



# English Teaching Materials With Flipped Learning Model in English Course

Farida Febriati<sup>1\*</sup>, Dirwan Jaya<sup>2</sup>, Nurhikmah H<sup>3</sup>, Sujarwo<sup>4</sup> 

<sup>1,2,3</sup>Educational Technology Study Program, Universitas Negeri Makassar, Indonesia

<sup>4</sup>English Education Department Study Program, Universitas Megarezky, Makassar, Indonesia

## ARTICLE INFO

### Article history:

Received March 13, 2022

Revised March 20, 2022

Accepted August 12, 2022

Available online November 25, 2022

### Kata Kunci:

Pengembangan, bahan ajar, flipped learning

### Keywords:

Development, teaching materials, flipped learning

### DOI:

<https://doi.org/10.23887/jet.v6i4.45652>

## ABSTRAK

Berhasil atau tidaknya suatu pembelajaran akan terlihat selama proses belajar mengajar karena akan menunjukkan seberapa siap pembelajar dengan materi dan strategi yang tepat. Penelitian ini bertujuan untuk menganalisis kebutuhan pengembangan bahan ajar, mendesain bahan ajar, memvalidasi validitas, kepraktisan keefektifan pengembangan bahan ajar pada Mata Kuliah Bahasa Inggris. Metode penelitian ini Research and Development. Model pengembangan yang digunakan mengacu pada model pengembangan S. Thiagarajan, et.al., yang terdiri atas 4 tahap yaitu: Define, design, develop, dan Disseminate. Subjek penelitian 38 mahasiswa dan satu dosen. Teknik pengumpulan data menggunakan metode kualitatif dan kuantitatif (Wawancara, observasi, dokumentasi dan angket). Bahan ajar bahasa Inggris dikembangkan dan divalidasi oleh ahli materi dan ahli media, dengan hasil validasi materi dan validasi media sangat valid. Uji coba kelompok kecil memperoleh kategori sangat praktis sedangkan untuk uji coba kelompok besar memperoleh kategori praktis dan dilihat dari respon dosen dalam menilai bahan ajar memperoleh kategori sangat praktis. Sedangkan pada tingkat keefektifan bahan ajar dilihat dari tingkat kelulusan pada tes yang diberikan kepada mahasiswa dengan hasil >80 berada pada kategori sangat baik. Berdasarkan dari hasil yang ditemukan dapat disimpulkan bahwa bahan ajar praktis dan efektif digunakan dalam proses pembelajaran pada mata kuliah Bahasa Inggris.

## ABSTRACT

The success or failure of a lesson will be seen during the teaching and learning process because it will show how prepared the learner is with the suitable materials and strategies. This study aims to analyze the need for developing teaching materials, designing teaching materials, and validating the validity and practicality of the effectiveness of developing teaching materials in English courses. This research method is Research and Development. The development model refers to S. Thiagarajan et al., which consists of 4 stages: Define, design, develop, and Disseminate. The research subjects were 38 students and one lecturer. Data collection techniques using qualitative and quantitative methods (interviews, observations, documentation, and questionnaires). English teaching materials were developed and validated by material and media experts, with material and media validation being very valid. The small group trials obtained a very practical category. In contrast, the large group trials obtained a practical category and, as seen from the lecturer's response in assessing teaching materials, obtained a very practical category. Meanwhile, the effectiveness of teaching materials can be seen from the passing rate on tests given to students, with results > 80 in the very good category. Based on the results found, it can be concluded that practical and effective teaching materials are used in the learning process in English courses.

This is an open access article under the [CC BY-SA](https://creativecommons.org/licenses/by-sa/4.0/) license.  
Copyright © 2022 by Author. Published by Universitas Pendidikan Ganesha.



## 1. INTRODUCTION

The role of education is very important to produce quality and competent students in their fields. Education also has a very important goal in preparing students to develop and apply knowledge (Abumalloh et al., 2021; Hakala et al., 2018; J. Zhang et al., 2019). However, learning activities are the core activities of the educational process. The success or failure of a lesson will be seen during the teaching and learning process because it will show how prepared the learner is with the materials and strategies that will be carried out while teaching so that what is conveyed can be understood by the learner and the objectives of the learning process can be achieved (Lestiyawati & Widyantoro, 2020; McVey, 2016; Meutia, 2021). In the process of constructing such as knowledge, students are required to be able to compare the prior knowledge with the new knowledge that they have acquired (Srivastava et al., 2017; Sujarwo et al., 2019). Previous study states that there are two related movements that are combining to change the face of education (Bangert et al., 2022). The first of these is a technological movement that enabled the amplification and duplication of information at an extremely low-cost. So this opinion gives an important message that educational progress can be achieved, one of them and most

importantly, through the development of technology. The use of technology, especially information technology, can facilitate the delivery of information widely and eliminate boundaries and difficulties when learning only relies on face-to-face in class (Nordlöf et al., 2019; Nurhikmah H et al., 2021; Siregar, 2020). Language is something very important for human life. Language means communication, and without language people cannot communicate with others (Anrasiyana et al., 2022; Dutta, 2020). In the era of globalization like now, English seems to have become a mandatory skill that must be possessed by students and professionals (Cahyana, 2020; Irmawati et al., 2017; X. Zhang et al., 2020). Because English is an international language, which means that in international communication, we must use English (Mauliate et al., 2019; Pustika, 2020; Yeh et al., 2017). Not mastering English means not being able to communicate with the international community. In addition, most of the good literatures are in English and have not been translated into Indonesian. Based on the data collection that has been carried out by researcher with an English lecturer at the Educational Technology Study Program, Faculty of Education, UNM, found that English course is elective course and there are no adequate learning tools including syllabus, RPS and teaching materials to carry out teaching and learning activities. The English course is chosen as an elective course because most students do not have an interest in learning English.

Teaching materials are used by learners to facilitate the learning process (Cloonan & Fingeret, 2020; Kosasih, 2021; Ramadoni et al., 2019). In this research, researcher focused on the development of teaching materials. With the existence of teaching materials, it will save learning time, lecturer will be more focused as facilitators, learning will be more effective and teaching materials will become guidelines in learning. Also it is a series of media or mean used and prepared by lecturer and students in learning process at the classroom (Cengiz et al., 2011; Renes & Strange, 2010). From what the researcher has found above, the Educational Technology study program needs to develop learning by utilizing technology that can be a learning solution that often occurs in English courses, ranging from problems of learning time and duration to the availability of qualified teaching materials. So that the Educational Technology Study Program is able to create quality learning in line with the demands of the world of work who need sufficient foreign language skills. E-Learning is one of the innovations in the field of education that utilizes information technology. Various online learning models began to be developed. For example, blended learning, distance learning and flipped learning (Alruwais et al., 2018; Astra et al., 2020; McKnight et al., 2016). This online learning basically tries to innovate and change the paradigm (Hwang et al., 2020; Satyawan et al., 2020). Through e-learning students have the opportunity to study anywhere and anytime as long as they have access to the internet network. It is not possible for students to carry books everywhere (Kumari et al., 2020; Saha et al., 2022). But it is very possible for students to carry their mobile phone or smartphone with them everywhere and use it to study anytime.

One of the online learning models that is currently being studied in educational research is flipped learning. The pioneers of flipped learning are Jonathan Bergmann and Aaron Sams, who studied Chemistry from Colorado in 2007. Flipped learning is learning that combines classroom meetings with online learning. According to previous study in flipped learning things that are usually done in class such as explaining material, giving assignments, exercises and homework are moved into online learning (Ramadhani et al., 2019; Wulandari et al., 2020). The concept of the flipped classroom has generated considerable interest in the educational context in recent years, especially in higher education (Cheng et al., 2019; Hwang et al., 2015; Jensen et al., 2018; Long et al., 2017; Mehring, 2018; Shi et al., 2020). The flipped classroom is one of the innovative learning models that have appeared in language learning in the last decade (Jayanti & Rahayuningsih, 2020; Sinaga, 2017). Flipped learning model shows its potential effectiveness and success in teaching language knowledge and language skills (El Miedany, 2019; Y. Lee & Martin, 2020; Namaziandost & Çakmak, 2020). Previous study found that both teachers and students have positive perceptions and attitudes that support this pedagogical approach (Abdullah et al., 2021; Tsai et al., 2020). His research also reveals that flipped learning helps improve students' academic performance in general. Several other researchers also has a positive impact on the performance and level of proficiency of learners in mastering language competencies (Basal, 2015; Engin, M. and Donanci, 2016). According to previous study the application of flipped learning helps to overcome some common problems faced by English language learners including low levels of participation, communication and interaction opportunities as well as lack of feedback from teachers. In addition, this learning model maximizes time in the classroom for communication activities (Al-Harbi et al., 2016). There are some relating previous studies that have been conducted by other researchers such as many professional development programs aim to improve student outcomes by enhancing teacher competencies and effective evaluation of these programs requires a clear delineation of the competencies to be gained. A competency model was developed to evaluate the impact of a teacher professional program that aimed to improve teachers' ability to effectively implement technologically engaged modules in a flipped classroom setting (Barnard et al., 2020; Ramadhani et al., 2019). This study is found that the academic achievement levels of the students in the flipped classroom model using ARCS motivation strategies were significantly higher than those of the students in the distance education classroom model and the traditional classroom model (Karabatak & Polat, 2020). From the results of the research above, it is necessary to carry out an innovation in the field of education to support learning that integrates technology

into the learning process. The purpose of this research is to produce teaching materials in the form of media learning with a flipped learning model approach that it is student-centered learning which will integrate skill problem solving and independent learning of students.

## 2. METHOD

The development model used in this research is Research and Development (R&D). The development model used will be adapted to the 4-D development flow (Four-D Model). The flow of 4-D model development consists of 4 main stages, namely define, design, develop and disseminate (Mukholifah et al., 2020; Novita, 2020). This model was chosen by considering a systematic sequence and is used in the development of teaching materials. At the define stage, an initial analysis is carried out, namely student analysis, task analysis, concept analysis and formulation of learning objectives. At the design stage, the instruments are prepared, the selection of teaching materials, the selection of the format and the initial product design is carried out. The develop stage includes the expert assessment stage and development trials. The last stage is the disseminate stage. The disseminate stage is the stage of using teaching materials that have been developed on a wider scale, for example in other classes, in other schools, and by other learners. This research was conducted at the Educational Technology Study Program, Faculty of Education, State University of Makassar which aims to produce teaching materials in the form of learning media with a flipped learning learning model approach that is student-centered learning that can be accessed online via a smartphone or desktop. The subjects of this study include content and construct validation test subjects by two experts, namely media expert and content or material expert and practicality test subjects involving one course lecturer and 21 students who program English course for the 2021-2022 academic year. as well as the subject of the effectiveness test. The subjects of this study were 2 validators consisting of 1 media expert and 1 content or material expert, odd semester students who program English elective courses and 1 lecturer of English course.

The following are the primary data in this study including data concerning, first, analysis of the need for the development of English teaching materials. Second, product validation questionnaire by experts. Third, product trial questionnaire in the field with a limited group. Secondary data is data obtained and collected by researchers from a variety of available sources, for example from survey reports, books, journals and others. The secondary data from this research include data in the form of written documents that available in the Education Technology Study Program such as curriculum, textbooks, modules, and others etc. Likewise with the data about the description of the research location such as historical, geographical data, the condition of lecturers, students and study program infrastructure Education technology. Primary and secondary data sources come from the results of observations and resource persons and various literatures. Data sources in this research are as follows: Experts for product validation, Student of Education Technology Study Program, and Literature data related to this research. The data collection technique in this development research uses qualitative and quantitative methods. Research method that combines or combine quantitative methods and qualitative methods to use together in a research activity, so that the data obtained more comprehensive, valid, reliable and objective (Sugiyono, 2015). As for the collection technique the data can be explained as follows: Interview, observation, documentation and questionnaire. Data analysis was carried out to obtain an overview of the product generated. This development research uses two data analysis techniques, namely qualitative techniques and descriptive statistical analysis to analyze the data by describing and developing the data that has been collected from development results, validation results, teacher and student responses in the test design try to get the developed teaching materials.

## 3. RESULT AND DISCUSSION


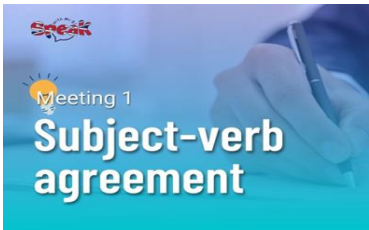
### Result

At the define stage by analyzing the need for developing English teaching materials with the flipped learning learning model, it was found that the results of the initial analysis obtained an overview of the curriculum and materials used in the Educational Technology Study Program, Faculty of Education, Makassar State University with KKNi and SN-DIKTI levels. Researchers also observed learning activities carried out by lecturers and students through google meet. The researcher found that the learning process was still teacher-centered and there was still a lack of student activity in responding to the learning process. Most of the students in synchronous learning via Google Meet do not activate their cameras. So as a teacher, in this case the subject lecturer did not know the progress of students in the learning process and the extent to which students have understood the learning material. Then the identification of student characteristics was used to find out what the student's character is like in learning and to find out what needs to be taught in English course. Through the identification of student characteristics carried out at the Educational Technology Study Program, Faculty of

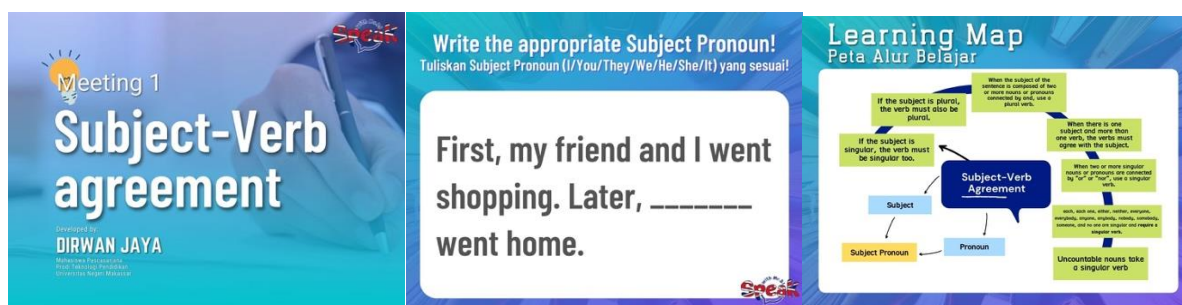
Education, Makassar State University, 66 students were randomly assigned to English course via google form to provide an overview to researcher regarding English course. There are 17 questions that are filled in by students as respondents by choosing one of the "yes" or "no" columns. In question 5 which contains the effectiveness of learning during the Covid-19 pandemic, the percentage of students who answered "Yes" was 22.7% and 77.3% who answered "No". This indicated that the learning has taken place needs to be given a solution so that the learning process can run more effectively. Then at question 11, 12, and 13 which contain students' interest in learning using modules and also audio-visual media, it is obtained a percentage of 100% who answered "Yes". This is supported by the readiness of students who all answered "Yes" to the question of ownership of a smartphone or laptop to access teaching materials.

The second stage was design. At this stage, the sources for the development of English teaching materials are determined in the form of platforms and supporting facilities and infrastructure to run the products developed. The platforms that are prepared to develop English teaching materials were canva, imovie and nearpod. Content in the form of videos that explain the material to be studied is created by researcher and also curated from YouTube and other video platforms. These English teaching materials can later be used on mobile and also on a PC or laptop. Product development at this stage was the initial design with the planning in the form of an initial display called a storyboard. The results of the storyboard design are shown in Table 1.

**Table 1. Storyboard of English Teaching Materials**

Display	Part	Description
<p><a href="https://bit.ly/bahasainggris-tp">https://bit.ly/bahasainggris-tp</a></p> 	<p>Starting</p> <p>First display of Teaching Materials on Nearpod</p>	<p>Link to access English teaching materials</p> <p>This display is used by students to identify their identities such as name, NIM before starting the teaching materials.</p>
	<p>Cover Display</p>	<p>It contains of meeting and title of topic.</p>

The next stage was the development stage. This stage is the implementation stage of the product planning that has been carried out in the previous stage. The purpose of this stage was to produce a final product of English teaching materials that are suitable for use. The results of content and construct validity by experts obtained results with a percentage of 96% which indicates that English teaching materials are in the very valid category. Then the results of media validation by experts obtained a percentage of 91% which explained that English teaching materials were in the very valid category. Some of the results of product revisions are presented in Figure 1.



**Figure 1. Some of the Results Of Product Revisions**

The next step was a practicality test conducted by lecturers and students to obtain data on the development of English teaching materials. This stage involved 1 lecturer in English course at the Makassar State University Education Technology Study Program and 21 students who have taken English course program for the 2021-2022 academic year at the Makassar State University Educational Technology Study Program. The results of student assessments of the development of English teaching materials in small group trials showed that the student responses of Makassar State University Education Technology Study Program obtained an average percentage of 85% from 3 small groups, which means that student responses are in the very practical category and based on the results of the English lecture responses got a percentage of 90%, so the practicality test of teaching materials is in the very practical category. Then it can be said that teaching materials could be used in the learning process. The last step in the development stage was testing the effectiveness of open materials by testing learning outcomes which are measured using descriptive analysis. Effectiveness analysis is an analysis that functions to describe or provide an overview of the object under study through a sample of data as it is, without conducting analysis and making conclusions that apply to the public. The effectiveness of the data obtained from the effectiveness of student learning outcomes developed by researcher as a guide to determine student test results or exams using English teaching materials. The test was in the form of multiple choice questions with 10 numbers arranged into the quizizz platform. The tests that have been compiled into the quizizz platform were given to 21 students who are part of a large group trial before the students use the English teaching materials that have been developed. The test was given back to 21 large group students after the students had used the teaching materials. The results of student work showed that the average test results before studying teaching materials and after studying teaching materials have increased.

## Discussion

The development of English teaching materials with the flipped learning model has gone through several tests to obtain valid, practical and effective teaching materials so that they can be applied in the learning process of English course at the Education Technology Study Program, Makassar State University with the flipped learning model. This development used the development model of. The 4-D development model consists of 4 main stages, namely Define, Design, Develop and Disseminate. The development of English teaching materials has gone through several tests to obtain valid, practical and effective teaching materials so that they can be applied in the learning process of English courses at the Makassar State University Education Technology Study Program with the flipped learning model. The validity test was carried out by two experts consisting of one material expert and one media expert. The validators assess the English teaching materials that have been produced. Assessment of English teaching materials was carried out by filling out a material assessment questionnaire for the material validator, and a media questionnaire for the media validator. The results of the assessment of the 2 validators showed that the results of the material validator and media validator were in the very valid category. The next part was practicality test which is a test to get better results. The use of student response questionnaires is a benchmark to see the feasibility of the practical aspect in accordance to statement that the results of student responses are a description of the learning inputs that have been received by students (Dewi et al., 2018; Kaplan et al., 2016; Malinda et al., 2021).

There are some research results that have been conducted who found that self-regulated learning strategies positively affected the development of foreign language skills in the flipped classroom model and having significant difference in favor of the group working with the platform including self-regulated learning strategies outperformed in speaking, reading, writing, and grammar test scores (Öztürk & Çakıroğlu, 2021; Šteh & Šarić, 2020; Zetriuslita et al., 2020). In line with the other study found that the utilization of flipped classroom in various disciplines is mainly advocated to promote students' engagement, metacognition, attitude, performance, understanding, and achievement, as well as other learning outcomes (El Sadik & Al Abdulmonem, 2020; Jayanti & Rahayuningsih, 2020; Sinaga, 2017). The key challenges of this method, shared across all disciplines, were devoted to the length of the video/digital materials and time required for instructors to prepare the learning materials and for students to master it. Recommendations for policy makers and other crucial insights for the future studies were highlighted (Al-Samarraie et al., 2020). This study is supported by the other study found that Using an established method for model development research, a theoretically constructed initial model was iteratively improved and underwent internal and external validation through model usability tests, expert review, and field evaluation. The implementation of an algebra class in a Korean university designed by the final model resulted in significant increases in the maturity of mathematical views, quality of reflections, and satisfactions of students. Features of the model are discussed, along with theoretical and practical implications and suggestions for further research (J. Lee et al., 2017). Furthermore, that students are not yet ready for a complete flipped classroom in which all the input is given through the video. In this context, a mix of video input and teacher explanation is more appropriate (Engin, M. and Donanci, 2016; Permatasari et al., 2019).

The results of the learning evaluation show that the use of English teaching materials has a positive impact on students. Although the results of student tests before and after using teaching materials were not very

significant, the English teaching materials that had been accessed by students became the initial capital for further discussion in virtual face-to-face classes. This is in line with the principle of the flipped learning model where classes are usually given face-to-face in the flipped learning model, the material is given independently outside the classroom and then after students have studied it first and have initial knowledge of the material to be studied, they are brought into face-to-face classes for further discussion if they have problems in independent learning (Bechter & Swierczek, 2017; Ekayana et al., 2021; Ramadhani et al., 2019). In line with the results of research conducted by previous study, it is shown that the use of media in e-learning containing multimedia can improve student learning outcomes (Cucus et al., 2016). So that English teaching materials are expected to help the learning process to improve student learning outcomes and solve problems that exist in learning conditions during the Covid-19 pandemic.

#### 4. CONCLUSION

The level of validity of English teaching materials with the flipped learning model is in the very valid category, so that the learning outcomes using these teaching materials can be said valid. The level of practicality of English teaching materials that have been tested on subject lecturers and also students of the Education Technology Study Program is in the practical category. The results of the learning evaluation get good results which also have a good effect on educator and learners.

#### 5. REFERENCES

- Abdullah, M. Y., Hussin, S., Hammad, Z. M., & Ismail, K. (2021). Exploring the effects of flipped classroom model implementation on EFL learners' self-confidence in English speaking performance. *In Recent Advances in Intelligent Systems and Smart Applications*, 223–241. [https://doi.org/10.1007/978-3-030-47411-9\\_13](https://doi.org/10.1007/978-3-030-47411-9_13).
- Abumalloh, R. A., Asadi, S., Nilashi, M., Minaei-Bidgoli, B., Nayer, F. K., Samad, S., Mohd, S., & Ibrahim, O. (2021). The impact of coronavirus pandemic (COVID-19) on education: The role of virtual and remote laboratories in education. *Technology in Society*, 67(September 2020), 101728. <https://doi.org/10.1016/j.techsoc.2021.101728>.
- Al-Harbi, Sarah., S., & Yousif., A. (2016). The Flipped Classroom Impact in Grammar Class on EFL Saudi Secondary School Students' Performances and Attitudes. *English Language Teaching*, 9(10), 60–80.
- Al-Samarraie, H., Shamsuddin, A., & Alzahrani, A. I. (2020). A flipped classroom model in higher education: a review of the evidence across disciplines. *Educational Technology Research and Development*, 68(3), 1017–1051. <https://doi.org/10.1007/s11423-019-09718-8>.
- Alruwais, N., Wills, G., & Wald, M. (2018). Advantages and Challenges of Using e-Assessment. *International Journal of Information and Education Technology*, 8(1), 34–37. <https://doi.org/10.18178/ijiet.2018.8.1.1008>.
- Anrasiyana, A., Sulistyaningsih, S., & Syakur, A. (2022). Creating Vlog as Media in English Language Teaching (ELT): Teaching Speaking. *Journal Basicedu*, 6(2). <https://doi.org/10.31004/basicedu.v6i2.2575>.
- Astra, I. M., Raihanati, R., & Mujayanah, N. (2020). Development of Electronic Module Using Creative Problem-Solving Model Equipped with Hots Problems on The Kinetic Theory of Gases Material. *Jurnal Penelitian & Pengembangan Pendidikan Fisika*, 6(2), 181–194. <https://doi.org/10.21009/1.06205>.
- Bangert, K., Bates, J., Beck, S. B. M., Bishop, Z. K., Benedetti, D. M., Fullwood, J., Funnell, A. C., Garrard, A., Hayes, S. A., & Howard, T. (2022). Remote practicals in the time of coronavirus, a multidisciplinary approach. *International Journal of Mechanical Engineering Education*, 50(2), 219–239. <https://doi.org/10.1177/0306419020958100>.
- Barnard, M., Dehon, E., Compretta, C., Notebaert, A., Sparkmon, W., Meyer, E., & Rockhold, R. (2020). Development of a competency model and tailored assessment method for high school science teachers utilizing a flipped learning approach. *Educational Technology Research and Development*, 68(5), 2595–2614. <https://doi.org/10.1007/s11423-020-09782-5>.
- Basal, A. (2015). The Implementation of a Flipped Classroom in Foreign Language Teaching. *Turkish Online Journal of Distance Education*, 16(4), 28–37. <https://doi.org/10.17718/tojde.72185>.
- Bechter, C., & Swierczek, F. W. (2017). Digital storytelling in a flipped classroom for effective learning. *Education Sciences*, 7(2). <https://doi.org/10.3390/educsci7020061>.
- Cahyana, A. A. C. (2020). The use of Youtube Video in Teaching English for Foreign Language at Vocational High School. *Jurnal Pendidikan Bahasa Inggris*, 8(2). <https://doi.org/10.23887/jpbi.v8i2.3399>.
- Cengiz, N., Kline, K., & Grant, T. J. (2011). Extending students' mathematical thinking during whole-group

- discussions. *Journal of Mathematics Teacher Education*, 14(5), 355–374. <https://doi.org/10.1007/s10857-011-9179-7>.
- Cheng, L., Ritzhaupt, A. D., & Antonenko, P. (2019). Effects of the flipped classroom instructional strategy on students' learning outcomes: A meta-analysis. *Educational Technology Research and Development*, 67(4), 793–824. <https://doi.org/10.1007/s11423-018-9633-7>.
- Cloonan, M., & Fingeret, A. L. (2020). Developing Teaching Materials for Learners in Surgery. *Surgery (United States)*, 167(4), 689–692. <https://doi.org/10.1016/j.surg.2019.05.056>.
- Cucus, A., Aprilinda, Y., & Endra, R. Y. (2016). Pengembangan E-Learning Berbasis Multimedia Untuk Efektivitas Pembelajaran Jarak Jauh. *Explore: Jurnal Sistem Informasi Dan Telematika (Telekomunikasi, Multimedia Dan Informatika)*, 7(2). <https://doi.org/10.36448/jsit.v7i2.765>.
- Dewi, N. R., Kannapiran, S., & Wibowo, S. W. A. (2018). Development of digital storytelling-based science teaching materials to improve students' metacognitive ability. *Jurnal Pendidikan IPA Indonesia*, 7(1), 16–24. <https://doi.org/10.15294/jpii.v7i1.12718>.
- Dutta, S. (2020). the Importance of “English” Language in Today’S World. *International Journal of English Learning & Teaching Skills*, 2(1), 1028–1035. <https://doi.org/10.15864/ijelts.2119>.
- Ekayana, A. A. G., Muku, I. D. M. K., & Hartawan, I. N. B. (2021). Implementasi Model Pembelajaran Flipped Classroom Pada Mata Kuliah Sensor Transduser Dalam Pembelajaran Daring. *Jurnal Teknologi Pembelajaran Indonesia*, 11(2), 106–119. [https://doi.org/10.23887/jurnal\\_tp.v11i2.636](https://doi.org/10.23887/jurnal_tp.v11i2.636).
- El Miedany, Y. (2019). Flipped learning. *In Rheumatology Teaching*, 285–303. [https://doi.org/10.1007/978-3-319-98213-7\\_15](https://doi.org/10.1007/978-3-319-98213-7_15).
- El Sadik, A., & Al Abdulmonem, W. (2020). Improvement in Student Performance and Perceptions through a Flipped Anatomy Classroom: Shifting from Passive Traditional to Active Blended Learning. *Anatomical Sciences Education*. <https://doi.org/10.1002/ase.2015>.
- Engin, M. and Donanci, S. (2016). Instructional videos as part of a ‘flipped’ approach in academic writing. *Learning and Teaching in Higher Education: Gulf Perspectives*, 13(1), 73–80. <https://doi.org/10.18538/lthe.v13.n1.231>.
- Hakala, K., Björnsdóttir, K., Lappalainen, S., Jóhannesson, I. Á., & Teittinen, A. (2018). Nordic perspectives on disability studies in education: a review of research in Finland and Iceland. *Education Inquiry*, 9(1), 78–96. <https://doi.org/10.1080/20004508.2017.1421390>.
- Hwang, G. J., Chiu, L. Y., & Chen, C. H. (2015). *A contextual game-based learning approach to improving students' inquiry-based learning performance in social studies courses*.
- Hwang, G. J., Wang, S. Y., & Lai, C. L. (2020). Effects of a Social Regulation-Based Online Learning Framework on Students' Learning Achievements and Behaviors in Mathematics. *Computers and Education*, 160, 104031. <https://doi.org/10.1016/j.compedu.2020.104031>.
- Irmawati, D., Widiati, U., & Cahyono, B. (2017). How Do Indonesian Professional English Teachers Develop Their Pedagogical Competence in Teaching Implementation? *Arab World English Journal*, 8(2), 293–307. <https://doi.org/10.24093/awej/vol8no2.21>.
- Jayanti, R., & Rahayuningsih, S. (2020). Peran Aplikasi Schoology dalam Pembelajaran Flipped Classroom pada Materi Teks Anekdote. *Jurnal Pendidikan Edutama*, 7(2). <https://doi.org/10.30734/jpe.v7i2.933>.
- Jensen, J. L., Holt, E. A., Sowards, J. B., Heath Ogden, T., & West, R. E. (2018). Investigating strategies for pre-class content learning in a flipped classroom. *Journal of Science Education and Technology*, 27(6), 523–535. <https://doi.org/10.1007/s10956-018-9740-6>.
- Kaplan, I., Stolk, Y., Valibhoy, M., Tucker, A., & Baker, J. (2016). Cognitive assessment of refugee children: Effects of trauma and new language acquisition. *Transcultural psychiatry*, 53(1), 81–109. <https://doi.org/10.1177/1363461515612933>.
- Karabatak, S., & Polat, H. (2020). The effects of the flipped classroom model designed according to the ARCS motivation strategies on the students' motivation and academic achievement levels. *Education and Information Technologies*, 25(3), 1475–1495.
- Kosasih, E. (2021). *Pengembangan Bahan Ajar*. Bumi Aksara.
- Kumari, A. T., Hemalatha, C. H., Subhani Ali, M., & Naresh, R. (2020). Survey on Impact and Learning's of the Online Courses on the Present Era. *Procedia Computer Science*, 172, 82–91. <https://doi.org/10.1016/j.procs.2020.05.167>.
- Lee, J., Lim, C., & Kim, H. (2017). Development of an instructional design model for flipped learning in higher education. *Educational Technology Research and Development*, 65(2), 427–453. <https://doi.org/10.1007/s11423-016-9502-1>.
- Lee, Y., & Martin, K. I. (2020). The flipped classroom in ESL teacher education: An example from CALL. *Education and Information Technologies*, 25(4), 2605–2633. <https://doi.org/10.1007/s10639-019-10082-6>.
- Lestyanawati, R., & Widyantoro, A. (2020). Strategies and Problems Faced by Indonesian Teachers in

- Conducting E- Learning System During COVID-19 Outbreak. *Journal of culture, literature, linguistic and english teaching*, 2(1), 71–82. <https://doi.org/10.32699/cllient.v2i1.1271>.
- Long, T., Cummins, J., & Waugh, M. (2017). Use of the flipped classroom instructional model in higher education: instructors' perspectives. *Journal of computing in higher education*, 29(2), 179–200. <https://doi.org/10.1007/s12528-016-9119-8>.
- Malinda, P., Rohaeti, E. E., & Sugandi, A. I. (2021). Development Of Teaching Materials Using A Scientific And Contextual Approach To Improve Mathematic Connection Ability. (*JIML*) *Journal Of Innovative Mathematics Learning*, 4(3), 117–131. <https://doi.org/10.22460/jiml.v4i3.p117-131>.
- Mauliate, H. D., Rahmat, A., & Wachidah, S. (2019). Evaluation the Lesson Plan of English Language Learning in Junior High School, Seraphine Bakti Utama West Jakarta. *International Journal of Scientific Research and Management*, 7(07), 1078–1086. <https://doi.org/10.18535/ijstrm/v7i7.el02>.
- McKnight, K., O'Malley, K., Ruzic, R., Horsley, M. K., Franey, J. J., & Bassett, K. (2016). Teaching in a digital age: How educators use technology to improve student learning. *Journal of research on technology in education*, 48(3), 194–211. <https://doi.org/10.1080/15391523.2016.1175856>.
- McVey, M. (2016). Preservice Teachers' Perception of Assessment Strategies in Online Teaching. *Journal of Digital Learning in Teacher Education*, 32(4), 119–127. <https://doi.org/10.1080/21532974.2016.1205460>.
- Mehring, J. (2018). The flipped classroom. In *Innovations in flipping the language classroom*, 1–9. [https://doi.org/10.1007/978-981-10-6968-0\\_1](https://doi.org/10.1007/978-981-10-6968-0_1).
- Meutia, M. (2021). Teacher Strategies in Improving the Quality of Students at MTs 2 Medan Country. *International Journal of Education, Social Studies, And Management (IJESSM)*, 1(1), 49–57. <https://doi.org/10.52121/ijessm.v1i1.7>.
- Mukholifah, M., Tisngati, U., & Ardhyantama, V. (2020). Mengembangkan Media Pembelajaran Wayang Karakter Pada Pembelajaran Tematik. *Jurnal Inovasi Penelitian*, 1(4), 673–682. <https://doi.org/10.47492/jip.v1i4.152>.
- Namaziandost, E., & Çakmak, F. (2020). An account of EFL learners' self-efficacy and gender in the Flipped Classroom Model. *Education and Information Technologies*, 25(5), 4041–4055. <https://doi.org/10.1007/s10639-020-10167-7>.
- Nordlöf, C., Hallström, J., & Höst, G. E. (2019). Self-efficacy or context dependency?: Exploring teachers' perceptions of and attitudes towards technology education. *International Journal of Technology and Design Education*, 29(1), 123–141. <https://doi.org/10.1007/s10798-017-9431-2>.
- Novita, E. (2020). Pengembangan Buku Pedoman Praktikum Berbasis Keterampilan Proses Dasar Sains Kelas IV Sekolah Dasar. *Journal Evaluation in Education (JEE)*, 1(1), 34–41. <https://doi.org/10.37251/JEE.V1I1.38>.
- Nurhikmah H, N. H., Sulfiandi, S., & Sujarwo, S. (2021). Developing Online Teaching Materials for Science Subject During Covid-19 Era. *Jurnal Pendidikan: Teori, Penelitian, dan Pengembangan*, 6(8), 1198–1206.
- Öztürk, M., & Çakıroğlu, Ü. (2021). Flipped learning design in EFL classrooms: implementing self-regulated learning strategies to develop language skills. *Smart Learning Environments*, 8(1), 1–20. <https://doi.org/10.1186/s40561-021-00146-x>.
- Permatasari, I. S., Hendracipta, N., & Pamungkas, A. S. (2019). Pengembangan Media Pembelajaran Video Animasi Hands Move Dengan Konteks Lingkungan Pada Mapel Ips. *Terampil : Jurnal Pendidikan dan Pembelajaran Dasar*, 6(1), 34–48. <https://doi.org/10.24042/terampil.v6i1.4100>.
- Pustika, R. (2020). Future english teachers' perspective towards the implementation of e-learning in covid-19 pandemic era. *Journal of English Language Teaching and Linguistics*, 5(3). <https://doi.org/10.1371/journal.pone.0248758>.
- Ramadhani, R., Umam, R., Abdurrahman, A., & Syazali, M. (2019). The effect of flipped-problem based learning model integrated with LMS-google classroom for senior high school students. *Journal for the Education of Gifted Young Scientists*, 7(2), 137–158. <https://doi.org/10.17478/jegys.548350>.
- Ramadoni, A., Yulkifli, & Ratnawulan. (2019). Development of physics module SMA/MA integrated character values based on discovery learning models with approach science process skills. *Journal of Physics: Conference Series*, 1185(1). <https://doi.org/10.1088/1742-6596/1185/1/012068>.
- Renes, S. L., & Strange, A. T. (2010). Using Technology to Enhance Higher Education. *Innovative Higher Education*, 36(3), 203–213. <https://doi.org/10.1007/s10755-010-9167-3>.
- Saha, S. M., Pranty, S. A., Rana, M. J., Islam, M. J., & Hossain, M. E. (2022). Teaching during a pandemic: do university teachers prefer online teaching? *Heliyon*, 8(1), e08663. <https://doi.org/10.1016/j.heliyon.2021.e08663>.
- Satyawan, I. M., Wahjoedi, & Swadesi, I. K. I. (2020). The Effectiveness of Online Learning Through UNDIKSHA E-Learning During the COVID-19 Pandemic in the Physical Education Study Program.



- Journal of Education Technology*, 5(2), 191–199. <https://doi.org/10.23887/jet.v5i2.32364>.
- Shi, Y., Ma, Y., MacLeod, J., & Yang, H. H. (2020). College students' cognitive learning outcomes in flipped classroom instruction: a meta-analysis of the empirical literature. *Journal of Computers in Education*, 7(1), 79–103. <https://doi.org/10.1007/s40692-019-00142-8>.
- Sinaga, K. (2017). Penerapan Flipped Classroom Pada Mata Kuliah Kimia Dasar Untuk Meningkatkan Self-Regulated Learning Belajar Mahasiswa. *Jurnal Inovasi Pendidikan Kimia*, 11(2). <https://doi.org/10.15294/jipk.v11i2.10609>.
- Siregar, R. A. (2020). The Effective 21st-century Pedagogical Competence as Perceived by Pre-service English Teachers. *Pedagogy: Journal of English Language Teaching*, 8(1), 1. <https://doi.org/10.32332/pedagogy.v8i1.1953>.
- Srivastava, M., de Boer, A. A., & Pijl, S. J. (2017). Preparing for the inclusive classroom: changing teachers' attitudes and knowledge. *Teacher Development*, 21(4), 561–579. <https://doi.org/10.1080/13664530.2017.1279681>.
- Šteh, & Šarić. (2020). Enhancing self-regulated learning in higher education. *Journal of Elementary Education*, 1. <https://doi.org/10.18690/rei.13.Special.129-150.2020>.
- Sugiyono. (2015). *Metode penelitian pendidikan pendekatan kuantitatif, Kualitatif dan R&D*. Alfabeta.
- Sujarwo, S., Akhiruddin, A., Salemuddin, M. R., Sabillah, B. M., & Sriwahyuni, S. (2019). The Application of Problem Solving Reasoning (PSR) in Improving Students' Metacognitive at the Twelfth Grade Students of SMAN 19 Makassar. *International Journal for Educational and Vocational Studies*, 1(2), 138–141. <https://doi.org/10.29103/i>.
- Tsai, M.-N., Liao, Y.-F., Chang, Y.-L., & Chen, H.-C. (2020). A brainstorming flipped classroom approach for improving students' learning performance, motivation, teacher-student interaction and creativity in a civics education class. *Thinking Skills and Creativity*, 38. <https://doi.org/10.1016/j.tsc.2020.100747>.
- Wulandari, I. G. A. A. M., Sudatha, I. G. W., & Simamora, A. H. (2020). Pengembangan Pembelajaran Blended Pada Mata Kuliah Ahara Yoga Semester II di IHDN Denpasar. *Jurnal Edutech Undiksha*, 8(1), 1. <https://doi.org/10.23887/jeu.v8i1.26459>.
- Yeh, Y. T., Hung, H. T., & Hsu, Y. J. (2017). Digital game-based learning for improving students' academic achievement, learning motivation, and willingness to communicate in an english course. *International Congress on Advanced Applied Informatics*. <https://doi.org/10.1109/IIAI-AAI.2017.40>.
- Zetriuslita, Nofriyandi, & Istikomah, E. (2020). The Increasing Self-Efficacy and Self-Regulated through GeoGebra Based Teaching reviewed from Initial Mathematical Ability (IMA) Level. *International Journal of Instruction*, 14(1), 587–598. <https://doi.org/10.29333/IJI.2021.14135A>.
- Zhang, J., Sziegat, H., Perris, K., & Zhou, C. (2019). More than Access: MOOCs and Changes in Chinese Higher Education. *Learning, Media and Technology*, 44(2), 108–123. <https://doi.org/10.1080/17439884.2019.1602541>.
- Zhang, X., Ardasheva, Y., & Austin, B. W. (2020). Self-efficacy and english public speaking performance: A mixed method approach. *English for Specific Purposes*, 59. <https://doi.org/10.1016/j.esp.2020.02.001>.