videos, presentation slides, and so on.

As stated by one of the Economics teachers at SMAN 1 Madiun, Mr. AS in the initial survey of this research, he said that "... *For face-to-face or live synchronous learning, yes, the discussion may be used in the laboratory. Then the virtual face-to-face uses virtual synchronous learning, so it uses the Blended Learning method, for SMAN 1 Madiun*".

From the reality in the field and this empirical data, it is considered necessary to develop media and teaching materials that are digitally based and interesting so that they can accommodate students' desires in learning, especially for materials that are considered less attractive and quite difficult to understand, for example in Economics learning, the sub-subject of equations. Basic Accounting for SMA class XII. This subject matter is considered difficult by most students compared to other subjects, so in the learning process, students need a long time to digest the basic concepts in accounting. This is expressed that the level of accounting difficulty is higher than in other subjects (Rahmawati, 2019).

Based on the results of interviews conducted by researchers during the initial survey in several schools in East Java, information was obtained that researchers found problems in economics subjects, namely the material that was considered difficult and needed more in-depth explanation from the teacher was Accounting material in class XII. Even though it has been explained through the learning video, students still ask for an explanation from the teacher. One of the difficulties in learning Accounting is the presence of external factors such as boredom while studying online during the pandemic and the lack of student interest.

In the sub-subject of basic accounting equations, students are required to master the concept of fundamental equations in accounting as a provision for making financial reports. Understanding these concepts requires teachers to be more innovative and creative in packaging the presentation of the material so that students are more interested in learning and are expected to understand basic concepts in accounting. Based on this reality, it is essential to develop exciting learning materials and media and simultaneously accommodate the needs of online learning during the pandemic (Dhawan 2020).

This research and development are one of the efforts that can be done to accommodate these needs. One of the efforts is to develop interactive e-modules, in which exciting and innovative materials are presented. The development of this interactive e-module is expected to be able to answer problems in learning during this pandemic. Because it is explained that e-modules can improve students' cognitive learning outcomes (Yulianti, 2017).

In addition, e-modules can increase students' independence (Susilo et al., 2016), without spending much money (Tania, 2017). This is in accordance with the learning conditions experienced during the pandemic. The use of e-modules is allegedly better than the usual print modules. E-modules are packaged digitally, contain text, images, or both, and contain material with examples and simulations that can be used in learning activities (Herawati & Muhtadi, 2018).

The results presented in this study can be used as a solution in online learning to provide variety in learning which is later expected to foster enthusiasm for learning from students. The development the e-module described in this research and development is an interesting game-based interactive e-module as a solution for online learning during this pandemic. The innovation of learning materials and media by adding game elements is intended to increase students' interest in learning. Game-based learning is a tool that can help students solve problems, improve critical thinking, and make assessments in learning (Dellos, 2015). In line with (Sutirna, 2018) game education (educational game) is a game used in the learning process and contains elements of education or educational values. Therefore, game-based learning media is appropriate for achieving learning objectives.

The novelty and uniqueness of the development of this Interactive e-module are shown by the addition of interesting game features (games) as a learning innovation in this Digital era. With the addition of this feature, it is hoped that it will become a stimulus for students to be more interested in reading the contents of this E-module and later be able to assist students in mastering the subject matter, especially during this pandemic.

RESEARCH METHOD

Research and development of Interactive e-modules on Economics material, sub-subject. The basic equation of Accounting begins with conducting a preliminary survey of Economics teachers in several schools in cities/districts in East Java. Some of these schools include MAN 2 Banyuwangi, Man 1 Blitar, SMA IT ASy-Syadzili, SMKN 1 Pagerwojo, SMAN 1 Tumpang, and SMAN 1 Madiun. This survey activity was conducted to explore and obtain information from Economics teachers for the needs of research and development of Interactive e-modules. This exploration activity is carried out using interview and observation techniques, the results of which are then used as research and development materials. The research and development model used is the development model of Borg and Gall (2003), as described in the following figure.

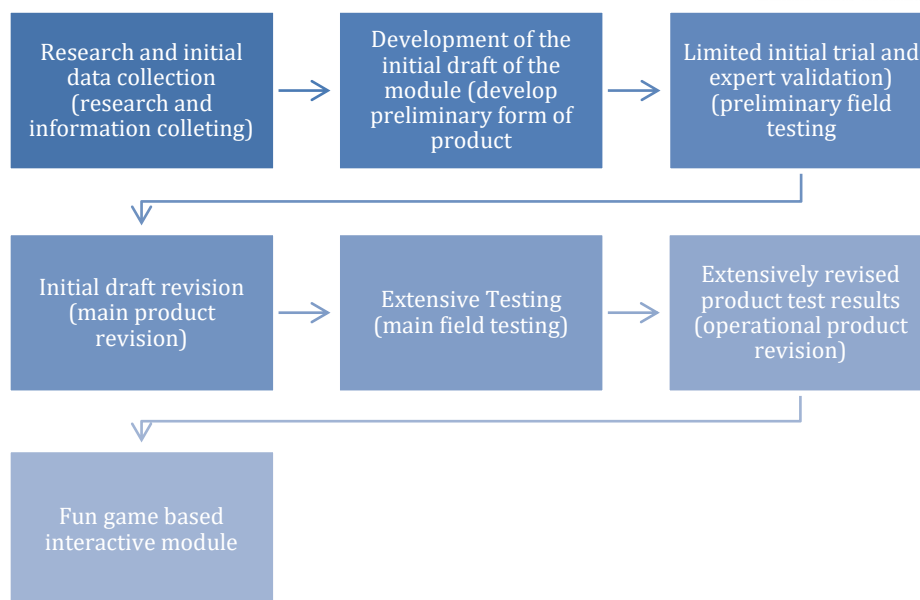


Figure 1.
The interactive e-module development procedure

From the results of the preliminary study, data were collected and analyzed as material for planning product development activities. This planning resulted in a draft of the Interactive e-module which is still an outline of this e-module. The initial draft of this product was then validated by Experts (learning materials experts and Design Experts). The results of validation from experts in the form of suggestions that build content and design become the basis for the next stage. Product development after being revised is then continued by conducting trials on users (students) in a small scope and scale.

Suggestions from this small group feasibility test include e-module attractiveness, readability of the material, the relevance of images, and others as a basis for improvement before proceeding to the next stage. After that, a field test (group test on a larger scale) was conducted. The data obtained in this study were analyzed quantitatively and qualitatively. The distribution of the questionnaire to users was analyzed quantitatively. Meanwhile, the responses and suggestions from users and validators were analyzed qualitatively. The results of large group tests, for example, are related to practicality or not.

RESULTS AND DISCUSSION

Interactive E-Module Development

As is known that in learning activities, one of the supporting factors in facilitating learning activities is the availability of learning materials and media. Teaching materials are often referred to as anything that helps teachers or instructors learn (Hall, 2007). The use of learning materials and media is expected to help teachers convey the subject matter well to students, and students can finally

achieve learning objectives well. With the use of these materials and media students are expected to be able to learn independently and achieve what they should get as explained in the National Education System Law No. 20 of 2003 article 1, namely that "Student-centered learning process, where students are required to seek solutions actively. to the problems faced related to the learning process.

This research and development activity is carried out based on the demands of the law and the reality on the ground related to the dynamics of online learning during the pandemic. It is known that during online learning, the use of learning materials and media shifts from print to non-print (online) with various weaknesses found in the field. These weaknesses require teachers to be as creative as possible in utilizing learning materials and media so that students can be more enthusiastic and interested in learning.

This interactive e-module development activity began with observations and interviews with Economics teachers in schools and Madrasahs in several areas in East Java such as SMAN 1 Madiun, MAN 2 Banyuwangi, MAN 1 Blitar, SMA IT ASy-Syadzili, SMKN 1 Pagerwojo, SMAN 1 Tumpang. From these activities, information was obtained that there are many weaknesses in online learning. From the observations, information was also obtained that the media used during online learning is limited to printed books, modules in pdf format (soft files), learning videos, presentation slides (PPT), and others. Most teachers already use digital teaching materials, as a consequence of online learning. However, many of the learning materials and media used are not yet interactive.

From this information, it can be seen that using teaching materials in electronic (digital) form is an opportunity for learning innovation in the online learning period. The development of interactive digital teaching materials will add to its interest. Interactive teaching materials are creative, innovative, and adaptive, so learning runs effectively and efficiently (Prastowo, 2011). This is also explained by (Khamidah, et al, 2019) that the use of teaching materials in interactive digital form in learning will improve student achievement. This is because interactive teaching materials can visualize the material. Therefore, the presence of this interactive e-module can be used as a solution to reducing the limitations of online learning.

The development of an interactive e-module with sub-topics of basic accounting equations was developed using the Canva application. The Canva application is an online design program application that provides various features including features for presentations, A4 documents, resumes, posters, pamphlets, brochures, graphics, infographics, banners, and others. Planning for the presentation and packaging of interactive e-modules using the Canva application is presented as a link with instructions for use. The interactive e-module can be operated online and offline if it is downloaded first via a mobile phone or computer.

At the planning stage of developing an interactive e-module, a sub-subject of basic accounting equations begins with designing first. The e-module design plan adopts the format described by Prastowo (2011), as presented in the following table.

Table 1.
Interactive e-module outline Basic Accounting Equation

No	The Beginning	Part of Contents	Part of End
1.	Cover	The Title	Evaluation Material
2.	Preface	Description of Material	Bibliography
3.	Table of Contents	Practice Questions	
4.	Competency Standards	Student Worksheet	
5.	Basic Competencies	Summary	
6.	Learning Objectives		
7.	Scope		
8.	Introductory Material		

Source: adapted from Prastowo (2011)




This Interactive e-module design plan will later be integrated with several interactive features to add to the attractiveness of the e-module. The following cover display and interactive features are presented in the figure and table.



Figure 2.
Interactive e-module front cover display

Table 2.
Examples of Interactive E-module Features

No	Fitur	Information
1.		<p>QR Code to connect to e-Learning features used such as Google Classroom, Sipejar, etc.</p>
2.		<p>Music facilities to accompany students in learning, for students who like to listen to music while studying.</p>
3.		<p>The YouTube link can be used by students with their audio-visual learning style and increase understanding apart from teaching materials.</p>

No	Fitur	Information
4.	  	<p>Game Feature Link "Accounting Missiles".</p> <ul style="list-style-type: none"> - learning applications that help students understand basic accounting knowledge, especially debit and credit mechanisms. - The use of the Accounting Missiles feature in this e-module is presented in the first sub-module - An example of the picture on the right is working on an accounting case "when the machine account increases," then what happens? the answer is when the machine account increases the normal balance is debited" this can be done through Fun Game
5.	<p>The other features developed by the teacher such character building, and practice questions with quizizz or Kahoot.</p>	

Interactive e-module on Economics sub-subject material This basic accounting equation discusses three learning module units where each learning module unit has sub-materials, namely 1) The first module with sub-materials namely understanding basic accounting equations, elements of basic accounting equations, and the form of the basic accounting equation; 2) The second module with sub-materials is recording transactions into the accounting equation; 3) The third module with sub-materials of financial statements. These materials are prepared with the aim of helping students understand the basic accounting equations as initial material that must be understood in accounting.

The preparation of e-module material is carried out properly and appropriately to facilitate student learning. Modules have an important role in learning, including a) explaining the learning material to be concrete; b) the material can be studied

repeatedly; c) overcoming the limitations of time, space, and the senses of both students and educators; d) increased learning motivation; e) develop the ability of students to interact directly with the environment and other learning resources; f) enable students to learn independently according to their abilities and interests; and g) enable students to evaluate their learning outcomes independently.

This interactive e-module is structured with a systematic writing structure and discussion sequence to make it easier and more interesting for readers to continue reading. The feasibility of the E-module is based on expert and user opinions, convincing researchers to test it extensively. The teaching materials (e-modules) have a characteristic that is commonly called "independent", this implies that the preparation of a complete and structured (systematic) book will facilitate and attract students to study it. In addition, students will also be interested in repeating to read and trying to understand the contents (Panen & Purwanto, 2001).

Interactive E-Module Validation

Material experts and design experts in Economics learning carry out the validation process for interactive e-modules. Suggestions and inputs from experts and users are used as additions and references in improving this interactive e-module. The following are material and media experts' validation results in preparing this interactive e-module.

Table 3.
Validation Results from Material Experts

No.	Criteria	Expert assessment 1	Expert assessment 2
Eligibility aspect			
1	Conformity of content with material characteristics	4	4
2	Procedure accuracy	4	4
3	Cultivate enthusiasm for learning	3	3
4	Conformity with the current learning conditions	4	3
Presentation Aspect			
1	Order of work	3	4
2	The legibility of the procedure	4	3
3	Interactive	4	4
Language Aspect			
1	Language Aspect Standard/formal vocabulary compatibility	3	4
2	Language and questions	4	3
Total Score		33	32
Percentage		91,67%	88,89%
Information		Very worth it	Very worth it

Based on table 3, it is explained that both expert validators 1 and 2 stated that the interactive e-module developed was declared feasible to be continued to the next stage. Then in table 4, the validation results from media (design) experts are explained, where from the expert opinion, it is stated that the e-module that has been designed can be developed with a slight revision in the font size section and the presentation of image illustrations in the e-module needs to be clarified in its resolution so that the message what you want to convey can be in accordance with what was planned.

Table 4.
Media Expert Validation

No	Criteria	expert assessment 1	expert assessment 2
Paper size aspect			
1	Appropriate paper size used	3	4
2	Paper Thickness Match	4	4
Cover Design			
3	Attractive cover design	4	4
4	Layout suitability	4	3
5	Image suitability and text proportions	3	3
6	Relevance of the image to the topic	3	4
Total Score		21	22
Percentage		87,50	91,67
Information		Very worth it	Very worth it

The small group test was carried out on users, namely social studies students who were in the city of Malang. The small group test was carried out on 15 students, with an average percentage of 80.23%, with the suggestion of adding more illustrations to the more exciting content of the module, so that it can foster enthusiasm for reading this e-module.

After the expert test and continued with the field test, the researcher conducted an analysis of the interactive e-module. The analysis results provide confidence that the development of interactive e-modules is exciting and suitable to be used as a companion for student learning during the Pandemic. The interactive e-module content makes the reader (user) feel excited to read the material presented. So that it is expected to help students to achieve their goals of learning. The development of this e-module will be the choice of learning resources for students, to help students understand concepts in their learning process and achieve good learning outcomes (Komang, 2017).

The students' desire to read the contents of this Interactive e-module is a positive step toward understanding the content of this e-module. When students have the desire to read, at that time students will be motivated to explore the

contents of this interactive e-module. This is where the student learning process through this e-module takes place. The student learning process related to Economics material, especially the basic accounting equations packaged in this interactive e-module, will be very efficient if students before reading the contents of this e-module already have the desire to learn something as they think in their minds (Kibler, et al., 1981).

A study of mathematics and science teachers in junior and senior high schools indicated that teachers' skills, parents' economic constraints, limited internet connection, and a lack of direction posed significant barriers to the deployment of online learning during the pandemic (Azhari & Fajri, 2021). Eventually, they observed that teachers performing distance learning might independently adapt to the ambient variables and student characteristics.

Effective online education during a crisis necessitates a successful transition and adaptation to crisis-related obstacles and situations. It is essential to recognize that a strong teacher presence can lessen students' sense of isolation and assist them in enhancing their academic achievement (Samuel, 2015). When teachers frequently posted in online chat rooms, encouraged students to ask questions, and provided thorough comments on student coursework, students also felt engaged (Solomon, 2022). However, when talking about innovative learning modules, the student must feel accepted first so they will not feel bored easily (Mustofa, et al., 2022).

CONCLUSION

Based on the results of the discussions that have been carried out, the interactive e-module is very appropriate to be used as a solution for learning Economics material on the sub-subject of Basic Accounting Equations. Planning e-modules with interactive features that systematically make it easier for students to understand the material on Basic Accounting Equations. The development of interactive e-modules is in accordance with the criteria. It deserves to be tested on a limited basis, according to the results of the validation of material and media experts. Using e-modules that are integrated with several features such as QR Code features, music, YouTube videos, quiz applications, and games adds to the attractiveness of interactive e-modules and helps students achieve predetermined learning goals. Suggestions that can be given in this research are that experimental research is needed to measure the effectiveness of using interactive e-modules in economics learning, especially the sub-subject of basic accounting equations.

People shouldn't just think about the benefits of using online learning during a crisis. They should also consider improving the quality of the virtual courses given during these times. E-learning takes a long time and costs much money. It's not as easy as it seems, and it takes money to buy the devices and equipment, keep the equipment running, train the people using it, and create online content. So, an effective and efficient education system needs to be made so that people can learn online.

REFERENCES

- Azhari, B. & Fajri, I. (2021). Distance learning during the COVID-19 pandemic: school closure in Indonesia. *International Journal of Mathematical Education in Science and Technology*, 53(7), 1-21.
- Badan Litbang dan Diklat Kementerian Agama RI (2020) Laporan Survei. Survei Pelaksanaan Belajar Dari Rumah Pada Masa Covid 19 Di. Madrasah Dan Sekolah. [Online, https://simlitbangdiklat.kemenag.go.id/simlitbang/spdata/upload/dokumen-penelitian/1592449941Laporan_Hasil_Survei_Penda_.pdf].
- Borg, W.R and Gall, M.D. (2003). *Educational Research: An Introduction 4 th Edition*. London: Longman Inc.
- Dellos, R. (2015). Kahoot! A digital game resource for learning. *International Journal of Instructional Technology and Distance Learning*, 12(4), 49-52.
- Dhawan, S. (2020). Online learning: a panacea in the time of COVID-19 crisis. *Journal of Educational Technology Systems*, 49(1).
- Khamidah, N., Winarto, & Mustikasari, V.R. (2019). Discovery learning: penerapan dalam pembelajaran IPA berbantuan bahan ajar digital interaktif untuk meningkatkan prestasi belajar siswa. *JIPVA (Jurnal Pendidikan IPA Veteran)*, 3(1), 87-99.
- Hall, M. C. (2007). *Key Aspects of Competency-Based Assessment*. South Australia: National Center of Education Research.
- Herawati, N.S & Muhtadi, A. (2018). Pengembangan Modul Elektronik (E-modul) Interaktif pada Mata Pelajaran Kimia Kelas XI SMA. *Jurnal Inovasi Teknologi Pendidikan*, 5(2), 180-191. DOI: <https://doi.org/10.21831/jitp.v5i2.15424>.
- Karima, M. & Mustofa, R.H. (2022). Penerapan literasi digital melalui LSM pada tingkat sekolah dasar (studi kasus SD Masehi Kota Pekalongan). *AULADUNA: Jurnal Pendidikan Dasar Islam*, 9(1), 83-93.
- Kebritchi, M., Lipschuetz, A. & Santiago, L. (2017). Issues and challenges for teaching successful online courses in higher education. *Journal of Educational Technology Systems*, 46(1), 4-29.
- Komang, I dkk. (2017). Pengembangan EModul Berbasis Model Pembelajaran Discovery Learning Pada Mata Pelajaran "Sistem Komputer" Untuk Siswa Kelas X Multimedia SMK Negeri 3 Singaraja. *Jurnal Pendidikan Teknologi dan Kejuruan*. 14(1), 40. 58- 72.
- Littlefield, J. (2018). *The difference between synchronous and asynchronous distance learning*. Thoughtco.com. <https://www.thoughtco.com/synchronous-distance-learning-asynchronous-distance-learning-1097959>.

- Mustofa, R.H., Pramudita, D.A., Atmono, D., Priyankara, R., Asmawan, M.C., Rahmattullah, M. Mudrikah, S. & Pamungkas, L.N.S. (2022). Exploring educational student acceptance of using movies as economics learning media: PLS-SEM analysis. *International Review of Economics Education*, 39, 100236.
- Mustofa, R.H. & Riyanti, H. (2019). Perkembangan e-learning sebagai inovasi pembelajaran di era digital. *Wahana Didaktika: Jurnal Ilmu Kependidikan*, 17(3), 379-391.
- Narimo, S., Mustofa, R.H. & Wahyudi, T.N. (2022). Upaya peningkatan persepsi kemudahan pembelajaran daring pada guru melalui Schoology. *J-ABDIPAMAS*, 6(1), 235-248.
- Panen, P. & Purwanto. (2001). Mengajar di perguruan tinggi, penulisan bahan ajar, bahan pelatihan PEKERTI & Applied Approach. Jakarta: Direktorat Jenderal Pendidikan Tinggi Depdiknas.
- Prastowo, A. (2011). *Metode penelitian kualitatif dalam perspektif rancangan penelitian*. Jogjakarta: Ar-Ruzz Media.
- Purwanto, dkk. (2020). Studi Eksploratif Dampak Pandemi COVID-19 Terhadap Proses Pembelajaran Online di Sekolah Dasar. *Journal of Education, Psychology, and Counselling*, 2(1), 1-12.
- Pusat Pendidikan dan Pelatihan Pegawai Kementerian Pendidikan, Kebudayaan, Riset, dan Teknologi. (2020). *Surat Edaran Mendikbud No. 4 Tahun 2020 tentang Pelaksanaan Kebijakan Pendidikan dalam Masa Darurat Penyebaran Corona Virus Disease (Covid-19)*. (Online), (<https://pusdiklat.kemdikbud.go.id/surat-edaran-mendikbud-no-4-tahun-2020-tentang-pelaksanaan-kebijakan-pendidikan-dalam-masa-darurat-penyebaran-corona-virus-disease-covid-1-9/>), diakses tanggal 30 Oktober 2021.
- Rahmawati, T & Fitri, N. (2019). Penelitian Tindakan Kelas Group to Group Exchange. *Progress*, 2(1), 18-30
- Rosali E.S. (2020). Aktifitas Pembelajaran Daring Pada Masa Pandemi Covid-19 Di Jurusan Pendidikan Geografi Universitas Siliwangi Tasikmalaya, *Geography Science Education Journal*, 1(1), 21-30.
- Salkiah, B. (2020). Perubahan paradigma pendidikan dan ekonomi dimasa pandemi COVID-19. *Media Bina Ilmiah*, 15 (1), 3781-3788.
- Samuel, A. (2015). Faculty perception of "presence" in the online environment. *Adult Education Research Conference*. <https://newprairiepress.org/aerc/2015/papers/47>.
- Solomon, L. (2022). Creating an effective online presence. *Library Technology Reports*, 58(3), 29-31.

Suprapmanto, J. & Utomo. (2021). Analisis Permasalahan Pembelajaran Daring selama Pandemi Covid 19 dan Solusinya. *Jurnal Belaindika*. 3(2), 15 – 19

Susilo, A., Siswandari, & Bandi. (2016). Pengembangan modul berbasis pembelajaran saintifik untuk peningkatan kemampuan mencipta siswa dalam proses pembelajaran akuntansi siswa kelas XII SMAN 1 Slogohimo 2014. *Jurnal Pendidikan Ilmu Sosial*, 26(1).

Sutirna. (2018). *Inovasi Pembelajaran*. Yogyakarta: CV. Budi Utama (Deepiblis).

Tania, L. & Wibowo, J.S. (2017). Pengembangan Bahan Ajar E-modul Sebagai Pendukung Pembelajaran Kurikulum 2013 pada Materi Ayat Jurnal Penyesuaian Perusahaan Jasa Siswa Kelas X Akuntansi SMK Negeri 1 Surabaya. *Jurnal Pendidikan Akuntansi*, 5(2), 1-9. Dari <https://ejournal.unesa.ac.id/index.php/jpak/article/view/21294>.

Undang-Undang Republik Indonesia nomor 20 Tahun 2003 tentang Sistem Pendidikan Nasional.

Yulianti, D. (2017). Problem Based Learning Model used to Scientific Approach Based Worksheet for Physics to Develop Senior High School Students Characters. *Journal of Physics: Conference Series*, 824(1), 12009. <https://doi.org/10.1088/1742-6596/824/1/012009>.

Yunianto, T.K. (2020). *Survei SRMC: 92% Siswa Memiliki Banyak Masalah dalam Belajar Daring*. Katadata.co.id. <https://katadata.co.id/ekarina/berita/5f3bc04617957/survei-smrc-92-siswa-memiliki-banyak-masalah-dalam-belajar-daring>.