DIFFERENTIATED ISLAMIC RELIGIOUS EDUCATION LEARNING BASED ON HYPERDOC TECHNOLOGY FOR JUNIOR HIGH SCHOOL STUDENTS

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A r t i c l e   I n f o

A b s t r a c t s

Curriculum changes from the Kurikulum 2013 to the Kurikulum Merdeka require teachers to be creative and innovative in carrying out differentiated learning. Technology is needed to make it easier for teachers to implement it. PAI teachers at SMPN 2 Kepung Kediri have innovated by utilizing Hyperdoc in the differentiated PAI learning. This study aims to describe: 1) different forms of PAI learning in classes IX-G and IX-I on tolerance; 2) implementing PAI learning based on Hyperdoc; and 3) The effectiveness of using Hyperdoc in PAI learning. The research approach used is a qualitative type of case study. Data collection techniques using interviews and documentation. The validity of the collected data was checked by means of technical triangulation. The results can be concluded: 1) Forms of PAI learning are carried out through content, process and product differentiation; 2) The implementation of differentiated PAI learning based on Hyperdoc technology is carried out through the following steps: distributing forms containing questions related to students' interest in art or other; compiling a differentiated Hyperdoc whose material is according to students' interests; PAI learning is carried out by teachers using Hyperdoc in various ways, in groups, and individually; create digital comic projects as a form of reflection on understanding the material that has been taught; and finally presenting the work; 3) The effectiveness of PAI learning by utilizing Hyperdoc can be seen through the positive responses of students and the learning outcomes of students who have achieved the Learning Objectives Achievement Criteria.

Keyword:
Differentiation, Hyperdoc, PAI learning, Technology

Introduction

As we already know, the curriculum in Indonesia is constantly changing according to the needs of society and the times. In February 2022, the Minister of Education launched the Independent Curriculum Program. The emphasis point on the Merdeka Curriculum is project-based learning and student character development according to the Pancasila Student Profile. To achieve this goal, learning in the Independent Curriculum is focused on essential material and differentiated learning according to the competence of students (Dirjenpendis, 2023).

Differentiated learning is learning that is rooted in meeting the needs of students both in terms of interest, learning style, learning readiness, and type of intelligence, and how the teacher responds to these learning needs. Differentiated learning is an attempt to adapt classroom learning to meet the individual learning needs of each student (Kemdikbud, 2021; Tomlinson, 2001). Things that must be done by the teacher to be able to apply differentiated learning are: 1) map the learning needs of students based on aspects of learning readiness, interest in learning, and their learning profile (this activity can be done through observation, interviews, or questionnaires); 2) planning and implementing differentiation learning based on

the previous mapping results; and 3) evaluating and reflecting on the lessons that have been done.

Differentiated learning components consist of content/content differentiation, process differentiation, product differentiation, and learning environment differentiation. Efforts to fulfill the needs of different students by implementing differentiated learning aim to improve student learning outcomes (Faiz & et al., 2022; Herwina, 2021). In another study, differentiated learning has an impact on increasing the creativity of students (Hasnawati, 2022).

Education is the key to forming a competent and competitive future generation. In the classroom, each student is unique and different in learning style, level of understanding, interests and needs. Therefore, it is important for educators to come up with learning strategies that can accommodate these differences and help students reach their full potential. Apart from needing to pay attention to the individual differences of students, a teacher must also not be left behind by the development of information technology which is developing very rapidly. It is very important for a teacher to learn, move and grow with him. As a facilitator, teachers are required to be able to make technology-based innovations in learning. Technology-based learning innovations can be implemented through Padlet, Live Worksheets, and Hyperdoc media. This is as explained in the research by Jatut Yoga and Dewi Indah Susanti regarding learning innovation in Thematic subjects at SDIT during the Covid-19 pandemic (Prameswari & Susanti, n.d.).

One manifestation of independent learning is the use of various technological applications in the teaching and learning process to help teachers serve student differentiation and support 21st century learning. Based on previous research searches, researchers found a research on the development of technology-based differentiated learning media. The results of this study explain that differentiated learning by using technology can improve student learning outcomes (Ekaningtias et al., 2023). Hapsari & Wulandari (2020) added that learning media make teaching more interesting to students and the meaning of the subject matter will be clearer, so that it will be easier for students to understand. Learning media also makes educational methods more varied, not just verbal communication through the teacher's words so that students don't get bored and teachers don't run out of steam. So it can be concluded that learning media is a teacher's tool in conveying subject matter.

One of the effective and innovative learning approaches to engage students in the use of technology is Hyperdoc technology-based differentiation learning. Hyperdoc is an application made by Google which is summarized in the Google Workspace for Education service. In general, Hyperdoc is understood as digital lessons stored in electronic documents or slides that include content, media, or hyperlinks. Hyperdoc can be used to deliver hands-on learning for the whole class, group learning, or self-learning for individual assignments. Hyperdoc can be used for in-class and outside-class learning with virtual learning settings. Hyperdoc is more than just digital worksheets. Hyperdoc is an interactive online document. Utilization of Hyperdoc will enable students to be creative, collaborative, critical thinking, and communicative. One of the benefits of using Hyperdoc in learning has been proven through a research conducted by Brilla Ardika Putri in 2022, that the application of Hyperdoc has a positive effect on student learning outcomes (Putri, 2022).

One of the schools where in PAI learning the teacher applies Hyperdoc technology is SMPN 2 Kepung Kediri. PAI teachers at this institution use Hyperdoc technology in implementing differentiated PAI learning. This is done as an effort to carry out the mandate of the Independent Curriculum and also to meet the demands of the times which continue to develop along with the development of increasingly advanced and diverse technology and information. Considering that differentiated learning is something new in the education curriculum in Indonesia and the urgency of using technology in learning, this research is important and interesting to do. The researcher focuses on finding answers to three focus problems, namely: 1) What are the forms of differentiation in PAI learning at SMPN 2 Kepung

Kediri?; 2) How does the implementation of PAI learning differentiate Tolerance material based on Hyperdoc technology at SMPN 2 Kepung Kediri?; and 3) How does the effectiveness of using Hyperdoc in PAI learning differentiate material tolerance at SMPN 2 Kepung Kediri? The results of this study are expected to provide discourse to readers, especially educational practitioners regarding the implementation of Hyperdoc technology-based differentiation learning so as to improve the quality of learning and student learning outcomes. Based on the background that the authors have described above, this research was conducted with the title: Differentiated Islamic Religious Education Learning Based on Hyperdoc Technology for Junior High School Students.

Methods

This research was conducted at SMPN 2 Kepung Kediri which is located at Jl. Raya Keling, Kepung, Kediri 64293. This research uses a qualitative approach with a case study type. The main data sources for this study were PAI teachers at SMPN 2 Kepung Kediri, UR mothers and students in grades IX-G and IX-I, each class consisting of 35 students. This research is limited only to the PAI "Tolerance" material. Research data researchers collect using interviews and documentation techniques. Researchers interviewed Islamic Religious Education teachers at the school to obtain data related to different forms of learning and the use of technology in its implementation in Islamic Religious Education learning. Researchers also interviewed students to obtain data related to student responses after implementing differentiated PAI learning with the use of technology. To complete the data collected, the researcher used documentation techniques to obtain data in the form of documents related to the implementation of differentiated PAI learning by using technology, namely student worksheet documents, google forms, and Hyperdoc. The data analysis that the researchers used was the analysis model of Miles et al., (2014) which consisted of three steps, namely data reduction/collection, data processing, and drawing conclusions. To check the validity of the collected data, the researcher used the technical triangulation method, namely checking the validity of the data using interview and documentation techniques.

Results and Discussion
Findings
1. **Differentiated forms of PAI learning based on Hyperdoc technology on Tolerance material at SMPN 2 Kepung Kediri**

    SMPN 2 Kepung Kediri has started implementing the Independent Curriculum since 2022, namely the Independent Learning category. In 2023 it has developed into the Mandiri Changing category. One of the characteristics of the Independent Curriculum is that the learning carried out must be differentiated, serving a variety of learning styles and student interests. Like it or not, teachers must be able to carry out the mandate of the Independent Curriculum. Of course the teacher must be painstaking and patient in preparing differentiated material to achieve the set learning objectives.

    Based on an interview with the PAI teacher for classes IX-G and IX-I SMPN 2 Kepung Kediri on July 17 2023, Mrs. UR, she explained that she had carried out differentiated learning in classes IX-G and IX-I. The forms of differentiated learning that he carries out include: a) Differentiation of material; b) Process differentiation; c) Differentiation of products/results of students' assignments; and d) Differentiation of learning environment. Material differentiation is in the form of tolerance material presented in the form of short stories, comics, poetry, and collages. Process differentiation is carried out through group and individual learning with the task of reading, observing, analyzing, and presenting. Product differentiation in the form of bills of group and individual assignments in the form of short stories, resumes, poetry and comics. While the differentiation of the learning environment is carried out through indoor and

outdoor learning. Indoor learning is carried out in the classroom and in the computer laboratory, while outdoor learning is carried out outside the classroom, such as in the school yard, prayer room, and classroom terraces. He packed all these forms in a technology application called Hyperdoc. The Hyperdoc application contains various material and various student assignment/worksheet instructions.
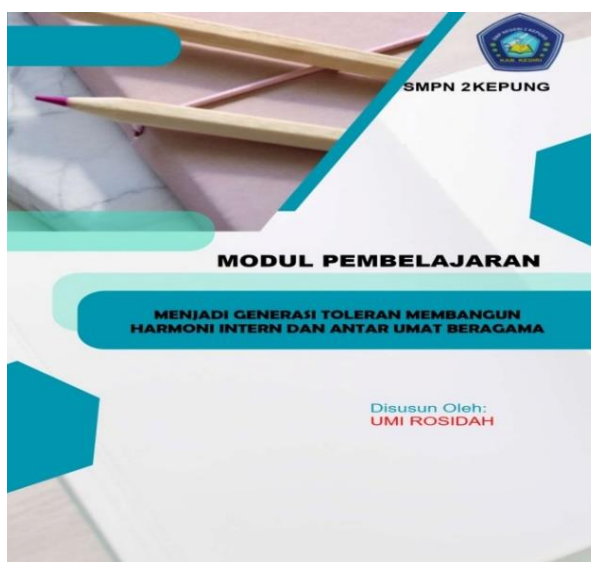

Picture 1.
Source: Documentation of Teacher PAI SMPN 2 Kepung Kediri

2. **Implementation of differentiated PAI learning based on Hyperdoc technology on Tolerance material at SMPN 2 Kepung Kediri**

Differentiated PAI learning that the researchers examine here is only PAI learning which is carried out in classes IX-G and IX-I on Tolerance material. Based on an interview with Mrs. UR as a PAI teacher on July 17 2023 and a documentation study, she explained that the implementation of differentiated PAI learning was carried out in classes IX-G and IX-I through the planning, implementation and evaluation stages.

First, the planning stage. At the planning stage, PAI teachers develop a PAI Teaching Module (MA). The Teaching Module (MA) is structured by analyzing the Learning Outcomes (CP) phase D of the Independent Curriculum into several Learning Objectives (TP). TP is prepared by taking into account the depth and breadth of the material and the characteristics of students. After several TPs have been compiled, these TPs are then sorted into a Learning Objective Flow (ATP) and given or determined the time allocation needed to achieve each of the TPs that has been set. From the ATP the teacher then makes a Teaching Module/RPP. The PAI teacher said that the Teaching Modules prepared were adapted from the Ministry of Education and Culture's PMM and developed by themselves according to the lesson plan that he would do. The teaching modules prepared by PAI teachers at SMPN 2 Kepung Kediri have met the established standards, which include identity, initial activities, core activities, closing, and attachments.
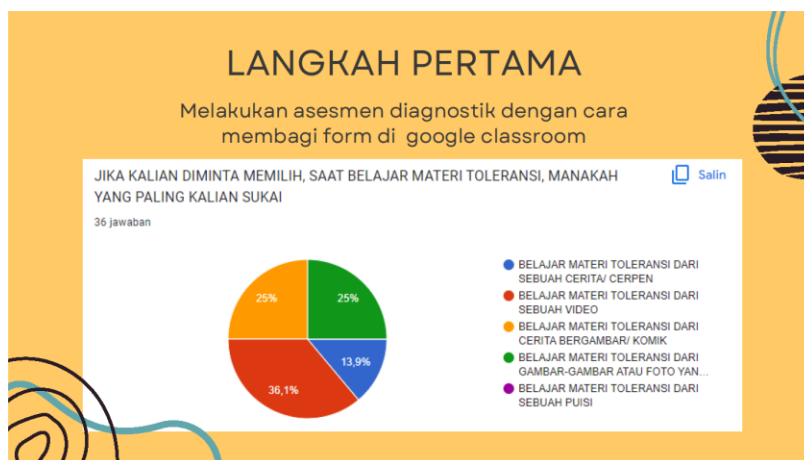
Picture 2.
Source: Documentation of Teacher PAI SMPN 2 Kepung Kediri

Second, the implementation stage. At this stage, PAI teachers carry out learning tolerance material differentiation through several stages. The following is his presentation based on the results of interviews and documentation that the researchers obtained on July 24, 2023:
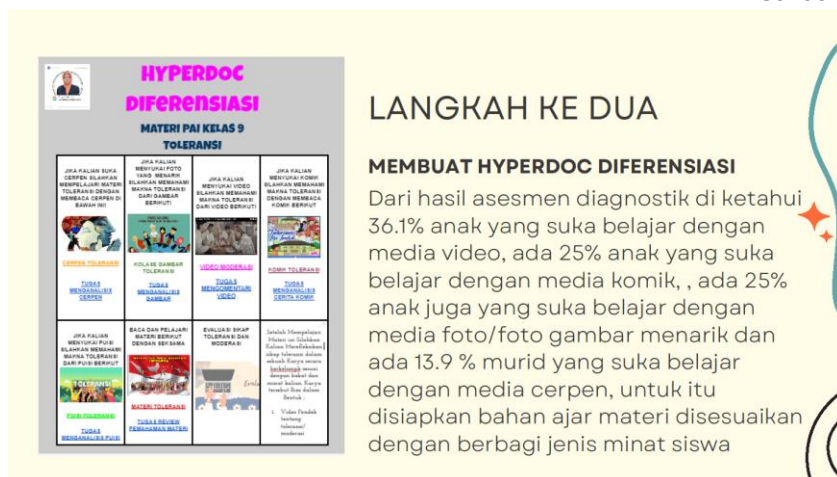
a. Distribute forms containing questions related to students' interest in art or other interesting things;

Picture 3.
Source: Documentation of Teacher PAI SMPN 2 Kepung Kediri

b. Create a differentiated Hyperdoc which contains material according to the interests of students;

Picture 4.
Source: Documentation of Teacher PAI SMPN 2 Kepung Kediri

c. The learning process uses Hyperdoc in various ways, in groups and individually;

Picture 5.
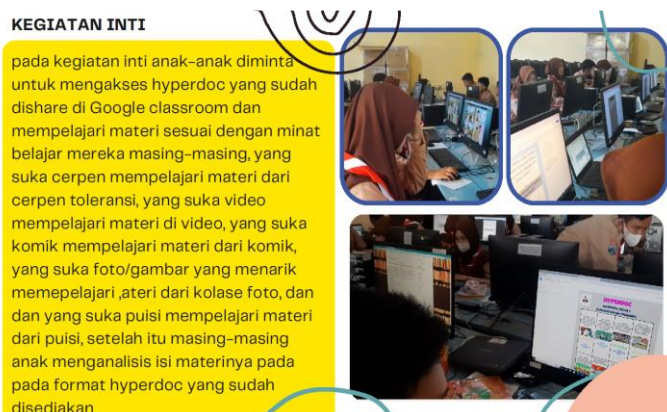Source: Documentation of Teacher PAI SMPN 2 Kepung Kediri

In the preliminary activities, the teacher invites students to pray together, checks student attendance, strengthens the learning contract or class agreement, followed by apperception, ice breaking or yells to increase student motivation and enthusiasm for learning, and provides an explanation regarding how to use the differentiation Hyperdoc.

Picture 6.

Source: Documentation of Teacher PAI SMPN 2 Kepung Kediri

After the preliminary activities are completed, the PAI teacher proceeds to the core activities. This core activity is carried out by asking students to access the Hyperdoc that has been shared on Google Classroom and study material according to their individual learning interests. Students who like short stories, learn the material from the short story Tolerance. Students who like videos learn material in the form of videos about tolerance. Students who like comics, learn material from comics. Students who like poetry learn material from a poem with the theme of tolerance and students who like pictures learn material from pictures or photos or collages related to the theme of tolerance. After each student has studied Tolerance material according to their respective interests, students are then asked to analyze the contents of the material in the Hyperdoc format that has been provided.

Picture 7.
Source: Documentation of Teacher PAI SMPN 2 Kepung Kediri

d. Create a digital comic project as a form of reflection on understanding the material that has been delivered;

At the reflection activity stage of understanding the material that has been delivered by the teacher, the PAI teacher asks students to make a digital comic project with the theme of tolerance in groups. The tools used in this activity are cellphones and the comic life application. First of all the teacher gives an explanation of how to take pictures and how to edit them. Furthermore, students are welcome to take the location settings according to their preferred place to take photos for the needs of the comic project that is being worked on according to the story they have scenariod. After completing the photo-taking process, students and their respective groups enter photos into the digital comic application with the guidance of the PAI teacher.

Picture 8.
Source: Documentation of Teacher PAI SMPN 2 Kepung Kediri

Picture 9.
Source: Documentation of Teacher PAI SMPN 2 Kepung Kediri

e. Presenting works

After the comic editing process is complete and the comics they have compiled are finished, then the PAI teacher asks the students and their respective groups to present the comics that have been made.

Picture 10.
Source: Documentation of Teacher PAI SMPN 2 Kepung Kediri

Third, the evaluation stage. To find out the achievement of the learning objectives of the Tolerance material that has been set, then the PAI teacher conducts an evaluation. The evaluation was made in the form of LKPD (Student Worksheets) using Doc. online, while the evaluation uses the Google form.

3. **The effectiveness of differentiated PAI learning based on Hyperdoc technology on Tolerance material at SMPN 2 Kepung Kediri**

After conducting differentiated PAI learning with Hyperdoc technology, the PAI teacher conducts an evaluation to determine the effectiveness of the learning media that has been used. Based on an interview with UR's mother on July 17 2023, she explained that she had distributed a questionnaire that students had to fill out regarding their impressions or responses (feedback) to PAI learning using the Hyperdoc they had followed. The questionnaire can be accessed by students through the Hyperdoc application and they can fill in their answers or impressions directly there.

To strengthen the information given by UR's mother, researchers conducted a documentation study at Hyperdoc. The following are the responses of some students from

classes IX-G and IX-I: "Pendapat saya dalam pembelajaran PAIBP ini sangat seru apalagi Bu Rosi yang sabar mengajari kami untuk berlatih memakai laptop. Makasih Bu Rosi" (Ananda Ramadhiani-kelas IX-I).

"In my opinion, maple PAI is very fun and adds a lot of knowledge. The definition of tolerance and its examples have had a good impact on me or other students. The next fun thing was learning basic computers that I didn't understand before. Saranghae mom…" (Sela Nur Aini-Class IX-G).

Picture 11.
Source: Documentation of Teacher PAI SMPN 2 Kepung Kediri

Picture 12.
Source: Documentation of Teacher PAI SMPN 2 Kepung Kediri

Apart from the student responses submitted via questionnaires at Hyperdoc, the effectiveness of PAI learning on Tolerance material in classes IX-G and IX-I SMPN 2 Kepung Kediri can also be known through student learning outcomes. Of the total number of students in grades IX-G and IX-I (70 students), all of them have completed their KKTP, none of whom have remedial.

Analysis

Differentiated learning objectives are to: 1) assist students in learning to be able to achieve learning goals; 2) increase motivation and student learning outcomes; 3) to establish a harmonious relationship between teachers and students; 4) to help students become independent learners; and 5) increasing teacher creativity (Marlina, 2019). Analysis of the effectiveness of differentiated PAI learning implemented by PAI teachers at SMPN 2 Kepung Kediri through questionnaires, interviews, and documentation of student learning outcomes shows that the five differentiated learning objectives have been achieved. This can be seen from the completeness/achievement of learning objectives, the positive responses of students after participating in differentiated PAI learning, the independence of student learning, and the creativity of PAI teachers in developing differentiated PAI learning with Hyperdoc technology. In fact, not only teacher creativity, but also student creativity has increased regarding the use of technology and computerization.

Not only the benefits as previously described, PAI learning is differentiated by utilizing technology (in this case Hyperdoc), which has proven to make it easier for teachers to serve the diverse characteristics of students. Students with visual, spatial, auditory, and linguistic types are all served according to their individual interests. They can even work in a team or individually. This benefit is like previous research that was carried out by Nurlaili et al. that the use of multimedia in PAI learning can help facilitate teaching and better cover the differences in the characteristics of students. Students enjoy learning more and can understand learning more broadly (Nurlaili et al., 2023). In addition, the use of Hyperdoc has supported 21st century learning because it is based on digital learning and is paperless. Based on the analysis that the researchers previously described, it can be concluded that learning PAI by utilizing Hyperdoc technology has a positive effect and is highly recommended to support differentiated PAI learning which is the current demands of the Independent Curriculum. The key is the teacher's persistence, patience, and creativity in preparing material for the Hyperdoc application.

Conclusion

Based on the discussion of the results of the research above, the researchers concluded: 1) The forms of PAI learning differ in material tolerance in classes IX-G and IX-I SMPN 2 Kepung Kediri are carried out through differentiation of content, process, product and learning environment. Everything is done by utilizing Hyperdoc technology; 2) The implementation of technology-based differentiated PAI learning is carried out through the following steps: distributing forms containing questions related to students' interest in art or other interesting things; compiling a differentiated Hyperdoc whose material is according to students' interests; PAI learning is carried out by teachers using Hyperdoc in various ways, in groups, and individually; create digital comic projects as a form of reflection on understanding the material that has been taught; and finally presenting the work; and 3) The effectiveness of PAI learning differentiated material Tolerance by utilizing Hyperdoc technology can be known through the positive responses of students regarding the learning that has been done and student learning outcomes that reach the Learning Objectives Achievement Criteria (KKTP).

Based on these conclusions, it can be seen that the use of Hyperdoc technology can support the success of differentiated PAI learning, especially in Tolerance material. Therefore, researchers provide advice to PAI teachers who want to innovate in their learning process to use the results of this study as a reference and can develop them more creatively according to their needs and on other PAI materials. Of course, this must be supported by the competence of qualified PAI teacher human resources in the use of technology. Training is important in increasing the competence of PAI teachers, especially regarding the implementation of the new curriculum and the use of technology. Principals should provide opportunities and facilitate their teachers in this activity.

References

Dirjenpendis. (2023). Modul Pendidikan Profesi Guru-Pengembangan Perangkat Pembelajaran. Dirjenpendis Kemenag RI.

Ekaningtias, P., Fitriani, H., Nurudin, M. N., & Akhodiyah, S. (2023). Pengembangan Media Pembelajaran Berdiferensiasi Berbasis Teknologi pada Materi Teks Prosedur untuk Siswa Kelas VII SMP. Journal on Education, 6(1), 841–847.

Faiz, & Dkk. (2022). Pembelajaran Berdiferensiasi dalam Program Guru Penggerak. Jurnal Basicedu, 6(2), 2846–2853.

Hapsari, T. P. R. N., & Wulandari, A. (2020). Analisis Kelayakan Buku Ajar Milenial Berbasis Augmented Reality (AR) Sebagai Media Pembelajaran Teks Prosedur Di Magelang. Diglosia, 3(4).

Hasnawati, N. (2022). Peningkatan Kreativitas Siswa Melalui Strategi Pembelajaran Berdiferensiasi Pada Pembelajaran PAI di SMAN 4 Wajo. Educandum, 8(2), 229–241.

Herwina. (2021). Optimalisasi Kebutuhan Murid dan Hasil Belajar dengan Pembelajaran Berdiferensiasi. Perspektif Ilmu Pendidikan, 35(2), 175–182.

Kemdikbud. (2021). Modul Guru Penggerak. Kemdikbud.

Marlina. (2019). Panduan Pelaksanaan Model Pembelajaran Berdiferensiasi di Sekolah Inklusif.

Miles, M. B., Huberman, A. M., & Saldana, J. (2014). Qualitative Data Analysis: A Methods Sourcebook. UI-Press.

Nurlaili, Suhirman, & Lestari, M. (2023). Pembelajaran Berdiferensiasi dengan Memanfaatkan Multimedia pada Pembelajaran Pendidikan Agama Islam(PAI). Belajea, Jurnal Pendidikan Islam, 8(1), 19–34.

Prameswari, J. Y., & Susanti, D. I. (n.d.). Inovasi Pembelajaran Pada Mata Pelajaran Tematik Di Sekolah Dasar Islam Terpadu Pada Masa Pandemi Covid-19. Seminar Nasional "Potensi Budaya, Bahasa, Sastra, Dan Pembelajarannya Untuk Pengembangan Pariwisata Dan Industri Kreatif," 250–258.

Putri, B. A. (2022). Penerapan Hyperdoc terhadap Hasil Belajar Peserta Didik pada Mata Pelajaran Ekonomi di SMAN 1 Rambang Niru. Universitas Sriwijaya.

Tomlinson. (2001). How to Differentiate Instruction in MixedAbility Classrooms. Pearson Education Upper Saddle River.