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PROFILE OF STUDENT’S AND TEACHER’S ABILITY TO UTILIZE DIGITAL DEVICE IN THE LEARNING OF IPAS AT SDN BUNULREJO 1 MALANG

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Abstract. Recent developments in digital technology have occurred massively. This research aims to describe the ability of teachers and students to utilize technological devices for learning. This research uses a qualitative method with a descriptive approach. The tool used in the research was a closed questionnaire complemented by structured interviews. The research subjects were teachers and students of class IV-C, SDN Bunulrejo 1 Malang. To check the validity of the data, triangulation was carried out on the information that had been obtained. The research results show that teachers and students have a good ability to use technology. Teachers are accustomed to learning models that utilize digital technology. Some applications that teachers often access are Canva, Quizzizz, Zoom Meeting, Google Meet, Edmodo, and Google Classroom. Meanwhile, students are used to using technology such as smartphones and tablets. They have these facilities in their respective homes. They are familiar with digital devices from an early age. Students are used to playing games and watching videos via their gadgets. These findings provide opportunities for the development of science and technology learning that is integrated with technology. This research has become the initial part of the intended learning development.

Keywords: *Student and Teacher Skills; Digital Devices; Science Learning*

A. INTRODUCTION

Technology has developed rapidly all over the world (Danuri, 2019). Various types of technology-based activities have emerged, including the field of education. Utilization of technology in education includes the use of e-learning, e-library, e-mail, e-laboratory, and others (Arridho et al., 2022). The use of technology in learning has resulted in changes, one of which is social interaction. Nowadays, people can interact at any time via email, telephone, chat, Facebook, Twitter, Yahoo! Messenger, and Internet Relay Chatting, as well as various other modern technologies (Ngafifi, 2014). This provides opportunities for open two-way communication between teachers and students.

The existence of Technological developments means that students and teachers are in a global learning environment that is connected via a network (Akbar, 2019). Some of the roles of

technology in learning are infrastructure, source of teaching materials, learning facility aids, research information sources, consultation media, and online learning media (Cholik, 2021). Current technology can store information and data very efficiently; we can access it anywhere and anytime, can present material in a variety of different media formats, and can respond to what is needed based on existing data (Popescu, 2020). With the rapid development of technology, teachers and students must be able to adapt to utilize it in learning (Aspi & Syahrani, 2022).

One form of digital technology that is currently being used massively is gadgets. Gadget usage has increased over time to reach 45 million users. Initially, gadgets were only used by office workers, business people, and officials. However, as time goes by, the use of gadgets has become a habit and trend followed by everyone, including students (Hudaya, 2018). Gadgets are usually given to children by their parents as entertainment. Initially, gadgets were only filled with music so children would not get bored. However, gradually, they feel bored and free from parental supervision (Nikmawati et al., 2021). Children use gadgets to communicate, access social media, play games, watch YouTube videos, etc. The intensity of children's use of gadgets is quite high and at various times, such as when they wake up, before and after studying, and even the whole day during school holidays (Nizar & Hajaroh, 2019).

The massive use of gadgets certainly provides challenges and opportunities in developing learning. Teachers can't prohibit students from using gadgets. Teachers should utilize existing potential. With gadgets, teachers and students can easily connect to the internet network, learning can be accessed anytime and anywhere. Learning models can develop more innovatively, such as blended learning, online learning, and e-learning (Ohlin, 2019; Singh dkk., 2021).

SDN Bunulrejo 1 Malang is a school that implements the use and development of technology in learning. The school supports all teachers in designing technology-based learning. The school is equipped with a computer laboratory. Schools have 48 tablets that teachers and students can use. Both teachers and students have good technology use skills. All teachers have personal devices such as gadgets and laptops. Meanwhile, all students have gadget facilities in their respective homes.

One use of technology is in the learning of IPAS (Ilmu Pengetahuan Alam dan Sosial). IPAS contains learning material about science and social matters, such as lessons about nature, the environment, technology, history, and culture. The aim of combining these two fields of science is to create education that is more comprehensive, multidisciplinary, and contextual. In this combination, science and science are not studied separately but are also connected so that students can understand the relationship between natural and social aspects of everyday life (Suhelayanti et al., 2023). This is where technology plays an important role in learning.

The problem in learning science and science is the need for more understanding of students in understanding the concept, and also the boredom felt during the learning process. Therefore, contributions from technological developments are needed to create an active learning atmosphere to help students understand learning and be innovative to overcome student boredom during the learning process (Andani, 2022). To create innovative learning, adequate teacher capabilities are needed for utilizing technology. The appropriate use of technology in learning can help teachers and students to achieve learning goals together. This paper will explain the profile of the abilities of teachers and students at SDN Bunulrejo 1 Malang in utilizing technology for learning. . This research aims to determine the ability of teachers and students to utilize technology in learning, determine the availability of digital devices, and analyze opportunities for developing digital-based media in science and science learning at SDN Bunulrejo 1 Malang.

B. METHODS

This research uses a qualitative method with a descriptive approach. According to (Sugiyono, 2019), a descriptive research approach is research that describes the research object based on facts. This research aims to determine the ability of teachers and students to utilize technology in learning, determine the availability of digital devices, and analyze opportunities for developing digital-based media in science and science learning at SDN Bunulrejo 1 Malang. Data collection in this research was carried out by direct observation of the research object and interviews with science subject teachers through a closed questionnaire that had been prepared. The research subjects other than teachers were students from class IV-C, 22 people. To check the validity of the data, triangulation was carried out on the information that had been obtained.

C. RESULTS AND DISCUSSION

1. Digital Device Availability Profile at SDN Bunulrejo 1 Malang

Based on the initial observations, data was obtained that SDN Bunulrejo 1 Malang had adequate availability of digital devices. This is proven by a computer laboratory that can be used interchangeably. Each teacher has a gadget connected to the internet. Students also have access to gadgets at home. The school also has 48 tablets. The tablet can also be used interchangeably by both teachers and students. The existing tablet optimizes the school operational assistance (BOS) budget.

The next finding was that every class in the school was equipped with a projector and a large screen. This condition makes it easier for teachers to convey material. However, the problem is that several teachers have needed help connecting the laptop to the existing projector. However, this condition is a small problem in implementing learning.

The availability of sufficient digital devices has provided opportunities for schools to develop more innovative learning. One innovative step that can be optimized is the development of digital-based learning media. The availability of learning media is very important in the learning process because it functions as a tool to help students' learning progress (Arianti, 2018).

Increasing the use of digital devices in schools can benefit students and teachers. Digital devices have prepared them to face a world where people can always be connected wherever and whenever, so learning will be easier. However, Digital devices cannot guarantee student learning success (Raja & Nagasubramani, 2018). The role of digital devices is only to assist the learning process.

2. Profile of Teacher Ability in Using Technology in Learning

The teacher is the most important component in learning. Teacher competency is a measure of student learning participation. To achieve these goals, it is natural for teachers in schools to try to improve the quality of their professionalism (Asmarani, 2014). Several things can be done to improve a teacher's professional competence. These include reading educational books, studying and recording current events from the media, participating in class activities, joining Teacher Working Groups (KKG), conducting classroom action research, and actively participating in professional organizations (Wardinur & Mutawally, 2019).

If we refer to the previous description, the ability profile of teachers at SDN Bunulrejo 1 Malang to utilize technology is likely good. Teachers are used to digital-based teaching materials. Some teaching materials that are often used are e-books, e-modules, e-learning, and e-reports. Some digital platforms that are frequently accessed are Zoom Meeting, Google Meet, Google Classroom, and Edmodo.

In carrying out learning, almost all teachers use a projector in the classroom to present presentation material. The most frequently used presentation materials are Microsoft PowerPoint and Canva. The following statement from the source supports this:

“Disini itu paling sering pakai power point. Kalau guru muda biasanya lebih kreatif, ada yang menggunakan canva, quizizz, wordwall, dan beberapa aplikasi gratis di internet. Kalau medianya variatif seperti itu, biasanya siswa juga senang dan semangat untuk belajar.”

in English.....

“Here, we most often use Power Point. Young teachers are usually more creative, some use Canva, Quizizz, Wordwall, and several free applications on the internet. If the media is varied like that, students are usually happy and enthusiastic about learning”

The interview results show that the teacher has very capable technology utilization skills. The various types of applications that are often used are known from academic forums that are often followed. Teachers always take part in activities organized by the Teacher Working Group in their respective regions. Apart from that, several teachers are often delegated to attend workshops or seminars on developing innovative learning that utilizes technology. There are also experienced teachers who are resource persons in workshops on developing innovative teaching materials.

Some of these activities certainly have a positive impact on teacher professionalism. This profile highlights for schools how important it is to have teachers who are not only experienced in using technology but also have a thorough understanding of how to integrate it effectively into learning. Teachers' ability to use technology effectively can provide better learning outcomes for students (Hasyim et al., 2022).

3. Student Ability Profile in Utilizing Technology in Learning

The existence of digital technology has entered the world of students. One important aspect of modern education is students' ability to use technology effectively in learning. A student with skills like these can learn, collaborate, and prepare for the future (Syamsuar & Reflianto, 2019).

SDN Bunulrejo 1 Malang has a great opportunity to prepare students who are competent in using technology. This refers to the results of observations that show that students are familiar with digital technology. Teachers must allow students to access existing digital devices. The teacher only acts as a guide so students can use digital devices appropriately for positive activities.

The research results show that the digital devices most frequently accessed are personal gadgets (cell phones, tablets, and computers). These devices are easy to access because they are available at home, whether they belong to parents, older siblings, or personal property. Students have been exposed to some of these devices from an early age. They are used to existing devices because their parents deliberately introduced them.

Some of the activities that students often do with existing digital devices vary. Starting from watching videos playing games, to taking part in lessons. For female students, watching videos on gadgets is the most frequent activity. They are familiar with various applications such as YouTube, Instagram, TikTok, and Facebook. Meanwhile, for male students, playing games is the main priority in using gadgets. These activities are, of course, carried out when they are at

home and under parental supervision. Several game applications often played include Free Fire, Mobile Legend, and PUBG. They like games that have an adventure and challenge theme.

In the learning process, several students stated that they preferred learning by using gadgets. They feel they have gained new experiences from technology-based learning models. They are happy when the material is presented in video animations and there are games for learning. This supports teachers' opportunities to develop innovative learning. Teachers have the competence to design learning with several applications such as Quizizz, canva, worldwall, and so on. With students' good ability to use technology, it is believed that learning will be more enjoyable. So, learning goals can be achieved together.

4. Opportunities for Digital-Based Media Development in Science and Technology Learning at SDN Bunulrejo 1 Malang

The availability of digital device support at SDN Bunulrejo 1 Malang opens up opportunities to develop more interesting learning media. In this case, digital-based media is the right choice. Digital-based media in teaching science and science in elementary schools is not only able to improve the quality of learning but also prepares students to become people who are better prepared for change (Sari & Atmojo, 2021).

One of the opportunities for developing digital media in science education at SDN Bunulrejo 1 Malang is using augmented reality animated videos. Animated videos are a form of media with entertaining images. Animated videos can present objects with varying shapes, sizes, and colors (Agustin & Yulastuti, 2018). This media is believed to increase students' curiosity about new things. When the desire to learn arises, students are believed to become more enthusiastic about seeing and understanding the content of the video (Sunami & Aslam, 2021).

Augmented reality animated video is a type of video that combines digital visual elements, such as images, 3D objects, or animation, with real-world images or text. These videos can be viewed with AR-enabled devices, such as smartphones and tablets. In other words, an augmented reality animated video will create a visual experience that connects the real world and the digital world so that users can see and interact with digital elements as part of their visual experience.

The development of augmented reality animated videos is a follow-up to this research. After knowing the profile of teachers and students in utilizing technology very well, researchers believe that developing augmented reality animated videos is easy. Teachers and students alike will gain new experiences in learning.

D. CONCLUSION

The occurrence of very massive technological developments cannot be avoided. In this case, educational institutions are also required to adapt quickly. All components of education, both teachers and students, must be equally able to recognize the changes that occur. This research has shown that teachers and students at SDN Bunulrejo 1 Malang have a very good ability to use technology. This can be seen from the teacher's experience in designing digital-based learning. Students have also become accustomed to utilizing digital devices because they can access them at home. All students are well-facilitated. Seeing these conditions, further development of learning media design that utilizes technology is needed. With digital technology-based learning media, it is believed that students' learning experiences will be more memorable, learning motivation will increase, and learning goals can be achieved together.

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A CONTENT ANALYSIS OF THE ISLAMIC EDUCATION TEXTBOOK IN MALAYSIA

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Abstract. Islamic Education is often taught as an academic subject like any other subject. The discipline of teaching Islamic doctrine and beliefs (Aqidah) requires a change of paradigm in both methodology and content. This is important to educate Muslim students to respond critically to modern challenges. The present study aims to analyze the Islamic Education Textbook of Secondary School (KSSM) in Malaysia on inculcating Aqidah (faith) for Form 1 students. One of the topics from the textbook was chosen for analysis, i.e., 'Islam, Religion of Fitrah.' The research used a qualitative content analysis method on the Islamic Education Form 1 Textbook from the Ministry of Education. Findings suggested that the Islamic Education Textbook should focus on developing the best and most informative content while encouraging students to act and reflect on their role as vicegerent of Allah through its structure, content, layout, and design. Finally, the study offers suggestions on how the textbook can be improved to facilitate effective teaching of Aqidah to the students.

Keywords: *Textbook, Islamic Education, Inculcate, Aqidah*

A. INTRODUCTION

According to Malaysia Education Blueprint 2013-2025, the implementation of Secondary School Standard Curriculum or Kurikulum Standard Sekolah Menengah (KSSM) and Primary School Standard Curriculum or Kurikulum Standard Sekolah Rendah (KSSR) was the revised version of Integrated Curriculum Secondary School or Kurikulum Bersepadu Sekolah Menengah (KBSM) and Integrated Curriculum Primary School or Kurikulum Bersepadu Sekolah Rendah (KBSR). The revision was part of the Government's aspiration to prepare students for 21st-century needs. The changes were set to balance the knowledge and skills such as creative thinking, innovation, problem-solving, and leadership. The new curriculum focused on student-centred, problem-based, and project-based work.

Islamic secondary education aims to cultivate individuals who, as dedicated servants and caliphs of Allah, embody intelligence, knowledge, virtue, and proficiency. These characters are in line with the Quranic and Prophetic teachings. According to the Ministry of Education Malaysia, the Islamic Education curriculum has the following objectives:

- 1- Practice reading the Quran and practising Quranic verses in daily life.
- 2- Formulate an understanding of hadith and practice it in life.
- 3- Formulate an understanding of Islamic beliefs.
- 4- Formulate an account of the Sirah of the Prophet Muhammad and Islamic civilisation and take lessons from it.

- 5- Understand Islamic morality and life.
- 6- Read and write Jawi as it is a cultural heritage.

In addition, The KSSM Islamic Education highlights the essential aspects of knowledge, practice, appreciation, and culture. These aspects provide students with a basic understanding of the Quran, the Hadith, the Faith, the Fiqh, Islamic Civilization, and Islamic Morals. Islamic education is a continuous effort to impart knowledge, skills, and appreciation of Islam based on the Al-Quran and as-Sunnah. In other words, the main goal of Islamic Education is to produce Muslims who are *hablum minal Allah* and *hablum minan nas*. In the philosophy of national education, the goal is to form a comprehensive individual from all aspects of life without neglecting any of those aspects.

In today's world of digital technology, the need for the textbook is still relevant. Some information requires thorough examination as it comprises introductory notes from the Islamic heritage. According to Okeeffe (2012), textbook review is a way to determine the efficacy of textbooks. Islamic Education textbooks aim to introduce the origin of Islam, creeds, core beliefs of Islam, history and scripture, revelation legend, and fact (Gilbert, 2008). Therefore, textbooks should be prepared precisely to document the knowledge accurately.

According to Azlina and Adnan (2019), the need to utilize resources to transfer knowledge should be emphasized to all religious teachers in Islamic Education while recommending that teachers use various educational materials. It shows that Islamic education teachers commonly use traditional teaching methods, relying on textbooks as essential resources in teaching and learning. Consequently, the content and structure of textbooks are significant as a source of information for teachers and students in the teaching and learning process. While the lecture-based approach has long been applied, it is still applicable in some subjects, for example, in teaching Tafsir al-Quran, Hadith, and many others. In contrast, these subjects heavily depend on teachers (Azlina & Adnan, 2019). So. The content of the Islamic Education textbook KSSM Form 1 from the topic of Islam, Religion of *Fitrah* on inculcating teaching' *aqidah* was analyzed in this study.

B. STATEMENT OF PROBLEM

Islamic Education is often taught as an academic subject like any other subject. Even though it is one of the core subjects, it is essential to point out that Islamic Education can be translated as a way of life for Muslims. Teaching Islamic doctrine and belief (*aqidah*) is crucial, as it equips the young generations of Muslims with credible answers to modern world problems (Mohd et al., 2012). The doctrinal elements are belief in Allah, His angels, His books, His prophets, the afterlife, and predestination.

According to Mohd Aderi and Ahmad Yunus (2012), Islamic Education textbooks suffer from shortcomings in many areas: the needs of the pupils, motivation; layout and language presentation, linguistic understanding, levels of the pupils; collaboration between the syllabus and the writers of Islamic Education texts on the one hand, and the teachers applying those textbooks on the other (cited in Al-Naqa, 1979 & Alalaoy, 1989). In addition, Islamic Education teaching methods tend to encourage memorisation, recall, and rote learning. The discipline of teaching Islamic doctrine and beliefs (*aqidah*) requires a change, embracing a new paradigm in both methodology and content. Such is essential to give Muslims a credible response to modern challenges. Islamic diversity and up-to-date theology must be emphasised by addressing the evolving contemporary needs using genuine sources.

Textbooks can be defined as the backbone of every educational system. Otherwise, it may be a good guide for assessing teaching and learning development. Today, textbooks are still the most common sources of knowledge transfer. It is a significant source used as a teaching guideline, particularly for teachers in Islamic education. According to Wittlin (1978), good textbooks need to consider content, aspects of value creation, elements of motivation, accessibility, diagrams, and study guides. It needs to promote a thirst for information and knowledge. Textbooks should aim to support and inspire students to learn.

Mikk (2000) stressed the need for exciting and creative textbooks; "students have plenty of knowledge available, and if their books could not be more exciting, they are reluctant to learn it. Curiosity in the subject grows through fascinating and enthusiastic textbooks. Therefore, religious textbooks should provide meaningful and valuable material to tackle current political, social, and

cultural issues. The research will help ensure that textbooks are geared towards achieving this goal thus the core values of the traditional textbook will remain relevant.

C. LITERATURE REVIEW

Textbook is one of the teaching tools used for teaching and studying Islamic Education. Several analyses on Islamic Education textbooks were conducted in Malaysia. The following is a collection of articles on Islamic education and textbook analysis in other science fields.

Norhasnira and Kauthar (2014) examined and classified the status of each hadith in the KBSM Form Two Islam Education textbook. This was done because many students, teachers, and the community ignore or are unaware of the dissemination of false hadith in the syllabus, which would undoubtedly harm the belief of Muslims in Malaysia. Forty-nine hadiths were included in the textbook as proof and evidence. The findings show that the hadiths provided were authentic hadith *hasan sahih*, *hasan sahih gharib*, *da'if*, and *mawdu'*.

Next, Eman (2015) examined problems in Islamic education textbooks in the three grades (grade 1,2,3) of secondary schools in Iraq according to the cognitive domain of Bloom's taxonomy. The result showed that the three-grade secondary school Islamic education textbook questions concentrate on the first two stages of Bloom's Taxonomy (Knowledge and Comprehension). Another study was conducted by Mahek (n.d.) to define the content of the Islamic Studies textbook that promotes civic sense, including group, ties, responsible citizen, and law-following knowledge. Furthermore, the study proposed suggestions to enhance civic sense content in the Islamic Studies textbook. The findings showed that textbooks need to improve some areas of student civic awareness.

On the other hand, Isnanur (2018) examined the Islamic Life Tool Pack, an English textbook for Islamic school grade 7 junior high school students centered on the scientific approach domains based on the 2013 curriculum. According to the study, the researcher concluded that no chapter in the textbook adequately covered all areas of the scientific method, indicating room for improvement in addressing these deficiencies. Based on the result, the research sample did not include all areas of the scientific approach; instead, it focused on observing, questioning, experimenting, associating, and communicating. Next, Ruzai (2018) found out that there are materials that do not follow Islamic teachings. The study's sample consisted of five textbooks used in an intensive English course. The findings from the study showed that the content of the English language textbooks could generally be classified into three groups: neutral, positive, and negative groups.

The research by Linda (2018) aimed at the requirements of a successful English textbook. The study sought to assess the suitability of materials in the textbook "Basic English of a Second Language." The textbook was evaluated using four criteria for a successful English textbook: aim and objective, encouraging learning method, activity or exercises, and vocabulary. The result showed that the lesson expectations in the textbook followed the criteria of an excellent English book. However, one material does not follow the requirements because it does not provide any concrete illustration in promoting the teaching-learning process. In addition, the exercises do not follow the standards of an excellent English textbook because pair or group work was not included, and it should be further developed.

Different studies have different focuses on analyzing textbooks. Besides, not many studies have been conducted concerning the analysis of Islamic Education Textbook KSSM, especially regarding *Aqidah* (faith). Therefore, this study aims to analyze the topic of Islam, the Religion of *Fitrah* (Islam Agama *Fitrah*) from the Islamic Education Form 1 Textbook.

Islamic education is frequently taught in classrooms alongside other academic subjects. It is important to note that, despite being one of the primary disciplines, Islamic education can be understood as a Muslim way of life. Teaching Islamic philosophy and belief, or *aqidah*, is essential because it provides the next generation of Muslims with reputable solutions to contemporary global issues (Mohd et al., 2012). Belief in Allah, His angels, His books, His prophets, the afterlife, and predestination are the theological components.

D. METHOD

The present study adopted content analysis as its leading research design. Specifically, the “Islam Agama Fitrah” section in the Islamic Education textbook was analyzed. Hence, this study is qualitative. In addition, the document analysis method was applied in collecting and analyzing the data. The data in this research are the words or sentences in the text of the materials contained in the KSSM Islamic Education Form 1 textbook.

The data source is the Islamic Education textbook used by Form 1 secondary school students published by the Ministry of Education Malaysia. The data for analysis was collected from one of the *Aqidah* sections in the textbook entitled “Islam Agama Fitrah”. Because the source of information is in the form of a document, the method used to gather data is called the documentation method.

Data collection in content analysis is called document collection. In this research, data was collected from the Islamic Education KSSM Form 1 textbook, specifically the section entitled “*Islam Agama Fitrah*”. “Islam Agama Fitrah” is one of the four topics from the segment on *Aqidah*, where it contains reading material for Form 1 students. The Islamic Education textbook comprises six parts, namely Quranic recitation, Hadith, *Aqidah* (Faith), *Fiqh* (Ibadah), *Sirah* (Prophetic Biography), and *Akhlak Islamiyyah* (Islamic Morality and Manners). In the section of *Aqidah*, there are four topics which are “*Islam Agama Fitrah*” (unit 13), “*Aqidah Islam*” (unit 14), “*Beriman kepada Allah*” (unit 15), “*Al-Khaliq dan Al-Musawwir*” (unit 16). The researcher chose to review only the first topic out of the four topics from the *Aqidah* section. Data collection procedure involved (a) reading the entire textbook and (b) determining the contents and units analyzed using the documentation method.

Firstly, the researcher familiarised with the entire content of the selected title. Secondly, the researcher focused on the analysis observed from the textbook contents. The feasibility of the content-oriented towards understanding the concept; the actualities of the sample material; the material encourages curiosity; the language used in textbooks; the suitability of language with student; and the use of symbols, terms, or pictures. Figure 1 shows the framework for the analysis of the *Aqidah* topic in the KSSM textbook:

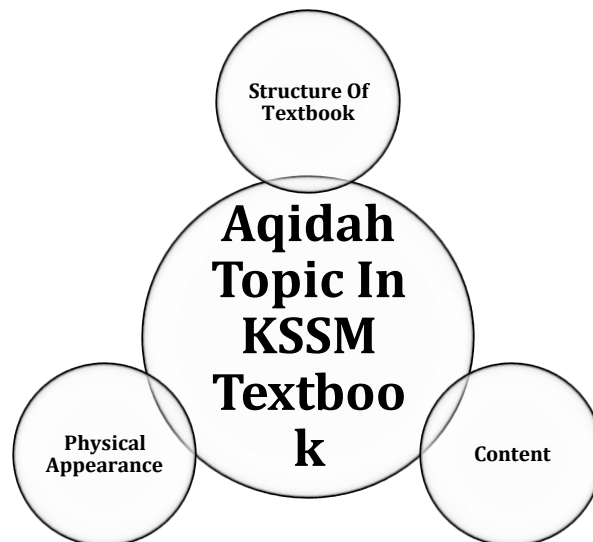


Figure 1: Framework for Analysis of *Aqidah* topic in KSSM Textbook. Adapted from Mohd Aderi and Ahmad Yunus (2012)

Islamic Education is often taught as an academic subject like any other subject. Even though it is one of the core subjects, it is essential to point out that Islamic Education can be translated as a way of life for Muslims. Teaching Islamic doctrine and belief (*aqidah*) is crucial, as it equips the young generations of Muslims with credible answers to modern world problems (Mohd et al., 2012). The doctrinal elements are belief in Allah, His angels, His books, His prophets, the afterlife, and predestination.

E. RESULT & DISCUSSION

The discussion centres around the framework's three aspects: the textbook's structure, content, and physical appearance.

1. Structure of Textbook of Islamic Education Form 1

Islamic Education textbook by Malaysia's Ministry of Education is produced to fulfil students' and teachers' needs. The Islamic Education textbook's *Aqidah* (Faith) section consists of reading materials focusing on Islamic beliefs. This *Aqidah* (faith) section focuses on three main aspects: *Ilahiyyat*, *Nubuwwat*, and *Sam'iyat*. The focus of this study is on the *uluhiyyat* aspect. "Islam Agama Fitrah" is a topic that discusses issues related to Islam, a religion of *Fitrah* or also known as nature disposition.

Every topic is listed in its respective segments. Each segment has a stimulus page. Islamic Education textbook comprises six segments, namely Quranic recitation, Hadith, *Aqidah* (Faith), *Fiqh* (Ibadah), *Sirah* (Prophetic Biography), and *Akhlaq Islamiyyah* (Islamic Morality and Manners). One topic was chosen, which is "Islam Agama Fitrah". Under this topic, three sub-topics were highlighted: introduction to the concept of Islam as a religion of *fitrah*, Quranic sources, and the characteristics of Islam as the religion of *fitrah*. This textbook deals with the need for religion in human life and the need for God in our lives. The theme concerns God, who creates us upon a *fitrah* (natural disposition) and acknowledges Allah as The Creator.

The topic "Islam Agama Fitrah" comprises six pages, including a stimulus page for the segment *Aqidah* (Faith), the first topic under the segment, a subtopic, a standard learning number, a teacher's note, suggested teaching and learning methods, activity, assessments, pictures, character, and high order thinking skills (HOTS) questions.

2. Contents of the topic

The text was written in *Jawi* font to explain Islam as a religion of *fitrah* in a broader context. The study's objectives were not stated in the textbook but were mentioned in the Standard Curriculum and Assessment Documents DSKP provided for the teachers. (Figure 2)

3. عقيدة

مستلرد قريستاسي		مستلرد قمبراجرن	مستلرد كانلدوغن
تفسيرن	تاهف قغواسان		
<ul style="list-style-type: none"> • مپاتاكن مقصود اسلام اكام فطره، اسلام اكام يغ بنردان مسواي دغن فطره ما نسي، دليل عقلي دان نقلي يغ بركا يئن دان جيري ۲ اسلام سباكاي اكام فطره. 	1	موريد بوليہ: 3.1.1 مپاتاكن اسلام سباكاي اكام فطره.	3.1.1 اسلام اكام فطره.
<ul style="list-style-type: none"> • مپاتاكن مقصود اسلام اكام فطره سرتا دليل عقلي دان نقلي يغ بركا يئن. • منجلسكن اسلام اكام يغ بنردان مسواي دغن فطره ما نسي سرتا جيري ۲ اسلام سباكاي اكام فطره. 	2	3.1.2 مرغكن هان اسلام اكام يغ بنردان مسواي دغن فطره ما نسي. 3.1.3 مغموكاكن دليل نقلي دان عقلي بهاوا اسلام اكام فطره دان درضاي اوليه الله ﷻ.	
<ul style="list-style-type: none"> • مپاتاكن مقصود اسلام اكام فطره سرتا دليل عقلي دان نقلي يغ بركا يئن. • مرغكن اسلام اكام يغ بنردان مسواي دغن فطره ما نسي سرتا جيري ۲ اسلام سباكاي اكام فطره. 	3	3.1.4 مرغكن جيري ۲ اسلام سباكاي اكام فطره.	
<ul style="list-style-type: none"> • مپاتاكن مقصود اسلام اكام فطره سرتا دليل عقلي دان نقلي يغ 	4		

Figure 2: The Objectives Of The Topic 'Islam As A Religion Of Fitrah'. Standard Curriculum and Assessment Documents DSKP Ministry of Education Malaysia (2015)

Based on Figure 2, the topic's objectives are declaring Islam as a religion of *Fitrah* and elucidating why only Islam is true according to human nature. Additionally, it seeks to explain the features of Islam as a religion of *fitrah* and to believe and practise Islam consistently in day-to-day living. Quranic sources (*naqli*) and rationale (*aqli*) on Islam, a religion of *fitrah* and the only religion accepted by Allah, are also provided.

Referring to the objectives was essential to ensure that the topic's contents aligned with the intended purpose of teaching and learning. Students will have a joint knowledge foundation in presenting a basic introduction to Islam, including its core beliefs. Through textbooks, students should understand what Islam stands for and the values associated with the religion. In the textbooks, the concept of '*fitrah*' is given priority as an essential topic to be highlighted in explaining the faith. The '*fitrah*' describes how humans need God to worship and religion to stand for, which are related to a personal relationship with Allah. This concept of '*fitrah*' is considered the fundamental part of Islam and is necessary to understand the religion.

The existence of Allah SWT is among the most critical topics to be taught in Islam (Fauzi et al., 2019). So, this topic is considered very relevant to support the learning process. Islam as a religion of *fitrah* is an essential topic for Muslim students to learn. This is because information on *fitrah*, innate composition to firm yourself as a Muslim, and finding Islam relevant is needed.

The title for the *Aqidah* section, "*Islam Agama Fitrah*," is in a simple sentence. This title could develop greatness, thankfulness, and awareness of The Creator, Allah, who gives benefits to humanity. In this chapter, students will also understand the innate composition (*fitrah*) to realize the existence of Allah. In this way, there is a scope for nurturing the personal growth of human beings, and the importance of religion; Islam is the true religion, and Islam as the only religion accepted by Allah urges students to observe themselves to prove the existence of Allah. *Fitrah* is a Quranic term used in the Quran. Al-Qur'ān addresses the idea of *fitrah* many times with a *lafaz al-mushtarak*, and linguistic studies have provided even more possible originating terms such as *Fāir* and *fitrah*, meaning "Creator" or "He who makes" (Ali, 2016). The teacher can explain the definition of *fitrah* from the Quran and Sunnah. In addition, teachers should encourage students to study the Quran because it is the ultimate source for Muslims.

Besides, no vocabulary section explains the meaning of a single term like *fitrah*. The vocabulary section is supplementary content. It is not available in this chapter, but it will be better if it is provided as students might read the textbook themselves. Vocabulary can help students understand Islamic concepts by referring to them, making it easier for them to use the textbook even without the presence of a teacher.

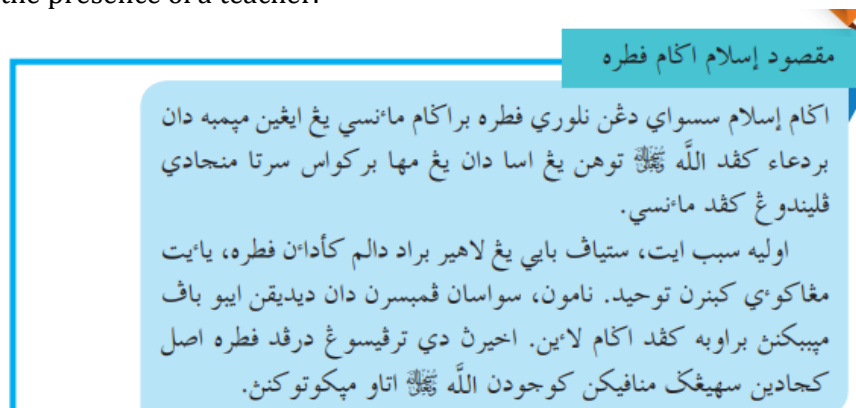


Figure 3: - Meaning "*Islam Agama Fitrah*". Rijaluddin Yahya et.al. (2016).

This subtopic has the scope of understanding Islam in a context. It is deemed to be a fruitful topic. However, a notable deficiency lies in the absence of a precise word-by-word definition, especially for the term "*fitrah*" (Figure 3). This is crucial because "*fitrah*" is an Islamic concept rooted in Quranic verses which require comprehensive explanation, and no word can adequately replace for this term.

In addition, the first sentence was found to be confusing. The author combined all points in one sentence, making it confusing and thus need to be read repeatedly to comprehend. This subtopic mentioned the relationship between Islam and human *fitrah* that need religion and God. Therefore,

the sentence started with a suitability of Islam with the need for faith. Then, examples of how a child was born with *fitrah* and how their parents shaped them into becoming believers or not were mentioned. The reading-through session must be done at least twice or more to understand the whole context comprehensively. The way the author fits all the information in one sentence makes it difficult for students to understand in the first reading. It is a long and complex sentence followed by traditional typical blocks of information advocating straightforward language but is too informative and packed.

Then, the text continues with the definition of the main topics related to the affirmation of the oneness of Allah (Figure 4). However, the text is still confusing and unclear for the students. In this context, the teacher plays a critical role in delivering comprehensive knowledge and explaining its underlying meanings in the most accessible manner possible.

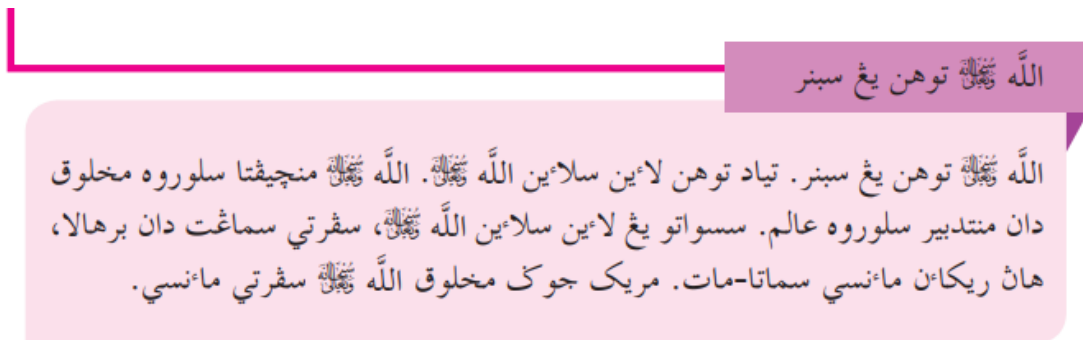


Figure 4: Affirmation of the oneness of Allah. Rijaluddin Yahya et.al. (2016).

The author arranged the materials sequentially and linked them to previous texts. Each reading text is well connected to the previous one and the ones after. The subtopics discussed under the topic are as follows:

1. Definition of Islam: a religion of *fitrah*.
2. The need for religion.
3. Allah is the only God.
4. Islam is the true religion and suitable with *fitrah*.
5. Quranic verse on *fitrah*.
6. The only religion accepted by Allah.
7. Characteristics of Islam as a religion of *fitrah*.

This topic is well organized and linked to each other thus make it easier for students to comprehend the information given.

The stimulus page displays the *Aqidah* (Faith) segment, displaying a picture of Muslims praying congregationally inside a mosque. It shows that the main aim of human life is to believe in God and to prove how vital God is in the lives of Muslims. The idea concerns religion, the spiritual dimension of life, and how it influences the human creed. A Quranic verse, Surah Al-'Araf verse 180 highlights the concept of *uluhiyyat* was also written.

3. Physical appearance

Textbook analysis starts with the physical appearance or the layout of the textbook. It is a crucial factor to be considered in designing every textbook as students develop first impression based on its physical appearance, regardless of its content. The layout is clear, colorful, and well-organized. The topic of each unit is written in bold. All letters are not in black color only. The title is in different fonts and colours, attracting students' attention. The colour, size, and fonts made the book attractive and motivated learners to read. However, crowded textbooks with complex layouts and small fonts can demotivate students.

At times, it has been observed that poor appearance of a book has caused readers not even to look at a single page of it. Nevertheless, the size and type of the fonts used in this textbook undoubtedly guarantee the smooth readability of the texts. The textbook is well-organized in terms of practical considerations. Therefore, this textbook is visually attractive, motivating, and relevant

for the learners. This current textbook uses colors that are pleasant for the eyes. It can be an advantage if a picture is added as it provides meaningful context for each piece of information, thus helps students understand the materials better.

F. CONCLUSION

Based on the analysis, the textbook needs to be improved in some areas. The suggestions are visualized in the following Figure 5:

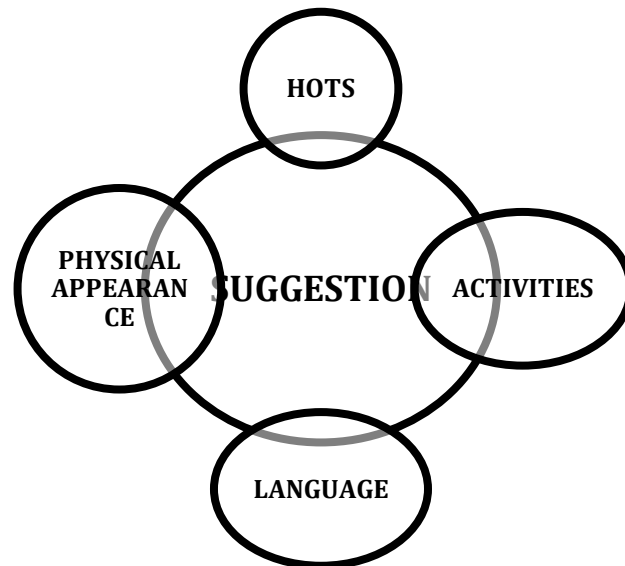


Figure 5: Suggestions on Islamic Education Textbook to inculcate students' Aqidah

Islamic education textbooks should focus on developing the best and most informative content and consider simple language suitable for the learners. The content analysis shows no pictures, dictionaries, vocabulary for Islamic terms, essential messages, or notes to make the book more exciting and motivating. Specific terms originated from Arabic that cannot be translated into English. For example, fitrah, wudu', zakat, and hajj were maintained in Arabic and were not translated. Translating wudu' into ablution, zakat into a gift, and hajj into pilgrimage does not give the real meaning of the word as conceptualized in Islam. Hence, these words should be maintained and written as they are in Arabic.

Spiritual aspects, critical thinking, moral values, and ethics cannot be achieved only by reading the text. There must be practical work, activities, or additional information provided. This is important because, with appropriate actions, teachers can holistically teach students to understand the Aqidah. In addition, textbooks should include higher-order thinking skills (HOTS) questions to develop inquiry skills and encourage students to act and reflect on their roles as the vicegerent of Allah. HOTS help students to become creative and critical in their evaluation, especially regarding faith.

In terms of physical appearance, no pictures accompanied the content. The need to use illustrations and photographs, either cartoon or real, is encouraged to make understanding the content more accessible. If reading is provided with a related picture, students can easily comprehend the meaning of the text. In addition, bringing real photos to highlight the Islamic concept might help students assimilate the situation successfully. This study proposes that incorporating more visuals in the textbook can enhance the realism of the content, while vocabulary can help students better comprehend the context.

It can be concluded that people need Islam to recognize their Creator and seek guidance in navigating the realities of life. Textbooks play a significant role as a medium for teaching and learning, especially in Aqidah. Supposed that the textbook is presented in an exciting and effective form, it will help teachers to facilitate teaching sessions and, at the same time, increase students' understanding and appreciation of Aqidah. This will make them be the best believers as desired in the teaching of Islamic Education.

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A CRITICAL EXAMINATION OF THE PHILOSOPHY OF SCIENCE FROM WESTERN AND ISLAMIC PERSPECTIVES

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Abstract. This research discusses the philosophy of science from a Western and Islamic perspective. Philosophy of science is a branch of philosophy that discusses the fundamental characteristics of science systematically. In the study of philosophy of science, there are two most prominent camps, namely Western philosophy of science and Islamic philosophy of science. Both have their own backgrounds, perspectives and characteristics. From here, this research intends to re-examine Western philosophy of science and Islamic philosophy of science critically and comprehensively, to produce a complete understanding by looking at the results of analyzing the similarities and differences between Western and Islamic philosophy of science. This study uses a qualitative research method with a literature study approach to collect theories from various sources that are related and can be used to solve research problems. Through literature study, data collection in this study is carried out by examining various books, literature, reports and notes relevant to the philosophy of science in Western and Islamic views. From this research, it is found that in both Western and Islamic philosophy of science, there is a deep concern for the search for truth, the use of reason, scientific research methodology, the concept of causality, and the relationship between religion and science. Western philosophy of science and Islamic philosophy of science have significant differences in various aspects, including the foundations of epistemology, theology, approaches to science, and cultural influences.

Keywords: *Philosophy; Science; Western Islamic*

A. INTRODUCTION

One thing that distinguishes humans from other creatures is reason, with reason will generate a science. The progress of science is a benchmark for evaluating human civilization in every era. The increase in science is a sign of human development. For further progress, science is separated into several disciplines, each of which requires unique methods, characteristics, subjects, goals, and measures. The growth of these various disciplines is based on the philosophy of the objects of scientific research, which have many complex qualities and diverse interpretations for those who try to investigate the meaning of these objects of research (Umar, 2018, p. 70).

Several Muslim and Western philosophers actively participated in this discourse on discipline by gathering factual information and determining which ones would produce certain ideas, issues and approaches. Several different viewpoints on knowledge seek to break down the ideologies involved. Science was created in the past as a result of specific tangible forms (Soelaiman, 2019, p. 35).

In modern times, man is called the rational animal. This is based on the human mind being given freedom from the shackles of religion. The human mind has begun to develop to give birth to a more advanced civilization. During the modern period, philosophers paid attention to the real thing. From this, Western philosophy was born (Widyawati, 2013, p. 87).

Meanwhile, the development of Islamic philosophy is an integral part of the long history of Islamic thought. One of the reasons for the misconception that Islamic philosophy is exclusively of Greek origin or the anti-philosophy sentiment that exists in certain Muslim communities is the lack of research. Many people recognize that the influence of Greek philosophical ideas on Islamic thought has influenced the development of Islamic philosophy (Wahyuni, 2021, p. 82).

Departing from this background, the author is interested in reviewing and comprehensively examining the nature of the philosophy of science, the philosophy of science from a Western perspective and also the Philosophy of Science from an Islamic perspective. It is hoped that the preparation of this paper can add to the treasury of integration-based philosophy of science that is beneficial for the life of the country, nation and religion.

B. METHODS

The study uses a qualitative research method with a literature study approach, where this research covers theories related to the research problem. Literature study is an approach that aims to collect data by examining various literature studies, books, notes, reports that are relevant to the problem being studied (Irawan & Mutmainah, 2022, p. 101). Therefore, in the preparation of this article, researchers collected data obtained from the results of searching and reviewing articles, books, journals and other literature related to the philosophy of science in western and Islamic perspectives without conducting reviews or field research.

Rizaldy Fatha Pringgar and Bambang Sujatmiko said that literature review is a study that provides new theories using accurate data collection techniques (Fatha Pringgar & Sujatmiko, 2020, p. 319). As for data collection techniques, researchers use documentation techniques. The data used in this study is secondary, namely data generated by examining objects that are indirectly related.

These secondary data related to the philosophy of science from a Western and Islamic perspective can be accounted for because after the data is collected, then the researcher analyzes it using descriptive qualitative analysis. The results of the analysis are in the form of descriptive written sentences and observations from the results of research that has been conducted by previous researchers. In data processing, at least researchers go through 4 stages, namely:

Collecting Data

At this stage, researchers collect data related to the philosophy of science in Western and Islamic views from various literatures to obtain the information needed for research purposes.

Reducing Data

After the data is collected, the researcher then analyzes, selects the data and then separates the data from the data that is not needed. Then the data is categorized in such a way as to facilitate further data processing.

Presenting Data

After the data is reduced, the researcher presents the data in the form of exposure to patterns that are useful for research and conclusions from possible data. Researchers recorded secondary data until several general conclusions were obtained regarding the philosophy of science from a Western and Islamic perspective.

Verifying Data.

This stage is the stage of concluding new findings that have not existed before. Analysis is

carried out by producing general conclusions that lead to specific conclusions. This is done in order to identify comparisons and differences between this research and previous research.

C. RESULT & DISCUSSION

The Essence of Philosophy of Science

The term "philosophy" comes from the ancient Greek word "philosophia", which consists of the words "philo" and "sophia". The word "philo" denotes the concept of love, while "sophia" refers to the implied message or truth. According to I.R. Pudjawijatna, the term "philo" encompasses a comprehensive notion of love, which involves a strong desire for something and an effort to obtain it. On the other hand, "sophia" is associated with intellectual acumen and deep understanding. The significance of philosophy lies in its potential to be interpreted as an implicit expression of love or as a fundamental truth relating to love. Therefore, philosophy can be characterized as an effort and a deep desire for comprehensive understanding or a loving devotion to wisdom (Ritaudin, 2015, p. 129).

Gazalba in Setya Widyawati argues that philosophizing is the search for truth from truth to truth about all issues through systematic, radical, and broad thinking. Narratives and descriptions that are built from a thought are called philosophy. Starting from the verb "philosophize", a noun emerges, namely philosophy, which is defined as a system of truth about everything in question as a product of a radical, systematic and universal thinking process (Widyawati, 2018, p. 4).

Thus, philosophizing is a thinking activity, but not all thinking activities are philosophical activities. Gazalba in Setya Widyawati further explains the characteristics of thinking patterns that can be said to be philosophical, among others: (Widyawati, 2018, p. 4)

- a. Radical, means thinking deeply to the roots and to the ultimate consequences. Thinking radically means thinking all the way to the end without stopping halfway.
- b. Systematic, means systematic thinking is logical thinking that takes place responsibly with an orderly reciprocal relationship, step by step consciously.
- c. Universal, meaning thinking in a general and comprehensive manner. limited to a few areas but encompassing the whole.

Philosophy is the study of how to address life's difficulties wisely and how to lead humans through mental processes to solve these problems. Philosophy is a way of thinking that guides people to develop wisdom in facing life's challenges. As a result, philosophy can help people find solutions to unresolved problems in everyday life (Efendi & Sartika, 2019, p. 2).

The etymology of the name "Science" can be traced back to the Arabic phrase "alima-ya'lamu-ilman" which denotes the act of understanding or comprehending. In the field of English literature, it is generally stated that the term "science" comes from Latin, specifically from the words "scientia" (which means knowledge) and "scire" (which means knowing). According to the Kamus Besar Bahasa Indonesia, science is characterized as a discipline that is systematically arranged through a rigorous methodology and has the ability to explain certain symptoms in the field of knowledge (Siti Fatimah, 2022, p. 1155).

Alfensyef, a prominent Russian intellectual, argued that science encompasses a comprehensive compilation of human knowledge relating to nature, society and the human mind. Science serves as a reflective tool for understanding the natural world, using a systematic methodology to investigate its concepts, theories, and empirical manifestations. According to Harre, the concept of science includes a compilation of empirically verified hypotheses that explain consistent or inconsistent patterns of carefully investigated data or facts (Tamrin, 2019, p. 73).

Philosophy of science is concerned with the philosophical study of scientific problems. Disciplines concerned with the critical examination and contemplation of fundamental concepts are

usually referred to as philosophy. The field of philosophy of science therefore entails a comprehensive examination of the fundamental principles and conceptions underlying scientific studies. In the field of science, such principles can be defined as the essential factors and universally applicable truths that serve as the foundation for a particular discipline (Widyawati, 2018, p. 8).

Philosophy of Science Western Perspective

1. A Brief History of Western Philosophy of Science

Philosophy of Science began to develop in the Western world three centuries ago. Motivated by their situation and conditions at that time. The West paid great attention to the study of philosophy of science. The West experienced a great and great revolution regarding freedom of expression in everything that resulted in changes in their mindset. Coupled with their pluralist mindset, where this patterned thinking requires diverse understanding and knowledge from the community. This has led them to the gates of a rich and extraordinary knowledge. They were able to get out of intellectual trauma (Oesman, 1996, p. 100).

The development of philosophy of science over a period of time is closely linked to the broader development of philosophy as a discipline. There are clear differences in the paradigm of philosophical development between the West and Islam, which have the potential to show contrasting characteristics. According to Rasel in Rian Rokhmad Hidayat et al (2021) the period of western philosophy is divided into three periods, namely: 1) Ancient philosophy, which consists of: pre-Socratic era, the age of Socrates, Plato and Aristotle and post-Aristotelian times; 2) Catholic philosophy, which consists of: the age of the fathers, the age of medieval philosophers; 3) Modern Philosophy (Hidayat et al., 2021, p. 127). Each historical era shows different perspectives and characteristics in reviewing an object of life that builds on the previous era. Each era also produces significant scientific ideas that have value and can serve as the foundation for human existence.

2. Definition of Western philosophy of science

Darwis A. Soelaiman suggests that philosophy is divided into two aspects of understanding, namely: general philosophy and special philosophy. General philosophy is a philosophical study that discusses all the realities that exist in the universe in order to find the ultimate truth of these realities. Meanwhile, special philosophy is a philosophical study that is applied to certain fields of science as a philosophical basis, such as the philosophy of economics, philosophy of physics, philosophy of education and others (Soelaiman, 2019, p. 6).

Here are opinions of Western experts regarding the definition of philosophy of science: Cornelli Benjamin, argues that philosophy of science is a branch of philosophy that examines systematically the fundamental characteristics of science, especially concepts, methods, conjectures, and their location in the general frame and branches of science systematically (Soelaiman, 2019, p. 30).

The Liang Gie, states that the philosophy of science is the scope of all deliberate thinking about problems related to the theoretical basis of science and the interaction between science and all aspects of human life (Gie, 1997, p. 61).

Jujun S. Suriasumatri, says that philosophy of science is a branch of philosophy that focuses on the nature of science and seeks to provide answers to questions about the nature of science, including ontological, epistemological, and axiological questions (Suriasumantri, 1996, p. 33).

May Brodbeck, says that philosophy of science is the basics of science analyzed, described, and explained in an ethically and philosophically neutral way (Umar, 2018, p. 167).

From some of the definitions above, it can be concluded that the philosophy of science is an effort to critically examine the methods used in a particular science.

3. Position of Western Philosophy of Science

Historically, the position of philosophy and science is difficult to separate respectively because of the view of philosophy as the parent of all existing sciences. But in its development, philosophy and science need to be distinguished from the aspect of its definition. The dichotomy of philosophy and science is not necessarily an attempt to shift the existence of philosophy as the parent of all sciences, but aims to reveal the existence of each of philosophy and science (Umar, 2018, p. 164).

Philosophy offers enlightenment or deep and significant solutions to these problems. Another point of view states that historically philosophy is considered the mother of science. As it developed, science became more specialized and independent. Philosophy has replaced science as the foundation for addressing many of life's problems. Science does not regard philosophy as lacking in intellectual rigor and likewise, philosophy does not regard science as having a superficial understanding of the natural world. Hence, philosophy of science can be considered as an endeavor that aims to reconcile the gap that exists between the worlds of philosophy and science. The process or interaction mentioned above pertains to the discipline known as the philosophy of science (Nurhayati et al., 2021, pp. 346–347).

4. Scope of Western Philosophy of Science

Philosophy of science includes philosophical thinking related to science. The discipline of philosophy of science can be conceptualized as a scientific endeavor that aims to investigate and analyze various aspects related to science. These aspects include the nature and characteristics of science, the methodology used to acquire it, and the practical advantages it offers in the context of everyday life. Philosophy of science is inherently linked to the basic principles of philosophy, such as: ontology, epistemology, and axiology (Nurhayati et al., 2021, p. 347).

Ontology, a branch of philosophy of science that deals with the problems being studied by a science. Epistemology, is a branch of philosophy of science that discusses various sources and methods of science to arrive at scientific truth.

Axiology, is a branch of philosophy of science that deals with questions about how humans use their knowledge (Mariyah et al., 2021, p. 276).

5. Benefits of Western Philosophy of Science

When considering the nature of philosophy and science, studying the philosophy of science will have many benefits, including (Soelaiman, 2019, pp. 32–33):

Train to think logically and critically about the truth.

By studying the philosophy of science, a person will have critical thinking about the theory and science he is studying. He does not easily believe and swallow a theory or idea raw, but examines it carefully. This is what is called a critical attitude that needs to be developed as a way and pattern of life.

Increase awareness of the nature of science.

Philosophy of science will lead a person to an understanding of the concepts, methods and procedures of science. Knowledge of this is very important and necessary, especially in conducting scientific research. Where the research requires the ability to analyze and explain the relationship between one phenomenon and another until a result is obtained in the form of a solution in solving a particular problem.

Realizing the importance of the role of ethics in developing science and technology.

Apart from being a provider of satisfaction for human curiosity, the presence of science and technology also contributes to solving problems that arise in human life and how to survive properly and correctly. Problems such as underdevelopment, poverty, disease, ignorance and so on can be overcome with the development of science and technology but by still paying attention to

the role of ethics in it so that its application is fit for purpose and controlled.

Philosophy of Science from an Islamic Perspective

1. A Brief History of Islamic Philosophy of Science

The beginning of the history of philosophy can be traced back in the coastal areas of the Eastern Mediterranean Ocean around the 6th century BC. In his exposition, Majid Fakhriy in Wahyu Rinjani et al (2021) explains the origins of philosophy by highlighting its inherent role in answering questions related to the human condition, nature, and divinity. Philosophy has the capacity to give birth to disciplines, such as ethics, mathematics, and metaphysics, which serve as the basic pillars of global civilization. When examining the relationship between philosophy and Islamic law, the main focus lies in the realm of divinity, specifically the exploration of God's provisions for His servants (Rinjani et al., 2023, pp. 62–63).

According to Al-Farabi's Tahshil as-Sa'adah, the origins of philosophy can be traced back to Keldania (Babylon), then spread to Egypt, Greece, Suryani, and finally reached Arabia. The discipline of philosophy experienced a significant shift to the Arab region after the advent of Islam. Hence, the philosophical tradition that migrated to the Arab region is generally referred to as Islamic philosophy. Historians have different perspectives on the nomenclature of the philosophical tradition that migrated to the Arab region. However, the majority of scholars agree that the philosophical tradition that experienced significant development is called Islamic philosophy (Al-Ahwani, 1995, p. 2).

The process of translating especially Greek philosophical works was carried out during the caliphate of Abd al-Malik, and reached its peak during the caliphate of al-Makmum in 215 CE. The translators undertook the task of translating a large amount of Greek philosophy, especially the works of three leading thinkers: Plato, Aristotle, and Neo-Platonism. These translated texts exerted a significant influence on several Islamic intellectuals, ultimately serving as a catalyst for the emergence of Muslim philosophers who laid the foundation for the development of Islamic philosophy (Astuti et al., 2022, p. 275).

The emergence of Islamic philosophy led to mixed reactions from various groups. Some who oppose it believe that the study of philosophy will diminish Muslims' respect for the teachings of their religion. On the contrary, those who embraced it argued that philosophy could help in explaining the teachings of the Qur'an by providing information that was in tune with human reasoning. Islamic philosophy experienced fluctuations during its development, as demonstrated by the emergence of prominent Islamic thinkers such as al-Kindi and al-Razi in 806 AD. However, this period was also characterized by opposition from Imam Ibn Hanbal in 840 AD. The revival of philosophical thought in 870 AD was mainly led by al-Farabi and Ibn Sina. However, this intellectual progress suffered a setback in 1058 AD due to the opposition led by Al-Ghazali, which resulted in the decline of philosophical activities. It was not until 1153 AD that a new integration between philosophy and Sufism emerged, facilitated by Subrawardi and Ibn Arabi (Astuti et al., 2022, p. 275).

2. Definition of Islamic Philosophy of Science

From an Islamic perspective, philosophy is a means of explaining the way Allah conveys the truth, or haq, through rational language (Masang, 2020, p. 42). The philosophy of science according to some Islamic figures as follows.

According to Al-Kindi, Philosophy is a knowledge that includes understanding the nature of things (events, problems, etc.) within the limits of human possibility.

According to Ibn Sina, Philosophy includes the refinement of the human spirit by conceptualizing phenomena and evaluating theoretical and practical truths, while recognizing the inherent limitations of human capacity (Qadir, 2002, p. 8).

In ancient times, philosophy in the Muslim community was a story of progress and growth of the spirit. The principles discussed above also apply to Islamic science. In Islamic science, the Qur'an asserts that all natural phenomena are manifestations of God's guidance. This perspective is recognized by Rosental, who states that the purpose of philosophy in Islam is to establish the truth of revelation as God's law, while recognizing the limitations of reason in understanding God's nature. Furthermore, the aim of Islamic philosophy is to affirm that revelation does not contradict reason (Qadir, 2002, p. ix).

When studying and comparing Islamic philosophy with general philosophy, it is certain that Islamic philosophy has different characteristics, even though both have the same subject matter or object. The reason is because Islamic philosophy is influenced and limited by Islamic principles and values. Islamic philosophy is informed by the teachings of Islam. Based on the description above, it can be concluded that Islamic philosophy is a product of radical, systematic, and universal human contemplation about the essence of God, the universe, and humans based on Islamic teachings (Masang, 2020, p. 42).

Islamic philosophy shows a harmonious relationship between reason and revelation, and between vision and reasoning. Islamic philosophy is a storehouse of knowledge based on rational reasoning, ultimately leading to illumination. Illumination is a state that certainly cannot be separated from the sacred (Masang, 2020, p. 41).

3. Position of Islamic Philosophy of Science

The position of Islamic philosophy has fluctuated in terms of its development and condemnation, generating considerable interest in scientific discourse. Some scholars claim that Islam and philosophy are fundamentally incompatible and that integration of these two disciplines is unachievable. Al-Kindi, Al-Farabi, Ibn Sina, and Ibn Rushd were prominent scholars who attempted to unify and harmonize the two concepts. Al-Kindi stated that the fundamental purpose of philosophy lies in explaining the intrinsic nature of phenomena by elucidating their underlying causes. Al-Kindi established the relationship between philosophy and religion (Islam) by stating that philosophy serves as a discipline concerned with the pursuit of truth, while religion serves as a domain dedicated to the study of truth. Al-Farabi, on the other hand, demonstrated the capacity to establish a link between classical Greek political philosophy and Islam, interpreted in the light of revealed religions. Ibn Sina put forward the idea that the universe was created by God through a process of emanation. The viewpoints expressed by these philosophers show a significant correlation between philosophy and Islam. The religion of Islam shows a strong and harmonious compatibility with scientific principles (Fitrian et al., 2023, p. 258).

The position of philosophy of science in an Islamic perspective is as a medium to perfect the understanding of the truth that humans want to achieve. So that it comes to the point where the position and function of religion is strengthened not just a formal ritual, but as a final peak of human discovery of the truth (Zubair, 1997, p. 43).

The position of Islamic philosophy differs significantly from the conceptual framework of Jewish philosophy. The existence of Islamic philosophy can be attributed to the efforts of Muslim philosophers who have played an important role in maintaining its various perspectives. Islamic philosophy has exerted a significant influence on diverse customs, cultures, and civilizations all over. This indicates that philosophy in Islam has taken its rightful place, without any inherent contradiction to the core teachings of Islam. On the contrary, an examination of the Qur'anic verses reveals Allah's commands to engage in philosophical contemplation and reasoning (Masang, 2020, p. 41).

4. Scope of Islamic Philosophy of Science

Islamic philosophy encompasses a wide range of disciplines, including: logic, physics,

mathematics, and metaphysics. During the classical period, one was not considered a philosopher unless they demonstrated mastery over the various disciplines of philosophy. One example is Ibn Sina, a prominent philosopher who wrote a philosophical treatise known as "ash-Shifā'." This work is often regarded as his most important contribution. In addition, Ibn Sina also wrote works on various other disciplines, such as: metaphysics, logic, mathematics, and physics. This shows how broad the scope of Islamic philosophy was during the classical period (Mustofa, 2004, pp. 188–213).

The domain and scope of Islamic philosophy includes discussing the nature of all that exists as a whole, from the ontological and metaphysical realms to the empirical realm. Similar to the scope of philosophy in general, Islamic philosophy also examines topics such as epistemology, logic, ethics, and aesthetics. Furthermore, Islamic philosophy is also involved in the study of fundamental themes in human life, including: God, man, nature, and culture. These themes are harmonized with the evolving trends of society and the prevailing spirit of the times (Asy'arie, 1999, p. 29).

Therefore, the object of Islamic philosophy is basically indistinguishable from the subject matter of philosophy in general. This object of philosophy has the potential not to change from time to time. However, the formal object of study, which includes elements such as style, nature, and dimensions that become the emphasis or focus of study, can change and adjust to the development of the context of human life and civilization (Asy'arie, 1999, p. 30).

5. Benefits of Islamic Philosophy of Science

Ahmad Tafsir argues that the study of philosophy includes at least three different purposes and uses (Tafsir, 1997, pp. 41–44):

Philosophy as a compilation of a set of theories. In this scenario, philosophy serves as a foundation that can be used to strengthen or refute ideas proposed by others with the aim of beautifying and advancing world civilization. For example, for one to effectively critique various cultures, traditions, political systems, and global economic structures, it is imperative to first understand the philosophical conceptions underlying these constructs.

Philosophy as a way of life. In this scenario, the discipline of philosophy is implemented as religious teachings. Philosophical theories are used as perspectives and guiding principles in the implementation and application of daily activities. As a result, not a few parties believe that philosophy is able to make humans act wisely.

Philosophy as a problem-solving method. Solving and finding a solution to a problem is not easy. For example, there are rampant cases of theft in a housing complex. In general, people will reactively propose night patrol activities to overcome it. In fact, this solution is not able to solve the problem completely. It is different with people who solve problems with a philosophical approach. He will first analyze the problem in detail, and then he will formulate the right solution based on the root of the problem he found.

In fact, in addition to the three purposes and uses mentioned above, the study of philosophy also provides many additional benefits. Philosophy as the parent or root of all science, has a significant value in Islam as a source of knowledge while still recognizing the importance of the existence of revelation. As stated by Verhaak in Mohammad Ridwan and Muhyar Fanani (2023) added several benefits of studying philosophy of science, especially in understanding Islamic sciences, including (Ridwan & Fanani, 2023, pp. 6–7):

Accustom yourself to think logically and rationally in your opinions and arguments.

Develop a spirit of tolerance in every difference of view (plurality), because philosophers never have one opinion, both in content, formulation of problems and preparation of answers.

Teaches us how to think carefully and tirelessly.

1. Analysis of the Philosophy of Science from a Western Perspective

Philosophizing means discussing everything thoroughly and also deeply, because the purpose of philosophizing itself is to find the real truth. This is written in Darwis A. Soelaiman's book entitled "Philosophy of Science in Western and Islamic Perspectives", he reveals that philosophy is a science that discusses everything that exists thoroughly, deeply and also systematically in order to find the ultimate truth (Masang, 2020, pp. 30–55)

Philosophy of science is a sub-system of philosophy that still holds a mystery regarding its meaning that is not easily understood. This is what makes philosophy of science a matter of concern by some of the scientific elite. Each of them has a different point of view, giving rise to diverse perspectives of understanding. Not only in the redaction, but also in the substance of the problem.

From the presentation of the results regarding the definition of philosophy of science from a Western perspective above, several important points can be taken and understood. First, philosophy of science is a methodical scientific procedure used by philosophers or researchers to identify and categorize certain objects of knowledge. This is in line with the view of Nurhayati et al, who state that the philosophy of science is a process of critical analysis of the basic concepts of science to obtain validity so that a solid foundation is obtained (Nurhayati et al., 2021, p. 353).

Second, although the definition of the philosophy of science is different, it basically refers to the same thing, namely the philosophy of science is a form of human endeavor. This point reinforces the opinion expressed by Paham Ginting & Syafrizal Helmi that philosophy is a process, not a product. Where philosophy will change continuously until a certain point (Ginting & Situmorang, 2008, p. 2).

Third, understanding the difference between philosophy and science is very important to emphasize the concept of philosophy of science and to explain the point of view of philosophy of science. As explained by Nurhayati et al also, that the difference between philosophy and science lies in its emphasis. Where science focuses on studying a limited field by using a descriptive and analytical approach and using experiments, observations and data classification. As for philosophy, it focuses on studying experience as a whole and is inclusive, synthesizing and synoptic and even if it is analytical, the analysis enters the dimensions of life as a whole (Nurhayati et al., 2021, p. 353).

Fourth, as more and more problems in everyday life arise that cannot be solved by science alone, philosophy is forced to step forward and become the basis for solutions. As Setya Widyawati explains, philosophy provides a comprehensive and transformative explanation or resolution to these confusions. In the current context, the progress of science continues to evolve within set parameters, despite facing substantial scrutiny and criticism. The field of philosophy of science seeks to establish a harmonious relationship between philosophy and science, ensuring that neither discipline undermines the other (Widyawati, 2013, p. 93).

Fifthly, regarding truth, Abu Tamrin states that the truth obtained through science and philosophy is not multiform, but relative (Tamrin, 2019, p. 94). So, rather than taking the existence of science as a given, it is important to critique and examine it in order to place it appropriately within its boundaries. In addition, it is crucial to maintain a persistent effort to view science as an important component that coexists and collaborates with the various dimensions and disciplines involved in the formation and advancement of human civilization. This approach can effectively prevent the tendency to over-prioritize science and regard it as an exclusive source of truth.

Sixth, in this case, the philosophy of science will provide a new perspective on what the true nature of science is. This is because according to Setya Widyawati, philosophy of science is a study and reflection on science, so it is needed to combat the threats that result in the scattered condition of science (Widyawati, 2013, p. 93). In addition, by understanding the fundamentals, contexts, and relationships associated with scientific activities, the current growth of science can be kept in

balance.

Analysis of Islamic Philosophy of Science

As for the philosophy of science in the Islamic world, it has not received full attention. In fact, through the development of the framework of Islamic philosophy of science, it can be used as an effective solution in saving Muslims from the great currents under the control of the rapidly growing Western philosophy of science. Amrullah Achmad argues that Muslim scholars have a task that needs immediate handling, namely developing the study of Islamic philosophy of science. This philosophy of science is essentially able to lead Muslims from the classical period to a scientific and cultural civilization that is applicable but not dichotomous (Agus Toni, 2015, pp. 20–21).

Many think that Islamic Philosophy was influenced by the translators of Classical Greek works, such as Plato, Aristotle and so on. Although Greek philosophy influenced Islamic philosophy, Islamic philosophy is not only based on Greek philosophy. The accusations made by Ernest Renan and Pierre Duham who said that Islamic philosophy is only the result of copy and paste of Greek works translated into Arabic. However, this is not accepted by Oliver Leaman et al. They say that the teacher does not have to show similarities, because each thought does have its own cultural background. Hence the need for the development of Islamic philosophy itself (Wahyuni, 2021, p. 83).

From the above statement, an understanding can be taken that Islamic philosophy is not based on Greek philosophy which entered the Islamic scientific tradition through the process of translating Greek books, but Islamic philosophy is the development of Islamic treasures themselves because of a need in it.

Philosophy first appeared in Babylon, which then spread to Egypt, Greece, and arrived in Arabia. The arrival of Philosophy in Arabia is what is said to be Islamic philosophy. This statement is explained by Al-Farabi in his book *Tahshil as-Sa'adah* (Al-Ahwani, 1995, p. 2).

Azis Masang views that Western philosophy and Islam have similarities, both of which discuss truth. However, philosophy in the Islamic context has its own characteristics, although the object is the same, but philosophy in the Islamic context is bound by Islamic norms and Islamic religious guidelines (Masang, 2020, p. 49). From the explanation above, it can be concluded that Islamic philosophy is the result of radical, systematic, and universal human thought in which it discusses the nature of God, the universe and humans based on the teachings and guidelines of Islam.

Azis Masang also explains several things that are factors in the existence of Islamic philosophy in the world, namely (Masang, 2020, p. 49):

Encouragement of Islamic teachings

Islam is a religion or teaching that consistently encourages its followers to pursue knowledge. As a religion of praise and honor, Islam treats scientists very well. The Qur'an and Sunnah encourage Muslims to advance their knowledge and elevate their status.

Factors of division among Muslims

Political differences were the first thing that caused divisions in our world, these differences of opinion then spilled over into other areas such as religion. This happened after the time of Uthman bin Affan Muslims used logic and ancient scholarship, especially Greek and Persian reasoning to defend their position and refute the arguments of their opponents. After that, they developed what is now known as Islamic philosophy.

Islamic Da'wah Factors

Islam requires its adherents to spread the teachings of the religion to others. Efforts to invite people to convert to Islam, one of which is by conveying to them rational arguments. So that the followers of Islam can accept Islam also rationally.

Factors Facing the challenges of the times

With the development of the times, thinking about Islam is also growing. With the development of thoughts each individual must create different thoughts, therefore we need Philosophy to find the truth of each person's thoughts.

Influence of other cultures

The influence of other cultures that enter Islam, then the need for philosophy here. With the aim that incoming foreign cultures are not accepted raw by Islamic teachings.

Ziauddin Sardar, he mentions that Islamic philosophy of science has nine basic characteristics that Western philosophy of science does not have, including (Ziauddin, 1993, pp. 44-45). Based on absolute guidelines and frameworks

- a. Although the guiding framework is absolute, Islamic epistemology is active
- b. Judges objectivity as a general rather than personal issue
- c. The majority is deductive
- d. Compromises knowledge with Islamic values
- e. Values knowledge as something that is inclusive, not exclusive
- f. Attempts to organize subjective experience and search for its basic value commitments.
- g. Bringing together concepts from different levels of subjective experience or consciousness, so that concepts that are appropriate at one level do not have to be appropriate at another.
- h. Does not contradict the holistic perspective, but integrates with human experience and knowledge.

Based on the nine basic characteristics above, it is understood that the most striking difference between Islamic philosophy of science and Western philosophy of science lies in the theological foundation in the form of an absolute guiding framework. Therefore, the essence of Islamic philosophy of science has advocated various ways to study nature and emphasize experience and reality in totality, so that knowledge can be obtained through reason, revelation, observation, research, theoretical speculation, tradition and intuition. In other words, Islamic philosophy of science is a flexible tool for obtaining various sciences, both those based on empirical data, through speculative approaches and those derived from revelation (Al-Qur'an and Hadith).

With the existence of Islamic Philosophy, Muslims will avoid all things that are still in doubt. With philosophy, Muslims can find the truth about things or problems that are happening. This is also expressed by Hasan, he revealed that the existence of Islamic philosophy will be able to 1) show the problems being faced, 2) provide a certain view of God and humans, 3) seek the truth about a matter that has not been solved. Problem (Basri, 2006, pp. 1-11).

Analysis of Similarities and Differences in Philosophy of Science from Western and Islamic Perspectives

In this regard, it is important to remember that Western philosophy of science and Islamic philosophy of science have different cultural backgrounds, histories and traditions. While there are similarities in some aspects, there are also differences in their approaches and focus. Western philosophy of science and Islamic philosophy of science have much in common, especially in their frameworks of thinking about science, knowledge and epistemology. Both seek to understand the nature of knowledge, the scientific method, and the relationship between humans and nature. Some of the fundamental similarities between the two are:

- a. The Search for Truth

In both Western philosophy of science and Islamic philosophy of science, there is a deep concern for the search for truth. Both seek to understand the universe, knowledge, and reality in depth.

b. Use of Reason

The primary source of knowledge in both traditions is reason. Both Western and Islamic traditions value the ability of human rationality to understand the world and reach the truth.

c. Research Methodology

In both Western and Islamic philosophies of science, there is attention to the methodology of scientific research. Both support the use of scientific methods to understand the world and develop knowledge.

d. The Concept of Causality

Both recognize the concept of causality, which is the idea that every event has a cause that can be understood and explained.

e. The Relationship between Religion and Science

Islamic philosophy of science often discusses the relationship between religion and science. This is similar to some discussions in Western philosophy of science about the relationship between religion and science.

However, there are also significant differences between the two. Western philosophy of science tends to focus more on rational thinking and scientific methods based on observation and experimentation. Meanwhile, Islamic philosophy of science includes a stronger spiritual and theological dimension, with an emphasis on understanding the universe in the context of Islamic religious beliefs. Western philosophy of science and Islamic philosophy of science differ significantly in many aspects, including epistemological foundations, theology, approach to science, and cultural influences. Here are some key differences between the two:

Aspect	Differences in Philosophy of Science	
	West	Islamic
Basic Epistemology	It is based more on the classical Greek philosophical tradition, such as Aristotle and Plato. Western philosophy of science emphasizes empirical scientific methods and rational thinking as the primary way to understand the world.	It is more related to the Islamic intellectual tradition and Islamic theology. Islamic philosophy of science often includes elements of theology and religion in the understanding of science.
approach to religion	Tends to separate religion and science, encouraging a secular understanding of science and philosophy of science.	They often include elements of theology and religion in their thinking. The understanding of Islam and religion becomes an integral part of Islamic philosophy of science.
Source of Authority	More likely to rely on empirical scientific methods and rational authority in the development of scientific thought.	Sources of authority include the Qur'an, Hadith, and the thought of Islamic scholars, in addition to the scientific method and rationality.
Framework of Thought	More often focused on questions of scientific method, empiricism, positivism and epistemology in science.	It tends to include questions about how science relates to Islamic teachings, how it can reflect the God-given order of the universe, and its ethical implications.
Cultural Influences	It was formed in the context of Western culture with influences from classical	It developed in an Islamic cultural context that involved

Greek philosophy and the European Renaissance, and developed under the influence of Christianity, the Enlightenment, and the scientific revolution.	heavy influence from Aristotle's thought, Neoplatonism, and Persian and Greek philosophical thought translated into Arabic during the Middle Ages.
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These differences create different frameworks in Western and Islamic philosophy of science. Although both seek to understand the universe and knowledge, their approaches, epistemological foundations, and intellectual focus can be very different. It is important to understand these differences in order to appreciate the diversity in philosophy of science thinking around the world.

D. CONCLUSION

The philosophy of science is concerned with the philosophical study of scientific problems. Western Philosophy of Science is a branch of philosophy that systematically examines the fundamental characteristics of science, especially its concepts, methods, conjectures, and location within the general framework and branches of science systematically. Islamic philosophy can be interpreted as an activity of thought that is Islamic in nature. The object discussed in Islamic philosophy is in the context of Islamic principles. Western philosophy of science and Islamic philosophy of science have many similarities, especially in their framework of thinking about science, knowledge, and epistemology. However, there are also significant differences between the two. Western philosophy of science tends to focus more on rational thinking and scientific methods based on observation and experimentation. Meanwhile, Islamic philosophy of science includes a stronger spiritual and theological dimension, with an emphasis on understanding the universe in the context of Islamic religious beliefs. It is hoped that this article can add insight into the scientific treasure for the community in general and academics in particular. In addition, it motivates further researchers to study it more comprehensively.

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A NEW PARADIGM OF ISLAMIC EDUCATION ON LOCAL AND GLOBAL PERSPECTIVE

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Abstract. Problems related to Islamic education still exist for study. Islamic education issues such as lack of competition, dualism of education, quality of learning, and new paradigms or new ideas of Islamic education based on local and global perspectives are very interesting to examine. This study aims to determine local and global perspectives on the paradigm of Islamic education. This research uses qualitative research methods with a literature study approach. Based on the data that the researchers found, the new paradigm of Islamic education is defined as a new idea that continues to be developed through the Islamic education system by collaborating the use of science and technology but cannot be separated from the fundamental concepts, namely the Qur'an and Hadith and related to perspective, the local perspective views that the new paradigm of Islamic education has a positive impact on the development of science, technology and also the character of students, while the global (western) perspective states that Islamic education must continue to improve and improve the existing education system for the advancement of Islamic education itself, to achieve the goals of Islamic education.

Keywords: *Paradigm; Islamic Education; Local and Global Perspectives*

A. INTRODUCTION

Problems related to Islamic education are an interesting topic of study. Problems of Islamic education such as new paradigms or new ideas of Islamic education still exist in academic studies (Bashori, 2017). The form of these problems such as the community's perspective on Islamic education is still unable to compete with other general education, as well as the emergence of various new issues related to the weakness of Islamic education such as lack of criticism, curriculum dualism, and declining learning quality (Sholeh, 2020). In this regard, coupled with the development of an increasingly complex era, Islamic education continues to strive to upgrade itself. It is increasingly open to the advancement of science and technology as a means to improve the quality of education, so that the development of Islamic education, also affects the emergence of a new paradigm of Islamic education. The paradigm of Islamic education views the concept of Islamic education design as a whole. In contrast, the new paradigm of Islamic education is a concept of Islamic education that collaborates with the advancement of science and technology, innovation, creativity, and various new ideas and thoughts related to the Islamic education system (Sanaky, 2017). However, the

collaboration with various disciplines does not cause Islamic education to come out of the basic concept of Islamic education, namely the implementation of educational values derived from the Qur'an and Hadith. The implementation of these values in Islamic education is inseparable from the objectives of Islamic education listed in the Qur'an surah (Al-Baqarah: 30)(Bashori, 2017).

﴿وَإِذْ قَالَ رَبُّكَ لِلْمَلٰٓئِكَةِ اِنِّيْ جَاعِلٌ فِى الْاَرْضِ خٰلِٖفَةًۭۙ قَالُوْۤا اَتَجْعَلُ فِیْهَا مَنْ یُّفْسِدُ فِیْهَا وَیَسْفِكُ الدِّمَآءَ وَنَحْنُ نُسَبِّحُ بِحَمْدِكَ وَنُقَدِّسُ لَكَۗ قَالَ اِنِّيْۤ اَعْلَمُ مَا لَا تَعْلَمُوْنَۙ﴾

30. (Remember) when your Lord said to the angels, "I will make caliph) on earth." They said, "Are You going to make people corrupt and shed blood there, while we pray to praise You and purify Your name?" He said, "Verily I know what ye know not."

The verse implicitly states that the true purpose of man's creation is to become a human being who is aware of his duties and responsibilities on earth. From the Islamic perspective, the duty and responsibility of man on earth is to worship Allah Almighty, according to the word of Allah in surah Ad-Dzariyat:56.

﴿وَمَا خَلَقْتُ الْجِنَّ وَالْاِنْسَ اِلَّا لِيَعْبُدُوْنَۙ﴾

It means "I did not create jinns and men except to serve Me" (Q:S Ad-Dzariyat; 56).

Based on the description of the two verses above, Islamic education optimizes all aspects to achieve the goals of Islamic education itself. There are several other specific goals of Islamic education such as becoming a person who believes and is devoted to God Almighty, has a noble character, knowledgeable, physically and spiritually healthy, creative, innovative, independent, and becomes a responsible citizen and balances knowledge of the world and the Hereafter(Nadialista Kurniawan, 2021).

Back again to the new paradigm of Islamic education. The existence of innovation, creativity, and collaboration in science and technology in building education. Given the growing transformation of Islamic education, it will certainly bring up various perspectives, both from local and global circles. Various previous studies such as research conducted by Rangkuti et al on Islamic education and socio-culture (Rangkuti et al., 2021), research conducted by Nur Kholis related to the paradigm of Islamic education in the National Education System (Kholis & Lecturers, 2014), research conducted by Muhaimin et al on the paradigm of Islamic education as an effort to streamline Islamic religious education in schools (Muhaimin, 2012), and several other studies have discussed the new paradigm of Islamic education, but previous research was still limited to definitions and very few studies discussed local and global perspectives on the paradigm of Islamic education. Therefore, this study was made to find out local and global perspectives on the paradigm of Islamic education, what indicators are used as a reference in seeing Islamic education, and whether it will bring up a positive perspective or vice versa. The purpose of this research is as a form of exploration to find out local and global perspectives on the new paradigm of Islamic education so that the information can be used as a basis for continuing to evaluate and improve to improve the quality of Islamic education of course.

B. METHODS

The method used in this study is a qualitative research method, using a literature study approach. According to Denzin and Lincoln, qualitative research is defined as research with a natural background that aims to describe various phenomena that occur, with qualitative methods such as

interviews, observations, and documentation (Sidiq et al., 2019). Literature study is a data collection technique by searching, reading, collecting, and comparing data obtained through various sources such as books and journals where the data has relevance to the problems that the researcher raises (Habsy, 2017). The data is then processed, analyzed, and added a little description. The form of method implementation with this approach is that researchers collect the latest research journals that researchers consider relevant to the data that researchers need. Furthermore, researchers read, analyze, and compare the information presented in the journal which researchers then take to complete and fulfill the research data.

C. RESULTS AND DISCUSSION

1. Definition of a New Paradigm of Islamic Education

Before discussing the new paradigm of Islamic education, it is necessary to first know the definition of the paradigm, the educational paradigm, and then the new paradigm of Islamic education. A paradigm is defined as a method or way of view or method of thinking about a problem (Rosyad & Maarif, 2020). The educational paradigm is defined as a way of asking, answering, and solving problems within the scope or field of education (Simatupang & Yuhertiana, 2021). In another sense, the educational paradigm is defined as a comprehensive view of the education system. Furthermore, related to the understanding of the new paradigm of Islamic education, the new paradigm of Islamic education is interpreted as a concept of new thoughts and ideas that are continuously developed through educational institutions, to balance and catch up in the mastery of science and technology (Mahfud, 1970). The concept of the paradigm of Islamic education is inseparable from the basic concept, which is sourced from the Qur'an and Hadith. Islamic education is required to continue to be selective and follow the times so that Islamic education is also an education that is growing and more advanced, of course.

Based on the definition that has been described, it can be concluded that the new paradigm of Islamic education is a new way of looking at various concepts and systems of Islamic education, ranging from the learning system, curriculum, Sarpras, educators, and educators, and various components that make up the education system. Islamic education must be able to transform education towards progress and development. One example of the application of the new paradigm of Islamic education can be seen in the *Islamic Boarding School* (MAN Insan Cendekia) collaborating between Islamic education and general knowledge so that students can collaborate with both disciplines. In Indonesia, there have been many new concepts of Islamic education, just how to manage the education well.

2. Purpose or Orientation of Islamic Education Paradigm

The transformation of the old educational paradigm into a new educational paradigm certainly has an orientation or goal that has been considered. In the paradigm of Islamic education, the new orientation of Islamic education will be described as follows. *First* The transformation of education that tends to be centralized towards decentralized brings benefits to Islamic education which is increasingly diverse and complex. *Second-down* policies become bottom-up, and partial education policies become holistic (Jalal & Supriadi, 2001). *Third* Education was originally designed with the growth of economics, politics, security, and assembly technology towards education that emphasizes unity, humanity and religion, creativity, productivity, and awareness of the law (Sazli Rais, Shopian

Hidayatulloh, 2017). *Fourth* Transformation of value conformism education methodology towards education using the methodology of developing science and utilizing science and technology, Transition of a close, isolationistic educational pattern to an open and flexible educational pattern(Zawawi, 2023). Based on this presentation, the transformation of the old paradigm into a new paradigm of Islamic education is aimed at adapting to the development of the era progress accompanied by optimism to advance Islamic education amid the current globalization and modernization, so that Islamic education can continue to exist and get better of course. With the new paradigm of Islamic education, it will certainly bring up perspectives, both from local and global circles.

3. Local Perspectives on the New Paradigm of Islamic Education

The new paradigm of Islamic education with various updates and innovations certainly raises various perspectives from local circles (communities). The emergence of Islamic education by combining the concept of formal education with pesantren (MAN) makes people fall more in love with Islamic education. Given that in an all-digital era, character education is one of the important considerations of parents in directing the right education for their students. Character education seeks to shape participants to behave by ethical and religious values(Sukma, 2021). In addition, the purpose of character education also forms students to have good morals, morals, and manners (Tsoraya et al., 2023). In this regard, Islamic education offers the right solution to the dilemma felt by parents. Therefore, people's views on Islamic education need to be preserved and developed.

In addition to providing good moral and ethical education, the new transformation of Islamic education that collaborates Islamic-based education with general knowledge can be managed well. Not only superior in the fields of religion, ethics, and morals but academically also not inferior. Based on survey results from several media, it is proven that high school level schools are equivalent to the best value ranking in Indonesia held by MAN Insan Cendekia Serpong. In addition, there is also one of the most famous popes, namely the popes Gontor Darussalam. The two Islamic educational institutions show that the existence of Islamic education has been very developed and advanced.

In addition to reflecting in terms of the learning system, statistics of achievement and value contained in Islamic education, in terms of quantity, Islamic education continues to develop from year to year, starting from madrasah ibtidaiyah, madrasah tsanawiah, madrasah Aliyah, and Islamic boarding schools. Central statistics data shows that in the period 2020 to 2023, there was a very significant increase, in Islamic educational institutions from RA (Rauatul Atfal) to MA (Madrasah Aliyah) increased by 15.8% (Hakim & Khotimah, 2023). Meanwhile, Islamic boarding schools increased by 12,076 institutional units. The percentage increase in Islamic educational institutions over the past three years shows that the community's need for Islamic educational institutions is getting higher, this certainly gives a positive image of Islamic educational institutions themselves.

Based on the explanation above, it can be concluded that local people, especially Indonesian citizens in general, view Islamic educational institutions as a necessity and certainly bring enormous benefits to the benefit and future of their students, so it is not uncommon to see in the field that many parents choose madsaras and ponpes as places to study knowledge.

4. Global Perspective on the New Paradigm of Islamic Education

Islamic education according to an international perspective still needs to improve and continue to upgrade the quality of education. This phenomenon can be seen in the progress of the increasingly advanced Western education system (Sembiring, 2020). This can be observed through various Western education systems adopted by the Islamic education system such as learning methods, facilities and infrastructure, curriculum, and educational facilities (Hasanuddin, 2008). Apart from the education system, judging from the list of the world's best campuses, World University Ranking 2022 shows that the best campus goals 1-5 are still held by international public campuses. Although several international Islamic campuses are included in the world's 500 best campuses, in terms of stratification, the top rank is still held by general international campuses in the Western world.

In addition to the education system, campus, and other aspects of progress, in terms of social aspects, the number of applicants entering public campuses is greater than on Islamic campuses. This phenomenon can be seen from a small example of life, when given a choice between wanting to enter the UIN or UI campus or other overseas campuses, most enthusiasts will choose UI, this can be seen from the number of enthusiasts for each campus. Likewise in the international world when faced with the choice between Harvard and al-Azhar, most will choose Harvard. Although the same international standard and the best education in the world, the psychological and social individuals will automatically want it. The data shows that Islamic education must continue to improve and upgrade itself to provide confidence in the international world that Islamic campuses in the world are no less competitive with other international standard campuses. As implemented by the campus of AL-Azhar University and Malaysia Islamic International University (UIIM). The existence of these two international Islamic campuses provides a way for other Islamic campuses to continue to improve and improve the quality of education.

Based on the presentation of data and the explanation of the rationality of life above, it can be concluded that the new paradigm of Islamic education from a global perspective or an international perspective does not view Islamic education as bad, not good, not superior and unable to compete with other campuses, but in the international world a good education system is still dominated by public campus campuses and the existence of the Islamic education system must continue to improve for the sake of progress and The success of the Islamic education system in the future.

D. CONCLUSION

The new paradigm of Islamic education is an interesting topic to be studied, considering the existence of Islamic education continues to transform and innovate the Islamic education system itself. The new paradigm of Islamic education is a new concept where there is a collaboration in the use of technology and the openness of Islamic education to various advances brought by globalization and modernization, but the basic concepts of Islamic education contained in the Qur'an and Hadith remain the main guidelines of the Islamic education system. The transformation of the old educational paradigm into a new educational paradigm in Islam is certainly inseparable from the purpose of Islamic education to continue to improve the quality of Islamic education itself. Then turn to local and global perspectives on the new paradigm of Islamic education, which is as follows. *First*, the local perspective views Islamic education with various innovations, creativity, and new ideas as making a positive contribution to students, especially in the development of science, and spiritual morality. *Both* global and international perspectives view that Islamic education still has to continue to improve and improve the quality of education, Islamic education with all innovations and new

creations is the first step to catching up with the medieval period which previously experienced a decline. Although according to the global perspective Islamic education is still under other general international education systems, it is necessary to know that the progress of the Western scientific system cannot be separated from the contribution of Islamic scientists in the previous era, this is the basis for continuing to develop and advance Islamic education such as Al-Azhar University and UIIM.

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ADDRESSING DIVERSITY IN SCIENCE EDUCATION: TEACHERS' CHALLENGES AND INNOVATIVE SOLUTIONS FOR INCLUSIVE EDUCATION

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Abstract. Inclusive science education requires an approach that is sensitive to student diversity, including differences in gender, culture, social background and learning ability. This process not only reflects social justice values, but also enriches students' learning experiences and prepares them to participate in an increasingly globalized society. However, many challenges are faced by science educators in their efforts to address this diversity in an effective way. This study explores the various challenges faced by teachers in dealing with diversity in the context of science education. Factors such as gender stereotyping, imbalance of cultural representation in teaching materials and inequality of access were highlighted. Teachers also face barriers in establishing a supportive and inclusive classroom environment for all students. Through a literature review and field research, this study explores innovative solutions adopted by science teachers to address these challenges. These initiatives involve inclusive curriculum design, the use of diverse role models, and the integration of technology to improve access and learning. In addition, teacher training focusing on cultural expertise and awareness of unconscious bias were also identified as key factors in creating inclusive learning environments. This research provides an in-depth insight into how science educators can face and overcome the challenges of diversity in the context of science education. Practical implications and policy recommendations will be outlined to support a more inclusive and relevant science education for all students in this global era.

Keywords: *Inclusive Education; Science Education; Diversity Education*

A. INTRODUCTION

Merangkum Summarizes an in-depth review of efforts to address diversity in science learning, with an emphasis on the role of teachers, the challenges they face, and the innovative solutions implemented in creating inclusive education. First, "Addressing Diversity In Science Education" describes a commitment to exploring and responding to diversity in the context of science learning (Hasanah, 2023). This reflects an awareness of the complexity of students' backgrounds in terms of culture, ability and learning styles. This article discusses how diversity can be a valuable resource that can enrich the learning experience, but also a challenge for educators. By understanding and responding to this diversity, this article can provide deep insights into how

science education can better align itself with the needs and characteristics of diverse students.

Then, the focus on "Teachers' Challenges And Innovative Solutions For Inclusive Education" highlights the role of teachers in facing these challenges. The article discusses concrete barriers faced by teachers, such as inequalities in learning accessibility, differences in learning styles, or cross-cultural communication challenges. By exploring these challenges, readers are expected to gain a better understanding of the complexity of teachers' tasks in managing diversity. In addition, this article will provide an in-depth look at innovative solutions implemented by teachers to create an inclusive learning environment. These solutions may include the use of technology, responsive curriculum development or differentiated teaching practices to meet the needs of diverse students. Thus, the title of the article promises a holistic understanding of creating inclusive science education through understanding the challenges and innovative solutions faced by teachers.

Science education is a key element in building a foundation of knowledge and skills to face the challenges of the modern world (Halim, 2022). However, in the face of increasingly complex diversity in the classroom, educators are faced with significant challenges. This article aims to explore the dimensions of diversity in science education and specifically focus on the role of teachers in dealing with these challenges. With the title "Addressing Diversity In Science Education: Teachers' Challenges And Innovative Solutions For Inclusive Education", this article explores the extent to which educators face challenges in creating an inclusive learning environment that takes into account the diversity of students in terms of culture, abilities and learning styles.

The importance of diversity in the context of science education lies not only in recognizing individual differences, but also in the potential that diversity has to enrich students' learning experiences. In line with the dynamic changes in the global society, this article aims to detail the challenges faced by science teachers in responding to student diversity. Through an in-depth literature review, this article seeks to provide insight into the concrete barriers that educators may face, while highlighting the innovative steps that have been taken to create inclusive science education. By understanding and addressing these challenges, it is hoped that this article can positively contribute to our understanding of how to create a science learning environment that integrates diversity into a dynamic and inclusive educational force.

B. METHODS

The literature study method is a research approach that involves collecting, analyzing, and synthesizing literature relevant to a particular research topic (Assyakurrohim, 2023). This method does not involve collecting new data, but rather focuses on researching and understanding previously published works, such as books, journal articles, theses, and other literature sources. The main purpose of the literature study method is to present a comprehensive and detailed overview of existing knowledge in a research field (Kurniawan, 2023).

This literature study is designed to provide an in-depth insight into the role of teachers in addressing the challenges of diversity in science education, focusing on the innovations that have been adopted to create an inclusive learning environment. With the title "Addressing Diversity In Science Education: Teachers' Challenges And Innovative Solutions For Inclusive Education" this article uses the literature study method to investigate the contributions of relevant literature in understanding the context of diversity in science classrooms.

In an effort to holistically understand the challenges faced by science teachers, the selected literature includes empirical, theoretical and best practice research. Through analysis of the literature, several key themes emerged, including cross-cultural communication challenges, differences in student learning styles, and learning accessibility gaps. While the literature presented an overview of these barriers, a number of innovative solutions were also revealed. Some of these

solutions may involve the application of technology in teaching, curriculum development that is responsive to student diversity, and learning differentiation strategies tailored to individual needs.

This article compiles the results of the literature analysis to present a deeper understanding of how science teachers can face diversity challenges and implement innovative solutions to achieve a more inclusive science education. It is hoped that this article will provide guidance for educational practitioners, researchers and policy makers in understanding the framework needed to create science classrooms that integrate diversity as a valuable resource. The conclusion of this article is expected to be a useful contribution to the development of future strategies for inclusive science education.

C. RESULT & DISCUSSION

The results of this literature study illustrate that diversity in the context of science education plays an important and complex role in shaping an inclusive learning environment. The challenges faced by science teachers in addressing diversity include various aspects, such as cross-cultural communication gaps, differences in student learning styles and learning accessibility issues. The literature also highlights that inequalities in teaching approaches can limit students' potential, particularly those who come from different cultural backgrounds or have unique learning styles.

In this context, the innovative solutions proposed in the literature are integral to addressing these challenges. The use of technology in teaching, such as the use of online learning platforms or customizable educational apps, has proven to be one effective approach. In addition, learning differentiation strategies, where teachers tailor teaching methods to students' individual learning styles and needs, have also emerged as a promising solution.

1. Cross-Cultural Communication Challenges.

Science teachers face difficulties in communicating with students who come from different cultural backgrounds (Zahrawati, 2021). Differences in language, cultural norms and values can affect the effectiveness of communication in the classroom. In addressing diversity in science education, educators face a number of cross-cultural communication challenges that require innovative solutions. One of the main barriers is language and communication differences, where students with different cultural backgrounds may face language gaps. Innovative solutions in this case involve developing teaching strategies that take into account language variations, such as the use of technology for translation or the provision of resources in several languages. Different cultural norms and values are also a challenge, with educators needing to understand and respect the diversity of student values. Solutions include involving students in curriculum creation and providing training to teachers to improve their understanding of different cultural values.

Other challenges include low cultural awareness, where a lack of awareness can result in insensitivity to students' needs. Innovative solutions include regular training on cultural awareness for teachers and creating a school environment that supports open dialog about cultural diversity. Lack of representation in the curriculum can also be a barrier, with solutions involving revising the curriculum to reflect the scholarly contributions of different cultures. Educators may also face a lack of resources to support students with different cultural backgrounds, and innovative solutions include building inclusive resource centers. Inequitable assessments, especially those that do not consider cultural context, are also an obstacle that needs to be addressed through the development of assessment methods that take into account the diversity of student understanding. Finally, a lack of community involvement can make it difficult for education to be appropriate to students' cultural contexts, and innovative solutions include building close relationships with local communities and inviting the participation of parents and community members in educational decision-making. By addressing these challenges, a more inclusive science learning environment that is responsive to

students' cultural diversity can be created.

2. Differences in Student Learning Styles.

The literature shows that there is a large variation in students' learning styles. Teachers need to recognize and respond to these differences in order to present learning materials in a more effective way (Azrina, 2023). In addressing diversity in science education, teachers are faced with significant differences in students' learning styles as a major challenge that requires innovative solutions to create truly inclusive learning approaches. Learning styles refer to an individual's preferences and tendencies in receiving, processing and understanding information. Students are unique in the way they acquire knowledge and skills, creating a wide spectrum of learning preferences. Some students may show a tendency to learn better through visual approaches, such as diagrams and graphs, while others may be more responsive to verbal explanations or hands-on experiences through kinesthetic approaches.

The true challenge lies in the need to align teaching methods with this diversity of learning styles. This requires teachers to develop strong skills in designing diverse learning experiences and customizing teaching materials according to students' needs. In addition, the use of innovative learning tools and educational technology can be key in providing accessibility to various learning styles. For example, the use of multimedia, interactive simulations and online learning platforms can help overcome barriers to presenting information in a way that suits diverse learning preferences.

Innovative solutions to creating inclusivity in science education include curriculum development that takes into account different learning styles. This can involve task design that allows for active participation, project-based learning that allows for creative exploration, and the use of evaluations that reflect deep understanding rather than relying solely on written exams. Engaging students in the learning process is also a focus, where teaching can be tailored to their interests and learning styles. Through innovative solutions such as these, teachers can create a science learning environment that considers the diversity of students' learning styles, opens up opportunities for optimal development of each individual, and advances an inclusive approach in science education.

3. Learning Accessibility Gap.

There is unequal accessibility to learning resources, both physical and technological (Nadzirah, 2023). Students from low economic backgrounds may face access barriers to necessary learning materials. The learning accessibility gap refers to the inequality or inability of some students to access and utilize learning resources in an equal way. These challenges can stem from a variety of factors, including economic, technological, geographical, physical and even cultural differences. Financial hardship is one of the main factors leading to the accessibility gap, where students from low economic backgrounds may struggle to access books, learning materials or additional educational resources.

Technological aspects also play an important role in the accessibility gap. Students who do not have access to digital devices or a stable internet connection may be left behind in distance learning or unable to keep up with technological developments in the education process. In addition, geographical gaps may also occur, especially in rural or remote areas where schools may not have adequate infrastructure or educational resources. Physical factors include gaps in accessibility for students with disabilities. Lack of disability-friendly facilities, lack of adapted learning materials, or teaching methods that do not support the different needs of students with disabilities can create significant gaps in learning accessibility.

Solutions to address the learning accessibility gap include building education policies that support inclusivity, empowering communities through participatory approaches, and investing in educational technology that is affordable and accessible to all. Financial aid programs or the provision of devices and internet access for students from low economic backgrounds can help

reduce the financial gap. Meanwhile, a universal design approach to learning can ensure that learning materials are accessible to all students, including those with special needs. By understanding and responding to the factors that cause learning accessibility gaps, education systems can become more inclusive and ensure that every student has equal opportunities to develop their potential.

4. Technology Innovation in Teaching.

The use of technology, such as online platforms and educational apps, is emerging as an innovative solution to overcome accessibility challenges and facilitate customized learning (Mukhid, 2023). In this context, technological innovations play a crucial role in creating learning environments that are inclusive and respond to student diversity. One of the main challenges teachers face is the different learning styles and needs of their students. Technological innovations, such as online learning and educational apps, can provide greater access to a variety of learning methods that can be tailored to individual preferences. The importance of technology in addressing the accessibility gap is becoming more prominent, especially with online learning platforms and game-based curricula that can be accessed from various locations. The application of technologies such as augmented reality (AR) and virtual reality (VR) opens up new opportunities in visualizing science concepts in an engaging and inclusive way, allowing students from different cultural backgrounds to engage more actively in the learning process (Siswati, 2023).

In facing the challenges of cross-cultural communication, technology also plays an important role. Student engagement apps and platforms can support collaboration between students from different backgrounds, creating spaces where cultural understanding can be enriched and shared. Artificial intelligence (AI) technologies can be used to understand individual learning styles and provide customized feedback, ensuring that teaching can be adapted according to each student's unique needs. Nonetheless, it needs to be recognized that not all students have equal access to these technologies, so the challenge of accessibility gaps remains relevant. Innovations in this regard include measures to increase technology access in underprivileged communities, as well as the development of accessible solutions without reliance on high-end devices. This means that while technological innovations promise great advances in inclusive science education, continuous efforts are needed to ensure that these innovations truly reach all students, without exception. Thus, this article will further explore the challenges and innovative solutions involving technology in embracing diversity in science education.

5. Learning Differentiation Strategy.

Learning differentiation strategies, where teaching approaches are tailored to students' individual needs and learning styles (Siswati, 2023), have proven effective in creating inclusive environments. In the face of diversity challenges in science education, learning differentiation strategies are emerging as an innovative approach that can bridge the gap and enhance inclusivity. Teachers are faced with the complex task of accommodating students' significantly varying learning styles, comprehension levels and learning speeds. Learning differentiation strategies demand deep reflection on how to deliver learning materials in a way that meets the unique needs of each student.

One effective differentiation strategy is to present learning materials in a variety of ways. This can include using text, images, videos and other multimedia resources to support a variety of student learning styles. By utilizing technology, teachers can create more dynamic and engaging learning experiences that are accessible to students from different cultural backgrounds. Curriculum adaptation is also a key element of learning differentiation. Teachers can devise lesson plans that allow students to explore certain topics in greater depth or offer research projects that reflect cultural and scientific diversity. Curricula designed with a differentiation approach can help address gaps in cultural representation in teaching materials, so that students feel more connected to their learning. In addition, the use of differential assessment plays an important role in supporting

inclusivity. Assessments that consider students' different styles of expression and understanding can provide a more holistic picture of their learning progress. Teachers can use different types of assessments, including projects, oral presentations, and portfolios, to provide space for creative expression and evaluation that suits students' diversity.

The importance of open communication and dialogue between teachers, students and parents should not be overlooked in learning differentiation strategies. Teachers need to listen to students' needs and expectations, identify their strengths and challenges, and create an environment that motivates and supports individualized development. Increased collaboration between teachers and parents can help understand the cultural context of students, ensuring that learning approaches are more personalized and contextualized. In involving technology, online learning platforms can support differentiation strategies by providing learning modules that students can access independently. Game-based learning and virtual simulations can also offer an interactive way to explain science concepts that can be tailored to students' level of understanding. Through the implementation of differentiated learning strategies, teachers can create learning experiences that utilize diversity as a strength, accommodate students' individual needs, and stimulate interest and active participation in science. As such, it not only addresses the challenges of diversity in science education but also advances an inclusive approach that empowers every student to reach his or her full potential.

The discussion of the results of this literature study underscores the importance of a deep understanding of student diversity in designing inclusive science learning strategies. The challenges faced by science teachers are not only technical, but also involve social and cultural aspects that require deep sensitivity and understanding. In dealing with cross-cultural communication inequalities, teachers need to develop strong interpersonal skills and build an environment where every student feels heard and valued.

In addition, the use of technology and differentiated learning strategies show great potential for enhancing the inclusiveness of science education. However, these must be implemented carefully, ensuring that the solutions adopted are not only pedagogically effective but also take into account the holistic diversity of students. It should also be emphasized that there is no one-size-fits-all approach, and teachers must have the flexibility to respond to the unique needs of each student. Overall, this article provides an in-depth look at the challenges and solutions in dealing with diversity in science education. By acknowledging the complexity of this issue, it is hoped that educators and researchers can design a more holistic and responsive approach to create an inclusive science learning environment that empowers every student.

1. The Importance of Teacher Interpersonal Skills.

Emphasizing the need to develop science teachers' interpersonal skills, including sensitivity to cultural aspects of students (Ridho, Wardhana, Yuliana, Qolby, & Zalwana, 2022). Creating an environment where every student feels heard and valued is key to overcoming cross-cultural communication challenges. In addressing the challenges of science education that reflects diversity, the importance of teachers' interpersonal skills becomes very prominent. Interpersonal skills include teachers' ability to communicate effectively, understand and respond to the needs of students from different backgrounds, and create an inclusive learning environment. In the context of diversity in science education, interpersonal skills are not just an additional aspect, but the core of a successful and inclusive approach.

One key aspect is the teacher's ability to build positive relationships with students from different cultural backgrounds. Teachers with good interpersonal skills are able to understand individual differences, recognize students' cultural values and respond empathetically to their needs. This opens the door for trusting relationships to form, which can help build strong bonds between

teachers and students and create an environment that supports positive development. Effective communication is also key in dealing with cross-cultural communication challenges. Interpersonal skills help teachers deliver learning materials in a way that all students can understand, regardless of their background. Teachers who understand students' cultural diversity can use language variations, recognized cultural contexts, and sensitive approaches to explain science concepts in a relevant and pervasive manner.

Teachers' interpersonal skills also provide a foundation for creating an inclusive and welcoming classroom for all students. In facing the challenges of diverse learning styles, teachers need to have the ability to differentiate learning, i.e. adjusting teaching methods to the individual needs of students. Teachers who can read classroom dynamics, identify students' learning needs and respond with individually appropriate solutions can create a more relevant and effective learning experience. The importance of teachers' interpersonal skills can also be seen in their collaboration with peers, school staff and parents. Effective collaboration requires good communication and positive engagement from all parties. Teachers who are able to communicate well with colleagues can facilitate the exchange of ideas and best practices in responding to diversity in the classroom.

Finally, teachers' interpersonal skills embrace their role in shaping an inclusive and supportive school culture. Teachers who can create an environment where every student feels welcome and valued can contribute to a positive educational experience for all students, regardless of their cultural background or individual diversity. Thus, teachers' interpersonal skills become a key pillar in creating diversity-responsive science education, ensuring that every student feels recognized, supported and has equal opportunities to thrive in the realm of science.

2. Flexibility in Technology Use.

While technology can be an innovative solution, it needs to be recognized that not all students have equal access to devices or internet connections (Sabilla & Susanti, 2023). Therefore, there is a need for flexible approaches and alternative solutions to ensure inclusivity. In the face of the challenges of science education influenced by diversity, flexibility in the use of technology is a key cornerstone to promoting inclusivity and formulating innovative solutions. Teachers who integrate technology in a flexible way can better accommodate diverse learning styles, student needs and different cultural contexts. Flexibility in technology use includes teachers' ability to adapt digital learning tools according to students' needs and preferences. For example, in addressing the accessibility gap challenge, teachers can choose a variety of online learning platforms that can be accessed through various devices, allowing students with different levels of technology access to remain engaged in the learning process.

In dealing with the diversity of learning styles, technological flexibility can be reflected in the choice of diverse learning content. Teachers can utilize digital resources, such as videos, interactive simulations or educational apps, to deliver learning materials in various formats. This allows students to choose how they learn best, which in turn can improve understanding and retention of the material. Technology also plays a role in overcoming cross-cultural communication challenges. Flexibility in the use of technology allows for the integration of automatic translation tools, facilitating better communication between teachers and students with different languages. In addition, the utilization of online collaborative platforms can open pathways for enriching discussions and exchange of ideas, allowing students to share their perspectives on science according to their cultural context. The importance of flexibility in the use of technology is also seen in curriculum adaptation. Teachers can select or design learning resources that can be adapted to students' cultural contexts, making technology a tool to create connections between science concepts and students' life experiences. In this way, this flexible approach mobilizes diversity as a strength in science learning.

Finally, flexibility in the use of technology also creates opportunities for teachers to design diverse and inclusive assessments. Teachers can utilize digital tools to create tasks or projects that allow students to demonstrate their understanding in ways that match their expertise or interests, creating a more equitable and relevant assessment experience. By embracing flexibility in the use of technology, teachers can address the challenges that arise from diversity in science education. Flexible use of technology is not only a learning tool, but also a medium to build bridges between differences and create a learning environment that promotes inclusion and respect for student diversity.

3. The Importance of Adjusting to Student Uniqueness.

Highlighting the importance of understanding the uniqueness of each student and responding individually. Learning differentiation strategies are not just about providing different materials, but also understanding the needs and strengths of each student (Saksono, 2023). Adjustment to student uniqueness includes the teacher's ability to understand and respond to differences in student learning styles. In designing and delivering learning materials, teachers need to be able to identify individual learning preferences, be it through visual, auditive or kinesthetic approaches. This requires precision in developing teaching strategies that take into account various learning needs. In addition, adjusting to students' uniqueness also includes recognizing students' cultural values and backgrounds. Teachers need to incorporate elements that reflect cultural diversity in learning materials, creating a classroom environment that enriches and honors multiple perspectives. By acknowledging and celebrating this diversity, teachers open the door for students to feel recognized, accepted and motivated to actively participate in the learning process.

The importance of adjusting to students' uniqueness is also reflected in teachers' ability to overcome cross-cultural communication challenges. Teachers need to utilize a variety of tools and strategies to ensure effective communication, including inclusive language use, utilization of automatic translation technology, and creating spaces for students to share their experiences in their own language and culture. Adjustment to student uniqueness also involves teachers' ability to identify and respond to the needs of students with disabilities or special needs. This can involve using accessible teaching materials, providing additional support, and collaborating with special education experts to create an inclusive environment that supports the growth and development of every student. In an innovative framework, adapting to students' uniqueness also includes utilizing technology and digital resources. Teachers can use educational apps that can be customized to students' level of understanding or online learning platforms that support independent and project-based learning. By embracing student customization, teachers not only create an inclusive space for science learning, but also build a foundation for each student's personal and academic development. This approach not only accounts for differences but also taps into the unique potential of each individual, resulting in a learning environment that is empowering, inclusive and encourages a love of science in all students.

4. Commitment to Inclusive Education.

Inclusive science education requires a strong commitment from educators. The discussion emphasized that awareness raising, training and continuous support are needed to ensure equitable and inclusive education. Teachers who are committed to inclusive education recognize that each student brings his or her own uniqueness to the classroom, be it in terms of culture, learning style or special needs. They are committed to creating a space that welcomes all students, where differences are valued as richness that enriches the learning experience. This commitment becomes the foundation for adjusting teaching strategies, learning materials and assessments so that every student can access, understand and master science concepts. In the face of teachers' challenges in communicating with students from different cultural backgrounds, a commitment to inclusive

education encourages teachers to understand and respect students' cultural values. They look for ways to incorporate cultural elements in science learning so that students can feel represented and connected to the learning materials. This commitment also creates space for teachers to learn from students, better understand their cultural context and apply contextualized approaches.

In addition, a commitment to inclusive education encourages teachers to continue learning and developing. They seek innovation and creative solutions to address the challenges of diversity in science education. Teachers who are committed to inclusive education are open to additional training, collaboration with peers and the application of technology that supports inclusiveness. This commitment is also reflected in teachers' efforts to create an inclusive classroom in terms of student engagement and participation. Teachers are committed to motivating each student, creating an atmosphere that allows open questions and discussions, and building positive relationships with each student. They realize that student engagement is not only about delivering learning materials, but also about opening opportunities for students to have a voice and contribute to learning. In the face of accessibility gaps and differences in student learning styles, a commitment to inclusive education encourages teachers to seek innovative solutions. This could include utilizing technology to provide resources that are accessible to all students, creating game-based learning experiences, or designing differentiation strategies that meet the diverse learning needs of students. Thus, a commitment to inclusive education is not only the responsibility of teachers, but also the impetus that drives change and innovation in science education. It is a call to create an environment where every student can thrive and succeed, permeate the values of inclusivity into the core of education, and affirm the hope that science belongs to everyone.

D. CONCLUSION

In response to diversity in the context of science education, this article highlights a number of challenges faced by teachers and explores innovative solutions that can be implemented to create inclusive learning environments. Cross-cultural communication challenges, differences in students' learning styles and learning accessibility gaps are the main concerns in the literature. Innovative solutions, such as the use of technology in teaching and the implementation of learning differentiation strategies, have emerged as effective approaches.

Addressing diversity in science education requires a strong commitment to inclusive education from teachers. This commitment is reflected in adapting to students' uniqueness, where teachers seek to understand and respond to students' cultural differences, learning styles and special needs. Teachers committed to inclusive education engage in flexible teaching strategies, utilize technology wisely, and create a classroom environment that enriches diversity.

The importance of teachers' interpersonal skills in dealing with diversity is highlighted in the discussion, emphasizing that understanding and respecting cultural differences is key to creating an inclusive learning environment. Flexibility in the use of technology and adapting to students' uniqueness was also a point of discussion, recognizing that solutions should not be one-size-fits-all. Inclusive education requires a strong commitment from educators, and constant efforts in raising awareness, training and support.

With this commitment, teachers become not only facilitators of learning, but also agents of change in realizing science education that embraces diversity. Continuous self-improvement, ongoing efforts to overcome challenges and creativity in implementing innovative solutions are key to the success of inclusive education. Thus, teachers who embrace this commitment not only help students to understand science concepts, but also shape a learning culture that values and celebrates the uniqueness of each individual.

In conclusion, this article asserts that a holistic approach involving innovative solutions,

interpersonal skill development and a commitment to inclusive education is needed to address the challenges of diversity in science education. In the face of a future filled with the complexity of student diversity, evaluation and continued research remain crucial steps to ensure the sustainability and improvement of inclusive approaches in the context of science education.

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ANALISIS STRATEGI PEMBINAAN *TAHFIDZUL QUR’AN* BAGI MAHASISWA DI PESANTREN *TAHFIDZ BANI YUSUF* KOTA MALANG

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Abstrak. This research aims to 1. analyze the strategies and problems experienced by students in coaching tahfidzul quran at the Pesantren Tahfidz Bani Yusuf Merjosari Malang City, 2. Describe the results of tahfidzul quran coaching at the Pesantren Tahfidz Bani Yusuf Merjosari Malang City. This research was conducted on students at the Pesantren Tahfidz Bani Yusuf in 2022/2023. This research uses a qualitative method with a case study approach. Data collection techniques in this research used observation, interviews and documentation studies. The strategy for developing tahfidzul quran with mudarosah, namely reciting half a juz of Al-Quran verses by heart to a listening partner or friend with the aim of improving the quality of reading and memorizing the Koran, *fashohah*, namely reading the Koran together led by a guide in tartil for one page, tasmi is a test increasing the memorization of the Koran which is divided into six stages according to multiples of five juz. The model for implementing tasmi is by listening to students who have carried out tasmi according to the tasmi level for one sitting, *mauidzotul hasanah* is providing advice, direction and positive knowledge to students to increase enthusiasm and motivation in memorizing the Koran. The problems often experienced by students in the strategy of developing tahfidzul quran at the Pesantren Tahfidz Bani Yusuf originate from within the individual; not being able to manage time well, feeling lazy, lack of preparation, and lack of focus in coaching activities. Evaluation of the results of the development of tahfidzul quran training which was able to achieve the target of memorizing thirty juz as many as two people, students who had completed more than fifteen juz totaled sixteen students out of thirty seven students

Keywords. Strategy; Coaching; *Tahfidz*; Koran; *Fashoha*, *Tasmi*

A. INTRODUCTION

Alquran adalah kalamullah yang diwahyukan kepada Nabi Muhammad SAW melalui perantara Malaikat Jibril dan menjadi sumber hukum serta pegangan hidup bagi seluruh umat islam. Oleh karenanya, alquran wajib dipelajari, dimengerti, serta diamalkan terhadap apa yang dikandungnya (Aquami, 2017). Setiap orang yang membacanya akan mendapatkan pahala kebaikan sebagaimana sabda Rasulullah SAW dalam sebuah hadist shahih yang diriwayatkan oleh Imam Tirmidzi dari Ibnu Mas’ud, bahwa Rasulullah SAW bersabda “Barang siapa yang membaca satu huruf saja di dalam alquran maka akan memperoleh satu kebaikan, dan satu kebaikan itu akan dikalikan sepuluh kali lipat. Aku tidak mengatakan alif lam mim itu dihitung satu huruf, akan tetapi alif satu huruf, mim satu huruf dan lam satu huruf” (Syamli & Firdausi, 2018). Oleh sebab itu, belajar alquran itu sangat penting bagi umat islam.

Di era disrupsi masih banyak remaja muslim yang kurang paham akan isi alquran, bahkan untuk membaca alquran sendiri banyak yang belum bisa. Lemahnya keterampilan dalam

menulis dan membaca alquran disebabkan oleh kurangnya minat dan kesadaran untuk belajar alquran, mulai dari membaca, menghafal, hingga memahami makna yang dikandungnya sehingga perlu adanya lembaga pendidikan yang dapat mengakomodir kegiatan belajar membaca, menghafal, dan memahami ayat alquran (Dianto dkk., 2023).

Banyak sekali berbagai jenis lembaga pendidikan islam yang mengakomodir kebutuhan generasi muslim, salah satunya adalah pondok pesantren. Pondok pesantren adalah tempat tinggal para santri dan kyai untuk melakukan kegiatan pembelajaran keagamaan (Musthofa & Khotimah, 2023, hlm. 395). Pesantren dikelola dan dikembangkan oleh kyai Bersama dengan santri untuk melaksanakan proses belajar mengajar ilmu agama (Ferdinan & Ibrahim, 2018, hlm. 40). Peran pesantren sangat penting sebagai benteng Pendidikan agama. Selain itu, pesantren juga berperan sebagai pembentuk generasi berkarakter dan memiliki nasionalisme yang tinggi (Bisri, 2019, hlm. 101).

Di Indonesia, sudah banyak pesantren yang berdiri dan melahirkan generasi emas bangsa. Banyak sekali jenis pesantren yang disesuaikan dengan kebutuhan Masyarakat. Dari segi bentuk, terdapat pesantren salaf (tradisional) yang mengkaji kitab-kitab klasik dan pesantren modern yang berfokus mengkaji ilmu Bahasa, agama, umum, dan jarang berfokus pada pendalaman kitab kuning. Sedangkan dalam metode pengajaran di dalam pesantren meliputi metode sorogan, bandongan, tahfidz (hafalan), dan majelis taklim (Sudrajat, 2018, hlm. 64).

Pesantren tahfidz adalah salah satu jenis pesantren yang cukup familiar di Masyarakat sebagai tempat mencetak generasi penghafal alquran yang lafdzon, wa ma'nan, wa amalan. Di indonesia, cikal bakal berdirinya pesantren tahfidz dipelori oleh KH. Muhammad Munawwir sebagai pengasuh Pondok Pesantren Krapyak Yogyakarta pada tahun 1908 M. Seiring berjalannya waktu, kegiatan menghafal alquran menjamur di kalangan masyarakat (Nurfauziah & Rusmana, 2023, hlm. 455). Banyak lembaga pendidikan formal yang memiliki program unggulan tahfidzul quran karena kebutuhan masyarakat untuk membentuk generasi qurani di masa mendatang (Nasir dkk., 2021, hlm. 123). Tidak mengherankan jika banyak lembaga pendidikan anak usia dini hingga Lembaga perguruan tinggi mempunyai program tahfidzul quran.

Di lingkup perguruan tinggi, program tahfidz di pesantren mahasiswa mudah kita jumpai, khususnya di Kawasan kampus Kota Malang. Banyak berdiri pesantren tahfidz yang diasuh oleh dosen-dosen kampus yang dikondisikan dengan kegiatan mahasiswa sehingga dalam implementasinya agak berbeda dengan pesantren tahfidzul quran saja. Salah satu pesantren tahfidz mahasiswa yang ada di Kota Malang adalah Pesantren Tahfidz Bani Yusuf Kota Malang. Pesantren ini adalah pesantren yang dikhususkan kepada santri yang ingin bertekad menghafalkan alquran hingga tuntas. Sekitar 90% dari jumlah santri di pesantren ini adalah mahasiswa yang berasal dari sekitar pesantren, mulai dari UIN, UM, UB, dan UNISMA (Sya'bana, 2023, hlm. 55).

Sejak tahun 2016 didirikan, pesantren ini telah melahirkan penghafal quran yang berkualitas dari kalangan mahasiswa. Capaian yang memuaskan tersebut dilatarbelakangi oleh strategi pembinaan yang tertata dan terkontrol baik. Visi pesantren ini adalah untuk mencetak kader *haamilul qur'an* yang berkarakter dan berwawasan luas. Adapun visi dari pesantren ini adalah untuk meningkatkan kualitas hafalan quran yang dicapai santri, menyelenggarakan kajian keagamaan untuk menyokong karakter santri, dan mengamalkan isi kandungan alquran dalam sehari-hari (Jabbar, 2019, hlm. 52). Dalam implementasi pembinaan tahfidzul quran, diperlukan strategi pembinaan yang baik sehingga tercapai hasil evaluasi pembelajaran dan rencana tindak lanjut dari kendala yang dialami santri dalam pembinaan tahfidzul quran bagi mahasiswa di Pesantren Tahfidz Bani Yusuf Kota Malang.

B. METODE

Penelitian ini menggunakan metode kualitatif dengan pendekatan studi kasus. Penelitian ini dilakukan kepada mahasiswa yang menghafalkan alquran di Pesantren Tahfidz Bani Yusuf, Merjosari Kota Malang yang dilakukan pada bulan Oktober 2023. Teknik pengumpulan data yang digunakan dalam penelitian ini dengan cara observasi, wawancara, dan dokumentasi. Dalam kegiatan observasi, peneliti berperan sebagai pengamat dan orang yang terjun langsung dalam menjalankan kegiatan tahfidzul quran di Pesantren Tahfidz Bani Yusuf (PTBY) Kota Malang. Wawancara dilakukan kepada pengasuh, pengurus pesantren, dan beberapa santri mengenai strategi pembinaan *tahfidzul quran*, capaian hafalan santri, dan kendala yang dialami selama proses pembinaan *tahfidzul quran*. Adapun studi dokumentasi dalam penelitian ini dengan laporan capaian hafalan santri yang berasal dari data pengurus departemen tahfidz dan foto kegiatan strategi pembinaan *tahfidzul quran* di PTBY.

C. HASIL & PEMBAHASAN

Menghafal alquran adalah kegiatan mempelajari kitabullah secara runtut dan menyeluruh dari surah al fatihah hingga surah an-nas dengan cara menghafalkannya serta dilantunkan tanpa membuka mushaf dengan mengharap keridhoan Allah SWT (Irsyad & Qomariah, 2017, hlm. 137). Menghafal alquran adalah salah satu ibadah yang dicintai Allah SWT sehingga dalam proses menghafal, diperlukan niat yang lurus dan usaha untuk mempelajari, mengingat, dan memahami makna yang terkandung. Untuk mewujudkan cita-cita yang mulia, pesantren tahfidz menjadi tempat yang cocok untuk berproses para santri untuk fokus menghafalkan alquran dengan baik.

Salah satu pesantren tahfidz yang mewadahi mahasiswa adalah Pesantren Tahfidz Bani Yusuf (PTBY). Pesantren ini terletak di Jalan Joyosuko Metro No. 57 A RT/RW 03/02 Kelurahan Merjosari Kecamatan Lowokwaru Kota Malang Jawa Timur. Lokasi pesantren ini sangat strategis dengan berbagai kampus di Kota Malang sehingga menjadi rekomendasi mahasiswa yang ingin mondok di pesantren yang khusus menghafalkan quran (Hidayat, 2022, hlm. 56–57). Dalam kegiatan sehari-hari, pesantren ini fokus untuk membina para santri yang bekeinginan kuat menghafalkan alquran dengan program-program yang mampu meningkatkan intensitas bacaan dan hafalan alquran. Pembinaan tahfidzul quran diawasi langsung oleh pengasuh dan dilaksanakan oleh seluruh elemen santri mulai dari pengasuh, asatidz, pengurus pesantren, dan para santri.

Pembinaan tahfidzul quran diperlukan manajemen strategi yang mendukung mengingat 90% santri adalah mahasiswa. Waktu pelaksanaan pembinaan tahfidzul quran dilaksanakan diluar jam kuliah santri seperti bada subuh dan bada maghrib hingga selesai. Program pembinaan seperti mudarosah, fashohah, setoran, dan tasmi adalah salah satu bentuk pembinaan yang dapat menguatkan kualitas hafalan santri. Walaupun terdapat problematika yang dihadapi santri dalam pembinaan tahfidzul quran, santri diharapkan dapat mengikuti program dengan tertib sehingga dapat menunjukkan capaian baik dari strategi pembinaan tahfidzul quran berupa jumlah hafalan santri yang meningkat dan berkualitas.

Strategi dan Problematika Pembinaan Tahfidzul Quran

Shirley secara detail menggambarkan strategi sebagai sebuah tindakan untuk mengambil keputusan yang diperlukan untuk menggapai tujuan. Adapun Salusu menjelaskan bahwa

strategi adalah seni mengelola kecakapan dan sumber daya secara efektif agar mencapai tujuan dengan kondisi yang menguntungkan (Mufarokah, 2013, hlm. 29). Dari kedua sumber ahli dapat diambil intisari bahwa strategi adalah suatu pola untuk perencanaan dan penetapan suatu kegiatan dengan tepat yang menggunakan kemampuan komunikasi dan sumber daya lain secara maksimal (Irsyad & Qomariah, 2017, hlm. 138). Jika dihubungkan dengan strategi pembinaan tahfidz quran di PTBY, maka dapat dimaknai bahwa perencanaan yang ditetapkan oleh elemen PTBY (pengasuh, asatidz, pengurus, dan santri) dimaksudkan untuk mencetak kader *haamilul quran* dengan melalui tindakan yang tepat dan menggunakan kecakapan sumber daya manusia yang ada secara maksimal.

Adapun bentuk strategi pembinaan tahfidz quran di Pesantren Tahfidz Bani Yusuf meliputi pembinaan fashohah, mudarosah, setoran, tasmi, dan mauidzhotul hasanah.

1. Mudarosah

Mudarosah atau di dalam bahasa jawa dikenal dengan istilah *nderes*. Mudarosah adalah bentuk strategi pembinaan tahfidz quran untuk menjaga hafalan dan melatih mental ketika melantunkan hafalannya dikhalayak orang lain (Sa'dulloh & Muslih, 2022, hlm. 3). Mudarosah adalah adaptasi dari metode pembinaan tahfidz di Pondok Pesantren Madrasatul Quran Tebuireng Jombang karena pengasuh PTBY adalah alumni pesantren tersebut. Dalam implementasi mudarosah di Pesantren Tahfidz Bani Yusuf, santri melantunkan ayat alquran sebanyak setengah juz atau sepuluh halaman untuk disimakkan oleh temannya. Sang teman berhak mengoreksi dari kualitas bacaan ataupun mengingatkan kesalahan bacaan yang dilantunkan oleh si santri tersebut. Pelaksanaan mudarosah di Pesantren Tahfidz Bani Yusuf dilakukan setiap hari setelah setelah salat maghrib hingga adzan isya, kecuali pada hari kamis malam jumat yang digunakan untuk kegiatan yasinan. Mudarosah dilakukan oleh santri di aula pondok dan sekitarnya mulai dari lantai satu hingga lantai dua. Santri tidak diperkenankan melakukan mudarosah di dalam kamar atau di luar area lantai satu dan lantai dua pondok pesantren. Mudarosah dibuka dengan pembacaan tawassul dan surah al fatihah bersama dan tidak meninggalkan mudarosah sebelum adzan isya dimulai.

Pemilihan pasangan mudarosah menurut hasil wawancara kepada divisi tahfidz berpatok pada jumlah capaian hafalan santri dan kualitas hafalan santri. Jadi ada prinsip kafaah atau keseimbangan antar pasangan mudarosah. Jika ada santri yang sudah mencapai hafalan tiga puluh juz, maka akan mendapatkan pasangan yang sudah atau yang hampir mencapai hafalan tiga puluh juz, begitupun sebaliknya. Menurut hasil wawancara dengan Saudara Kafa selaku Koordinator Divisi Tahfidz, sistem kesetaraan dalam penentuan pasangan mudarosah membantu pasangan tersebut agar lebih mudah menyimak karena bacaan yang disemakkan kepada kita akan mampu menambah lancar hafalan kita juga. Selain itu juga tidak akan menimbulkan kesenjangan antar pasangan mudarosah yang berakibat tidak maksimalnya kegiatan mudarosah. Akan tetapi, jika pasangan mudarosah tidak bisa mengikuti kegiatan, maka sang santri wajib mencari pengganti atau teman yang belum ada pasangan mudarosah di kala itu.

Berdasarkan hasil observasi yang dilakukan oleh peneliti, pelaksanaan mudarosah di Pesantren Tahfidz Bani Yusuf sudah berjalan dengan baik. Hal ini dapat dibuktikan dengan antusias seluruh santri untuk mengikuti mudarosah karena kegiatan ini bersifat wajib ain. Para santri sadar akan pentingnya

mudasarah sebagai ajang mengulang kembali hafalan dan memperbaiki bacaan. Hal ini sebagaimana yang dipaparkan salah satu santri PTBY, Saudara Ansori Fatah. Dia menyatakan *“mudasarah itu penting, karena simak menyimak, memperbaiki bacaan, dan mengoreksi kesalahan bacaan. Yang terpenting bahwa mudasarah lebih membantu untuk memurojaah hafalan dengan cara saling menyimak daripada murojaah sendiri karena murojaah sendiri akan terasa berat, tidak ada yang mengoreksi jika kita tidak melihat mushaf.”*

Adapun jika salah satu santri izin untuk tidak mengikuti mudasarah, maka harus izin langsung ke pasangan mudasarah dan izin ke divisi tahfidz untuk pelaporan data keaktifan santri. Setelah melapor, pasangan mudasarah tersebut harus berinisiatif untuk mencari teman mudasarah untuk bisa saling simak menyimak hafalan masing-masing. Berdasarkan fakta di lapangan, peneliti mengungkap fakta bahwa sebagian besar santri yang pasangannya tidak bisa mengikuti mudasarah, mereka akan mencari pengganti yang lain. Di sisi lain, terdapat santri yang kedapatan pasangannya tidak bisa mengikuti mudasarah, maka ia tidak mau mencari pasangan lain. Ia lebih untuk murojaah sendiri intens karena menurutnya murojaah sendiri akan melancarkan bacaan yang ia hafal secara berulang-ulang sehingga kelancaran hafalan bisa maksimal.



Gambar 1: Pelaksanaan Mudarosah

2. Fashohah

Pengertian secara bahasa maknanya adalah terang dan jelas. Secara istilah Fashohah di adalah sebuah kalam/perkataan yang jelas atau terang yang bisa dimengerti tanpa bantuan ilmu tambahan yang lain. Dalam ilmu alquran fashohah adalah melantunkan ayat suci secara jelas dan terang sesuai dengan *makharijul huruf* (Ristia, 2017, hlm. 23). Fungsi fashohah dalam membaca alquran supaya bacaan kita bisa terucap dengan jelas, terang, dan sesuai kaidah tajwid maupun makharijul huruf.

Dalam strategi pembinaan tahfizul quran di Pesantren Tahfidz Bani Yusuf, Fashohah dibagi menjadi dua, yakni fashohah maghrib dan fashohah subuh & isya. Fashohah maghrib adalah fashohah yang dikhususkan kepada santri belum tasmii' alquran 5 juz dan dinilai kurang bacaanya oleh pengasuh pondok. Pada fashohah maghrib ini, santri tersebut wajib mengikuti fashohah dengan pemandu yang telah ditunjuk pengasuh. Materi awal yang disampaikan terkait makhorijul huruf dan ilmu tajwid. Standar bacaan yang dipake adalah fashohah model MQ Tebuireng.

Sedangkan fashohah subuh dan isya adalah kegiatan rutin yang wajib diikuti

oleh santri sebelum melakukan setoran hafalan alquran. Kegiatan fashohah dilakukan setelah salat subuh serta setelah salat isya dengan runtutan membaca doa *kalamun qodim* dilanjutkan membaca surah al fatihah, lalu diteruskan membaca alquran satu halaman dengan tartil sesuai kaidah tajwid. Teknis pelaksanaan fashohah sendiri santri mengikuti bersama-sama bacaan dari pemandu fashohah. Pemandu fashohah berasal dari anggota divisi tahfidz atau santri senior yang telah mengkhatakkan hafalan alquran.

Berdasarkan hasil wawancara kepada salah satu santri, bernama Saudara Kayyis. Dia menjelaskan *“implementasi dari strategi pembinaan alquran berupa fashohah yang dilaksanakan di PTBY sudah berjalan dengan baik. Fashohah dapat membantu santri dalam memahami teori tajwid yang sudah dipelajari untuk dipraktekkan bersama-sama. Apabila kita salah dalam membaca, kita sangat diuntungkan karena bisa mengetahui kesalahan tajwid/makharijul huruf mana yang perlu kita perbaiki. Selain itu, fashohah mampu meningkatkan kualitas bacaan alquran sebab ilmu penting yang harus dikuasai santri tahfidz adalah kemampuan membaca dan melantunkan alquran dengan baik dan benar sesuai kaidah tajwid dan makharijul huruf.”* Para santri dalam mengikuti kegiatan fashohah di PTBY cukup semangat. Beberapa santri mengeraskan suaranya agar dapat memperbaiki bacaan yang dilantunkan secara jelas dan terang. Para pemandu fashohah juga banyak yang hadir sehingga tidak takut ada kekosongan pemandu dalam jalannya fashohah.

Dalam pelaksanaan fashohah yang rutin dilakukan santri PTBY, ada beberapa problematika yang sering kali terjadi. Menurut hasil observasi lapangan yang dilakukan oleh peneliti bahwa pelaksanaan fashohah mengalami beberapa problematika, antara lain:

- a. Ketika fashohah subuh, beberapa santri yang belum bangun karena sulit dibangunkan oleh pengurus. Sebagian santri yang lain masih mengantri ke kamar mandi/ berwudu dan sebagian yang lain masih berjamaah salat subuh.
- b. Ketika fashohah isya, segelintir santri masih berada di kamar untuk menyelesaikan tugas kuliah dan sebagian yang lain masih berada di luar/kesibukan lain.
- c. Kurang mengikuti apa yang dibaca pemandu fashohah. Mereka dalam membaca alquran, kurang menekankan pada makhorijul huruf dan tajwid seperti kurang mengeluarkan suara sehingga bacaannya tidak jelas.
- d. Beberapa santri membaca sendiri, tidak mengikuti bacaan pemandu fashohah.
- e. Pemandu fashohah kurang menekankan tajwid dan makharijul huruf.



Gambar 2: Pelaksanaan fashohah subuh

3. Setoran

Dalam strategi pembinaan tahfizul quran, setoran menjadi hal penting dan inti disebabkan inti dari menghafalkan adalah untuk disetorkan kepada guru dan dimurojaah. Setoran alquran di Pesantren Tahfidz Bani Yusuf dibagi menjadi tiga, yakni setoran bin nadzor, setoran ziyadah, dan setoran murojaah. Semua santri harus mengikuti ketentuan- ketentuan setoran, seperti harus memakai songkok hitam polos, memakai baju berkerah lengan panjang, dan mempersiapkan hafalan dan bacaan alquran.

Setoran bin nadzor adalah setoran yang dilakukan santri yang masih kurang dalam bacaan alquran. Mereka menyetorkan bacaan alquran kepada Ustadz Abd. Rouf selaku pengasuh sebanyak satu halaman. Pelaksanaan setoran bin nadzor ini dilaksanakan bersamaan dengan setoran ziyadah di pagi hari bada subuh. Setoran bin nadzor akan berakhir ketika santri telah khatam setorannya di hadapan pengasuh.

Adapun setoran ziyadah adalah setoran hafalan yang baru dihafalkan santri untuk disimakkan langsung kepada pengasuh. Setoran ziyadah wajib hukumnya untuk dilantunkan secara tartil karena yang menyimak adalah pengasuh sekaligus untuk memperbaiki dan mengoreksi kesalahan bacaan. Adapun jumlah ayat yang disetorkan minimal adalah satu halaman dan maksimal sepuluh halaman atau setengah juz. Banyak atau sedikitnya yang disetorkan tetap wajib untuk dilantunkan dengan tartil. Teknis setoran ziyadah adalah santri mengantri di tempat yang telah disediakan, maju ke depan meja pengasuh untuk memulai setoran dengan bacaan taawudz, boleh melantunkan satu halaman untuk disetorkan kembali atau langsung menyetorkan hafalan baru, bersalaman dengan pengasuh ketika selesai melakukan setoran.

Setoran murojaah adalah setoran hafalan alquran dengan tujuan untuk mengulangi/menguatkan kembali hafalan yang telah dihafal sebelum-sebelumnya. Dalam implementasi strategi pembinaan tahfidzul quran di PTBY, setoran murojaah dilaksanakan dua kali sehari, yakni bada subuh dan bada isya'. Setoran bada subuh memang dikhususkan untuk santri yang ingin menyetorkan hafalan baru (ziyadah) kepada pengasuh. Akan tetapi, jika santri tidak bersedia, maka wajib untuk setoran murojaah kepada ustadz-ustadz badal yang telah dipilih pengasuh. Para ustadz badal adalah santri PTBY yang telah mendapatkan sanad alquran dari hasil tasmi' tiga puluh juz sekali duduk dalam sehari. Jumlah ustadz badal yang menunggu setoran adalah dua orang untuk setoran pagi dan tiga orang untuk setoran malam. Setoran murojaah kepada wajib dilantunkan oleh santri sebanyak

setengah juz atau sepuluh halaman, namun bagi santri yang belum tasmi dibawah sepuluh juz wajib setoran murojaah sebanyak seperempat halaman atau lima halaman. Sebagaimana instruksi pengasuh PTBY, Ustadz Abd. Rouf bahwa ketentuan tersebut berlaku sebab santri yang masih belum tasmi' sepuluh juz diwajibkan untuk memperbaiki dari fashohatul quran dan kualitas hafalan mereka sehingga setelah tasmi sepuluh juz dapat dilantunkan dengan lancar dan megikuti kaidah tajwid.

Dari analisis observasi peneliti terhadap pelaksanaan setoran di PTBY, bahwa seluruh santri mengikuti kegiatan tersebut dengan tertib. Santri mempersiapkan hafalannya dengan baik. Setelah mengikuti fashohah, mereka langsung mempersiapkan hafalannya yang akan disetor dengan mencari tempat yang nyaman. Bahkan, antusiasmesantri untuk setoran di awal sangat tinggi. Hal ini terjadi karena kesibukan santri PTBY mayoritas adalah mahasiswa yang sibuk dunia perkuliahan sehingga harus pintar membagi waktunya sebaik mungkin. Selain itu, motivasi pengasuh yang tertanam di santri bahwa mondok di PTBY harus memiliki tekad yang kuat untuk menyelesaikan hafalan alquran menjadi pendorong santri untuk rajin menambah dan murojaaah hafalan. Mereka yang telah mengkhatakkan setoran alquran sebelum di PTBY cenderung lebih ingin cepat menyelesaikan setoran ziyadah karena mereka ingin khatam sebelum lulus wisuda kampus. Adapun santri yang baru memulai menghafal, mereka akan berusaha memanajemen waktu untuk bisa meluangkan waktu membuat hafalan baru dan mengulangi/menguatkan hafalan lamanya sehingga dalam pelaksanaan setoran dapat berjalan dengan lancar.

Kendala dalam pelaksanaan setoran dalam rangka strategi pembinaan tahfidzul quran di PTBY dilatarbelakangi oleh beberapa faktor:

- a. Ketidaksiapan santri dalam menyetorkan hafalan sehingga ketika setoran ke pengasuh ataupun ustadz badal tidak lancar. Ciri-ciri santri yang tidak lancar setoran adalah lupa ayat, salah melantunkan ayat, bingung melanjutkan ayat/*mbulet*, terlalu cepat melantunkan sehingga menjadi terbata-bata.
- b. Adanya gangguan dari santri lain yang menyetorkan hafalan dengan suara keras sehingga mengganggu kefokusn hafalan diri sendiri. Hal ini disebabkan satu orang penyimak dapat menyimak dua hingga tiga santri sekaligus sehingga suara yang didengarkan menjadi bising ketika santri sama-sama mengeraskan suaranya apalalagi tidak lancar dalam melantunkannya.
- c. Kurang memanajemen waktu sehingga segelintir santri tidak mengikuti setoran karena alasan masih banyak tugas kuliah, mengantuk, dan urusan luarpondok.



Gambar 3: Pelaksanaan setoran murojaah ke ustadz badal

4. Tasmi'

Tasmi' adalah menyetorkan dan memperdengarkan hafalan dengan baik dan hafalan quran yang telah hafal (Massul, 2014, hlm. 49). Dalam strategi pembinaan tahfidz quran di PTBY, Tasmi' adalah sebagai tahapan ujian kelulusan santri dalam melanjutkan hafalan selanjutnya. Jika gagal dalam mengikuti tasmi', maka santri harus mengulangi sampai benar-benar dinyatakan lulus. Metode tasmi' yang digunakan di Pesantren Tahfidz Bani Yusuf metode kelipatan lima juz. Jadi ada enam tahapan tasmi' yang dilaksanakan mulai dari lima juz, sepuluh juz, lima belas juz, dua puluh juz, dua puluh lima juz, dan tiga puluh juz. Santri yang telah mencapai hafalan lima juz harus mengikuti tasmi' sebagai syarat untuk melanjutkan hafalan di juz berikutnya. Begitupun selanjutnya hingga santri telah menyelesaikan setoran hafalan tiga puluh juz harus mengikuti tasmi' tiga puluh juz sebagai syarat pengambilan sanad alquran.

Mekanisme tasmi' kelipatan lima juz adalah sebagai berikut

- a. Santri diharap menyiapkan tasmi' dengan matang sebelum melaksanakantasmi'.
- b. Sebelum melaksanakan tasmi', santri diharap untuk meminta izin kepada pengasuh kemudian melapor dan mendaftarkan kepada devisi tahfidz.
- c. Santri yang hendak tasmi' wajib menyediakan konsumsi untuk kesejahteraan penyimak dengan acuan per 5 juz = Rp. 15.000 dengan kelipatan seterusnya.
- d. Untuk kategori 5 juz & 10 juz wajib dibaca langsung satu dudukan (tidak boleh dicicil). Untuk kelipatan di atas 10 boleh dicicil dalam 2 hari berturut-turut.
- e. Batas maksimal kesalahan dalam setiap juz adalah 10x (ditegur 5x terlebih dahulu). Jika pembaca terlalu lama mikir, boleh langsung dicoret dan diberitahu kesalahannya. Boleh diingatkan jika salah harokat.
- f. Kesalahan-kesalahan dalam tasmi' ditulis di kertas laporan yang telah disediakan dan dikumpulkan ke devisi tahfidz.
- g. Penyimak adalah santri yang telah tasmi' atau mempunyai hafalan di atasantri yang mau tasmi'. Boleh memilih sendiri atau dipilhkan.
- h. Penyimak wajib memahami mekanisme tasmi' dengan baik dan tepat. Tasmi' dikatakan tidak lolos apabila:

- 1) Kesalahan lebih dari 10 setiap juznya.
 - 2). Melebihi waktu yang telah ditetapkan.
 - 3). Mencil bacaan lebih dari 1 hari (Jika tasmi' 5 atau 10 Juz).
- i. Bagi santri yang dinyatakan tidak lolos, maka diwajibkan untuk mengulang dengan ketentuan:
 1. Jika tidak lulus dalam kelipatan 5 dan 10 juz, maka diwajibkan membacadari awal.
 2. Jika tidak lulus diatas kelipatan 10 maka hanya mengulang 10 juz saja.
 3. Durasi untuk mengulang ialah 7 hari. Jika melebihi dari hari tersebutmaka harus mengulang dari awal.
 - j. Santri tidak boleh menambah hafalan sebelum dinyatakan lulus tasmi'.
 - k. Bagi santri yang lulus, segera melapor ke devisi tahfidz dengan membawa kertas laporan tasmi'.
 - l. Devisi Tahfidz berhak memperingatkan/memberhentikan, apabila santri tidak memenuhi syarat-syarat yang telah disebutkan di atas + grotal gratul saat tasmi'.

Adapun pelaksanaan tasmi' di Pesantren Tahfidz Bani Yusuf berjalan dengan baik. Dalam wawancara dengan divisi tahfidz bahwa semua santri yang telah mengikuti tasmi,90% lulus. Hal ini dikarenakan para santri sangat mempersiapkan ujian tasmi ini sehingga jika ia tidak lulus maka ia akan mengalami kerugian baik dari segi waktumaupun materi. Sedangkan problematika santri dalam menghadapi tasmi adalah:

- a. Tidak bisa memanajemen waktu sehingga membutuhkan waktu yang lama untuk mempersiapkannya
- b. Demam panggung. Banyak santri yang sudah mempersiapkan dengan matangtetapi ketika baca di mic menjadi gugup dan hafalannya morat marit. Apalagi ketika penyimak mengingatkan kesalahan, pikiran menjadi buyar.
- c. Kurangnya persiapan dan mencari penyimak yang sulit



Gambar 4: Pelaksanaan Tasmi Alquran

5. Maudzotul Hasanah

Secara Bahasa, mauidzotul hasanah berasal dari dua kata, mauidzoh berarti perkataan/nasihat/ bimbingan dan hasanah berarti kebaikan. Secara istilah, mauidzotul hasanah adalah ungkapan perkataan, pesan-pesan, nasihat, kisah-kisah yang baik yang dapat dijadikan pegangan hidup dunia dan akhirat (Mahmudah, 2010, hlm. 39). Dalam strategi pembinaan tahfidzul quran di PTBY, pemberian mauidzotul hasanah dilakukan oleh pengasuh Pesantren Tahfidz Bani Yusuf, Ustadz Abd. Rouf. Kegiatan ini dilakukan pada acara tertentu seperti khotmil quran kubro tiga puluh juz sekali duduk, peringatan hari besar islam maupun nasional. Selain itu, pengasuh juga memberikan mauidzotul hasanah disela-sela memberikan kajian kitab bulughul maram yang dilaksanakan setiap jumat malam sabtu. Beliau sering mengaitkan antara materi pembelajaran hadist-hadist sumber hukum ilmu fikih dengan motivasi-motivasi menghafal alquran.

Dari hasil wawancara terhadap beberapa santri bahwa pemberian mauidzotul hasanah dapat meningkatkan motivasi dan menambah semangat untuk menambah dan menjaga hafalan alquran. Hal ini sesuai dengan pernyataan Saudara Rizamul Malik yakni *"Pemberian motivasi sangat bermanfaat ketika santri dalam masa kehilangan spirit, mental down, dan lupa akan tujuan awal menghafal sehingga menjadi stimulus positif bagisantri."* Cara penyampaian nasihat yang lembut, santun, dan tidak menjatuhkan antar sesama membuat mauidzotul hasanah yang disampaikan beliau bisa diterima oleh semua santri. Adapun problematika pemberian mauidzotul hasanah yang sering diamati dan dialami peneliti dalam strategi pembinaan tahfidzul quran bagi santri adalah kurangnya kesadaran diri santri untuk mengimplementasikan hasil motivasi tersebut. Banyak motivasi yang tidak terpatri di dalam hati malah keluar begitu saja. Selain itu, ketidakfokusan santri seperti ketiduran, bermain sendiri, dan melamun dapat menghilangkan nilai-nilai semangat yang diberikan pengasuh kepada santri.



Gambar 5: Pemberian Maudzotul Hasanah dari Pengasuh

Evaluasi Hasil Capaian Pembinaan Tahfidzul Quran

Evaluasi hasil adalah sebuah informasi mengenai ketercapaian sebuah kegiatan. Evaluasi hasil membutuhkan tolak ukur atau acuan seperti dalam suatu program kerja sehingga dilakukan dengan membandingkan sebelum dan sesudah pelaksanaan kegiatan (Abdurrahman, 2017)., Evaluasi hasil ini sangat penting untuk mengukur seberapa jauh santri dalam berproses dalam pembinaan tahfidzul quran di Pesantren

Tahfidz Bani Yusuf. Bentuk konkrit dari evaluasi hasil dari pembinaan tahfidzul quran di PTBY adalah dengan capaian tasmi' santri. Capaian tasmi santri ini adalah sebagai acuan keberhasilan strategi pembinaan tahfidzul quran. Adapun hasil capaian tasmi santri PTBY sebagai berikut:

No	Nama Santri & Tahun Masuk	Perolehan Hafalan	Kategori Juz					
			5	10	15	20	25	30
1.	Abdul Fattah Azhari (2020)	Khatam	Lulus	Lulus	Lulus	Lulus	Lulus	
2.	Abdul Aziz Mashuri (2016)	Khatam	Lulus	Lulus	Lulus	Lulus	Lulus	Lulus
3.	Akhmad Alfandi (2017)	Khatam	Lulus	Lulus	Lulus	Lulus	Lulus	Lulus
4.	Abdul Wahid Riski (2022)	19 Juz	Lulus	Lulus	Lulus			
5.	Aburraihannagsabandi (2017)	10 Juz	Lulus					
6.	Achmad Afi (2023)	1 Juz						
7.	Achmad Miftachul Ulum (2021)	8 Juz	Lulus					
8.	Achmad Fuadi (2019)	Khatam	Lulus	Lulus	Lulus	Lulus	Lulus	
9.	Adam Wildan Sholeh (2019)	Khatam	Lulus	Lulus	Lulus	Lulus	Lulus	
10.	Ahmad Alvani Sirojudin (2021)	13 Juz	Lulus	Lulus				
11.	Ahmad Haidar Hakim (2021)	6 Juz	Lulus					
12.	Ahmad Qotada El-Muktav (2022)	8 Juz	Lulus					
13.	Akhid Saputra (2021)	8 Juz	Lulus					
14.	Anis Athoillah (2021)	10 Juz	Lulus					
15.	Anshori Fatah (2022)	5 Juz						
16.	Abdillah Hakam Hamdani (2021)	10 Juz	Lulus	Lulus				
17.	Danang Giri Sulistyopo (2017)	Khatam	Lulus	Lulus	Lulus	Lulus	Lulus	
18.	Danial Malikul Hakim (2021)	20 Juz	Lulus	Lulus	Lulus			
19.	Didik Agus Setyo Aji (2022)	8 Juz	Lulus					
20.	Fikri Ulfatta (2021)	9 Juz	Lulus					
21.	Hafiz Anshori (2017)	Khatam	Lulus	Lulus	Lulus	Lulus	Lulus	

22.	Hifzul Miftah Alfaton (2022)	5 Juz						
23.	Hilman Alfarizi D. M. (2022)	5 Juz						
24.	Ibnu Rusdi Salam (2021)	16 Juz	Lulus	Lulus	Lulus			
25.	Irfan Danial Aufar (2019)	20 Juz	Lulus	Lulus	Lulus			
26.	Irsyadul Ibad (2022)	6 Juz	Lulus					
27.	Istia Nurrizki (2021)	8 Juz	Lulus					
28.	Kafa Nashrullah (2021)	Khatam	Lulus	Lulus	Lulus	Lulus	Lulus	
29.	Kayyis Zaki Zarkasy (2022)	20 Juz	Lulus	Lulus	Lulus			
30.	Muhammad Iqbal (2019)	Khatam	Lulus	Lulus	Lulus	Lulus	Lulus	Lulus
31.	Muhammad Iqbal Humam (2018)	Khatam	Lulus	Lulus	Lulus	Lulus	Lulus	Lulus
32.	M. Firdaus (2022)	7 Juz	Lulus					
33.	M. Hasbi Hamdi (2022)	4 Juz						
34.	M. Abdul Aziz (2021)	5 Juz	Lulus					
35.	M. Ilyas Mawardi (2021)	5 Juz	Lulus					
36.	M. Naimul Masykuri (2019)	20 Juz	Lulus	Lulus	Lulus			
37.	M. Nashih (2022)	16 Juz	Lulus	Lulus	Lulus			
38.	M. Ridlo Alfian (2018)	20 Juz	Lulus	Lulus	Lulus			
39.	M. Ridlo Sukmawan (2018)	20 Juz	Lulus	Lulus	Lulus			
40.	M. Rozik Sudawam (2019)	25 Juz	Lulus	Lulus	Lulus	Lulus		
41.	Muhammad Roziq S.U (2021)	10 juz	Lulus					
42.	Miftahun Najib (2020)	19 Juz	Lulus	Lulus	Lulus			
43.	Muhammad Arif Su'udi (2021)	Khatam	Lulus	Lulus	Lulus	Lulus	Lulus	
44.	Muhammad Habibulloh (2017)	Khatam	Lulus	Lulus	Lulus	Lulus	Lulus	Lulus
45.	Muhammad Zayyin S. S. (2019)	25 Juz	Lulus	Lulus	Lulus	Lulus		
46.	M. Rosihan Anwar	15 Juz	Lulus	Lulus				

	(2022)							
47.	Nur Muhammad Numair (2022)	20 Juz	Lulus	Lulus	Lulus	Lulus		
48.	Rayhan syarif el-wafie (2021)	13 Juz	Lulus	Lulus				
49.	Rizamul Malik A. (2022)	20 Juz	Lulus	Lulus	Lulus	Lulus		
50.	Saddam Arifandi(2022)	Khatam	Lulus	Lulus	Lulus	Lulus	Lulus	Lulus
51.	Salman Hasan Ansori (2021)	10 Juz	Lulus					
52.	Satria Amir MakmunG. (2021)	Khatam	Lulus	Lulus	Lulus	Lulus	Lulus	Lulus
53.	Zainur Rozikin (2021)	20 Juz	Lulus	Lulus	Lulus			
54.	Zidan Amrullah As Sudis (2021)	25 Juz	Lulus	Lulus	Lulus	Lulus	Lulus	
55.	Zaqhlul Ammar bin Zulkifli (2022)	5 Juz						

Berdasarkan hasil rekapitulasi tasmi santri Pesantren Tahfidz Bani Yusuf Malang tahun 2022/2023 menyatakan bahwa selama tujuh tahun pesantren ini berdiri sudah ada tiga belas santri aktif PTBY yang menyelesaikan setoran ziyadah alquran tiga puluh juz kepada pengasuh. Empat dari tiga belas santri adalah santri sesudah angkatan 2020 dan dua dari empat santri tersebut adalah telah melaksanakan tasmi tiga puluh juz sekali duduk. Di bawah angkatan 2020 juga terdapat sembilan belas santri dari tiga puluh tujuh santri yang telah menyetorkan hafalan lima belas juz dan enam belas diantaranya sudah melaksanakan tasmi diatas lima belas juz. Hal ini menandakan bahwa pelaksanaan strategi pembinaan tahfidzul quran di Pesantren Tahfidz Bani Yusuf telah berjalan dengan baik dan mampu meningkatkan kualitas dan kuantitas hafalan santri karena santri yang mukim dibawah tiga tahun telah banyak berhasil melaksanakan tasmi lima belas juz ke atas.

D. KESIMPULAN

Menjadi bagian yang dapat menghafalkan alquran (Tahfidzul Quran) adalah sebuah anugrah yang luar biasa yang dimiliki umat muslim untuk menjaga kalamullah. Menghafal alquran dapat dilakukan oleh siapa saja selama ia memiliki keinginan kuat untuk menghafal, tak terkecuali bagi mahasiswa. Dengan berbagai kesibukan di kampus, tidak menjadi penghalang untuk bisa bisa mengkhataamkan alquran tiga puluh juz. Pesantren Tahfidz Bani Yusuf yang berlokasi di Merjosari Kota Malang adalah pesantren tahfidz yang memfasilitasi mahasiswa untuk menjadi haamilul quran yang lafdzon, maknan, wa amalan. Terdapat beberapa strategi untuk melakukakn pembinaan tahfidzul quran di PTBY, antara lain adalah pelaksanaan mudarosah, fashohah, setoran, tasmi, dan mauidzotul hasanah. Dari kelima strategi pembinaan tersebut, hasilnya berjalan sangat baik dan membawa dampak positif bagi santri untuk meningkatkan kualitas dan kuantitas hafalan. Adapun problematika yang mendominasi dalam

strategi pembinaan tersebut adalah berasal dari dalam diri santri seperti kurang manajemen waktu, rasa malas, dan kurangnya keinginan kuat dari santri. Hasil capaian pembinaan tahfidzul quran di Pesantren Tahfidz Bani Yusuf telah menunjukkan peningkatan yang baik dibuktikan dengan perolehan tasmi dan setoran ziyadah yang meningkat dari waktu ke waktu.

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ANALYSIS OF “PEER FRIENDS” VLOG ON THE LEARNING MOTIVATION OF MAHARAH ISTIMA’ UIN MALANG STUDENTS

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Abstract. This study aims to determine the results of "peer" vlog analysis on the learning motivation of Maharah Istima' a new student of Arabic Language Education at UIN Maulana Malik Ibrahim Malang. This is based on the main problem of students in digesting Arabic as a language that is difficult to learn, especially in maharah istima' which has a stereotype of "boring" because it only focuses on one thing, namely listening and digesting speech or guidance by others, even though maharah istima' itself is the most basic thing that must be understood and mastered before stepping on other language skills. The research method supported by some theories and that support this domain by supporting documents and based on survey. This research is a new thing that appears in the world of Arabic language learning, especially Maharah Istima' which has been containing difficult labeling even by Arabic students themselves. In the results of this study, it was found that the basic thing that makes new students of the Arabic study program motivated in learning maharah istima' is because of external factors, namely "peer vlogs". Of course, this attracts attention, especially it can be a reference for one of the models or methods of learning maharah istima' in various ways that exist.

Keywords: *Analysis; Vlogs; Peers; motivation; Arabic Language Learning*

A. INTRODUCTION

Arabic It is one of the languages in the world that has real urgency in every application in various fields in the world. Language itself is a basic and important need for mankind, this is due to the urgency of language as a medium of conveying ideas, ideas, and human thoughts in the form of speech or writing with the intention of being understood by others even with foreign socials. Among the languages that are widespread in the world, Arabic is the oldest language and has the longest spoken position in the world (Muhamad Kumaini Umasugi, 2022).

For this reason, it is important for the role of an educator to care about various things around him as an effort to explore Islamic teachings and improve social status. Similarly, the application of curriculum containing Arabic as a foreign language of choice is very important to be mastered by students starting at the primary and secondary education levels. Thus, making Arabic a third language that must be understood by students in the era of society 5.0.

In the era of society 5.0, there has been an important change at the Arabic language science paradigm in many things. Starting from the orientation and implementation of existing Arabic

language teaching, the specified teacher qualification demands and existing learning models, the competency demands possessed by students and learning characteristics. because of this basis, special attention is needed to address these various aspects infrastructure adapts to the times. Regardless of all the advantages and disadvantages that exist, all existing stakeholders, as well as those involved in Arabic language learning activities must and always make improvements and change directions so that it can continue to exist in time in the current millennial perception era.(Ahmad Syagif Hannany Mustaufiy, 2022).

This study aims to find out clearly related to the results of the analysis of one of the problems in learning maharah istima' and one of the solutions, namely vlogs between peers on the motivation to learn maharah istima' itself, especially for new students of the Arabic language education study program UIN Maulana Malik Ibrahim Malang. The background of this research was carried out because it was motivated by several factors. Among the factors that exist are related to Arabic which is considered difficult by most students(Syifa Nurlaila, Masripah, 2022), and secondly Maharah Istima' skills for listening and understanding what is being discussed or discussions that are considered boring(Hasan, 2017). Whereas on the other hand, in general, Maharah Istima' itself is the most basic thing before stepping into other forms of language skills, such as Maharah Kalam to speak, Maharah Qiro'ah to read and understand the context of the contents of various texts, and Maharah Kitabah which is the skill to write Arabic according to existing rules(Habibah & Sujefri, 2023).

Based on previous literature surveys, we reflect on many things, including various models to methods in studying maharah istima' itself, including research from (Ma'mun, 2015)which discusses istima' with WhatsApp media with the use of voice notes in it, or in maharah istima' research that uses short movie videos on social media by (Rev. Ashhari, n.d.), to learn maharah istima' using a communicative approach (Muspika Hendri, 2017). Unlike previous research in general, current research brings new things, namely vlog-based research that is different from in general. In this session, the vlog given was the result of vlogs by peers of the students with material direction from previous educators. With this new thing, it is expected to add insight and motivate students to the most basic skills in Arabic before stepping on the next step and step of other skills(Widodo, 2006).

B. METHODS

This research uses a qualitative approach That is a research method or method that emphasizes analysis or descriptiveness. In a qualitative research process, things that are subject perspectives are highlighted and theoretical foundations are used by researchers as guides, so that the research process is in accordance with the facts encountered in the field when conducting research(Muhammad Syafii, 2022). Qualitative research methods aim to explain a phenomenon in depth and are carried out by collecting in-depth data. It is easier to understand with meaning , namely research that does not use calculations in its research The results of this study are in the form of descriptive data in the form of written or spoken words from the object observed by the researcher.

Data used in this study Research is sourced and divided into several parts, including: Primary data specifically carried out to answer research questions. Furthermore, the author collected primary data using the survey method directly, namely on the main subjects of new students of the Arabic language education study program and also conducted direct observation methods at UIN Maulana Malik Ibrahim Malang. The survey method itself is a primary data collection method using oral and written questions, both directly and indirectly. It is this data that is further used as a result that illustrates the researcher's analysis.

Secondary data is taken from other supporting documents. Namely in the form of texts or readings and documents related to concepts and theories relevant to the research focus. (Prof. Dr. Sugiyono, 2013) The goal is to complement the primary data used by previous researchers. The data collection method goes through three stages, namely the first stage by observing peer vlogs with predetermined previous material, then providing questions that can add to the researcher's information by conducting interviews with students as listeners, and after that collecting data from several or is referred to as a very useful documentation method to support the intended research data. The final data analysis certainly goes through a series of stages, namely data collection, data reduction, data presentation and finally data verification. (Habibah & Sujefri, 2023)

C. RESULT & DISCUSSION

1. Understanding Maharah Istima' in the world of Arabic learning

Maharah istima' is one of the other 4 language skills namely kalam, qiroah, and kitabah. This skill is the most basic skill in Arabic before stepping into other forms of language skills. Listening skills are one element of basic skills for students in starting to master a foreign language, in this case Arabic. So in teaching and learning Arabic as a foreign language, this istima' proficiency is the most important urgency.

With skills in maharah istima', learners are able to understand something that is heard correctly and clearly. The success of listening learning depends on the planning stage, implementation stage, and evaluation stage. (Muhamad Fathoni, 2018) In the process of teaching and learning listening skills, aspects of aids such as media are very important aids.

The learning difficulties faced by students in Arabic subjects, especially in learning maharah istima' itself due to students' lack of understanding of the importance of learning, lack of students absorbing the material delivered by the teacher, and students' learning methods that are less effective and less sustainable make students have difficulty learning B. Arabic. Second, learning still uses conventional methods using four language skills without any form of significant renewal by educators in general in general. (M. Dzikrul Hakim Al Ghozali1), 2020)

So far, Arabic language scholars or educators have only positioned Arabic as a tool to understand Islamic texts in Arabic and have not functioned it as a discipline that needs to be developed through various studies and critical rereading. The challenges and problems faced by Arabic language education cannot be solved personally, but must be through an institutional approach and involve many parties. (Muhammad Zainuri, 2019)

It is possible that everything starts from maharah istima' skills as a path of Arabic language education as an opportunity that can provide brighter and promising prospects for Arabic language study enthusiasts and activists in the future. Scientific epistemology and curriculum in Arabic are needed to be addressed and oriented to the formation of competitive skills in this global era. All of that requires many parties to synergize in uniting the vision, mission, policy direction and development based on in-depth academic studies.

2. Vlog in Technology development

The development of da'wah and science is growing rapidly in the current era. In every case, there will definitely be many changes, especially in strategy. Communication and da'wah are two fields that cannot be separated from each other. The success of the da'wah movement is largely determined by the competence of an educator in it. As we all know in the era of gen z and millennials today are people who always involve communication activities with the cyber world or they are more familiar with social media and anything that smells of technology for information. (Estuningtyas,

2021) The use of appropriate methods by utilizing social media must certainly pay attention to many things, including the language of the media and the type of social media itself. Thus, it is hoped that education among millennials can achieve the expected results.

The problem of education is still a major problem in the current development of globalization that continue to roll, especially in the current era of Society 5.0. This era, has a basic concept in the form of transforming the conventional way of life towards digital-based. This has an impact on all aspects of human life including Arabic education and learning. Among the challenges that await before the world of education in the era of Society 5.0 is how to bring together science and technology without sacrificing students.(Ahmad Syagif Hannany Mustaufiy, 2022) So it was found that there was a significant shift in the paradigm of Arabic learning in various aspects starting from its learning orientation, the demands of educators' qualifications and learning models, the demands of students' competencies and learning characters, to the needs of supporting facilities and facilities. Regardless of the pluses and minuses, all parties and stakeholders involved in Arabic learning activities must be willing to improve in order to be able to maintain their existence in this digital era.

The right learning media plays an important role in creating and providing an enjoyable learning experience. In modern times, teachers can develop various learning media by utilizing available learning media, both in digital and analog form. The choice of learning media depends on several aspects, taking into account the accuracy of learning objectives and student conditions.(Euis Sholihah, Adi Supardi, 2022) In this discussion, researchers use one of the latest forms of technology to support Arabic language skills focused on maharah istima' by using vlogs.

Vlog itself is one form of new technological development where everyone can do it voluntarily for their own archives, educational aspects, or just sharing.

3. Student Learning Motivation

Efforts to increase student motivation or interest in learning can be done using learning media.(Wakhidati Nurrohmah Putri, 2017) This study aims to find out about the use of learning media and the influence of the use of Arabic learning media on the motivation to learn Arabic based on "Vlogs from Peers". Motivation itself is a form and internal realm of each person. Motivation itself is also sometimes easily obtained from some external influences, but can also be obtained from outside.

There are several phenomena of Arabic learning in Indonesia, one of which is in the form of a course which is one form of motivation for most students in Indonesia. For most people, learning Arabic presents several opportunities and challenges, such as increasing linguistic diversity in Indonesia and it is the task for educational institutions to design Arabic learning that suits the interests and aspirations of Arabic language learners and provides facilities to help continuous learning progress.

To achieve these learning goals, it is necessary to know the motivation of students to learn Arabic and the extent of their desired language level, so that they can set up independent strategies to improve their learning. As described above, about the motivation of students who learn Arabic at Arabic language course institutions, one of which is in Kediri, East Java, Indonesia.(Sa'diyah & Abdurahman, 2021) Research findings reveal that students who study Arabic at Arabic language course institutions in Kediri, East Java have different motivations to learn Arabic. This research provides important information about the motivation of Indonesian students to learn foreign languages.

Directly proportional to motivation, there are also several problems that exist, namely internal motivation problems and external motivation problems. Internal motivation problems include lack of vocabulary, difficulty reading Arabic script, feelings of laziness that arise in each student, and

difficulty understanding Arabic rules (nahwu and shorof).(Hamdah Barrel, 2022) While the problems of students' external motivation include the creation of an Arabic language environment among students, not all teachers understand intellectual differences between students, The efforts made by teachers are to provide information about the urgency of learning Arabic and teaching with interesting methods such as learning methods or strategies interspersed with games, and teachers keep the classroom atmosphere conducive.

4. Peer Vlog Exposure to Learning Motivation

So far, there are so many models and methods to the media used in supporting Arabic learning itself. From the traditional, conventional, in general, to using technology and mingling in it. In the current era of information technology, there is a need for changes in learning systems, especially in Arabic learning methods and media. The current Arabic learning system has been criticized for being monotonous, traditional, and not innovative compared to other language learning.(Muhandis Azzuhri, 2009) This is due to absolutism and lack of creativity of Arabic language learning stakeholders (lecturers, teachers, pesantren) in applying Arabic learning methods and media in accordance with advances in information technology. There are so many forms of internet-based Arabic learning started because it is the most communicative learning medium in the era of information technology because it integrates the internet and other information channels as a tool to empower the learning process to be more creative, innovative, and competitive.

Learning maharah istima' is identical to listening and understanding skills in Arabic, while vlog itself is usually applied in speaking skills or maharah kalam itself. But in this study, researchers tried something new, namely how much influence of "peer vlogs" on the motivation to learn maharah istima', especially for new students of Arabic language education at UIN Malang. So far, learning maharah istima' skills is considered boring by only listening to monotonous sounds or audio visuals. This tends to make students sleepy, lazy, and lose motivation to learn even before entering their own maharah istima' learning class.

Implementation to realize the vlog analysis of maharah istima' through several steps. Among them, namely:

- The first step is to enter the classroom by giving tests to students and obtaining the results. Find some things related to student problems through learning maharah istima'. From this background, a solution finally emerged, namely a learning model based on listening to vlogs but different from vlogs in general. Researchers finally found a new thing, namely peer vlogs where teachers provide material and divide into several groups in it. Then each vlog group with the material given and given a period of one week of work with a full vlog in Arabic.
- The second step. Vlogs by groups are collected. After the previous pre-test was held before this implementation and at the next meeting the vlog was played in class with all students required to listen, listen, understand, and be able to describe again related to the vlog material from their peers from different groups. Incidentally, the lecturer divided the top 6 groups with 3 people each in it and of course with 6 different themes.
- Step 3 after the lecturer appoints students randomly one by one. Then post-test results are given to measure how fluctuating the level of motivation of students towards maharah istima' modified by Vlog by their peers.

The results obtained from the three general steps above are that Vlogs brought by peers turned out to greatly affect the motivation to learn maharah istima' a student both personally, in groups, and as a whole. This result is obtained from the results of the podcast of students who feel more motivated which we summarize on several factors

- a. Fun audio visuals

- b. The language presented is in accordance with the initial classes they learn as beginner level maharah istima' learners
- c. Motivated to further hone maharah kalam to be even better and focus on maharah istima' from early, intermediate to high levels.

For this reason, the presentation of the results of peer vlog analysis on the motivation to learn maharah istima' new students of Arabic language education at UIN Malang at a fundamental stage.

D. CONCLUSION

Maharah Istima' is the most basic skill before any other skill. With skills in maharah istima', learners are able to understand something that is heard correctly and clearly. The success of listening learning depends on the planning stage, implementation stage, and evaluation stage. The learning difficulties faced by students in Arabic subjects, especially in learning maharah istima' itself due to students' lack of understanding of the importance of learning, lack of students absorbing the materials delivered by the teacher, and students' learning methods that are less effective and less sustainable make students have difficulty learning Arabic.

As we all know in the era of gen z and millennials today are people who always involve communication activities with the cyber world or they are more familiar with social media and anything that smells of technology for information. So it was found that there was a significant shift in the paradigm of Arabic learning in various aspects starting from its learning orientation, the demands of educators' qualifications and learning models, the demands of students' competencies and learning characters, to the needs of supporting facilities and facilities.

This study aims to find out about the use of learning media and the influence of the use of Arabic learning media on the motivation to learn Arabic based on "Vlog from Peers". To achieve these learning goals, it is necessary to know the motivation of students to learn Arabic and the extent of their desired language level, so that they can set up independent strategies to improve their learning. While the problems of students' external motivation include the creation of an Arabic language environment among students, not all teachers understand intellectual differences between students, The efforts made by teachers are to provide information about the urgency of learning Arabic and teaching with interesting methods such as learning methods or strategies interspersed with games, and teachers keep the classroom atmosphere conducive.

The results obtained from the three general steps above are that Vlogs brought by peers turned out to greatly affect the motivation to learn maharah istima' a student both personally, in groups, and as a whole. We as researchers hope that other forms of research can emerge to improve all kinds of language skills in Arabic that are fun and more progressive in the future. For all kinds of limitations researchers have suggestions and criticisms are very much welcome.

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ANALYSIS OF PROBLEM-SOLVING ABILITY: IMPLEMENTATION OF INQUIRY SOCIAL COMPLEXITY LEARNING MODEL AND SELF CONCEPT

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Abstract. Mathematical problem-solving ability is an important ability for students to have, because if students' mathematical problem-solving ability is high, then students' self-concept is also high. This study aims to determine (1) the effect of the inquiry social complexity learning model on students' mathematical problem-solving abilities by controlling self-concept; (2) is there an influence of the self-concept covariate variable on students' mathematical problem-solving abilities; and (3) whether there is a simultaneous influence of inquiry social complexity and self-concept learning models on students' mathematical problem-solving abilities. The data analysis technique uses analysis of covariance (one-way ANCOVA) at a significance level of 5%. The research method used is quasi-experimental. The instrument used is in the form of tests and questionnaires, the type of test instrument is a test of mathematical problem-solving abilities, while the questionnaire instrument is a self-concept questionnaire. The results showed that (1) the mathematical problem solving abilities of students in classes treated with the inquiry social complexity learning model were better than students in classes treated with the conventional expository model; (2) the self-concept of students in the experimental class who were treated with the inquiry social complexity learning model and the control class who were treated with the conventional expository model had good scores, thus influencing students' mathematical problem solving abilities; (3) there is a simultaneous influence of the inquiry social complexity learning model and Self Concept on students' mathematical problem solving abilities. The results of the study indicate that students' mathematical problem solving and self-concept abilities can be improved by using the inquiry social complexity learning model.

Keywords: *Inquiry Social Complexity Learning Model; Self-Concept; Mathematical Problem-Solving Ability*

A. INTRODUCTION

Mathematical Problem-Solving Ability is the ability that students have in trying to solve problems through several procedures or steps. Indicators of mathematical problem solving abilities include understanding the problem, preparing a solution plan, solving the problem according to plan and checking the results obtained again. (Maulyda et al., 2019) The Inquiry Social Complexity (ISC) learning model is a model that emphasizes activity, thinking skills, knowledge integration, constructivism, and discovery so that students' cognitive and communicative competencies can integrate with other students during learning and develop communication skills which are a special aspect of social unity among individuals and knowledge that can be improved simultaneously with other people to be more useful. (Perdana et al., 2020) Self-concept is a person's self-image, which

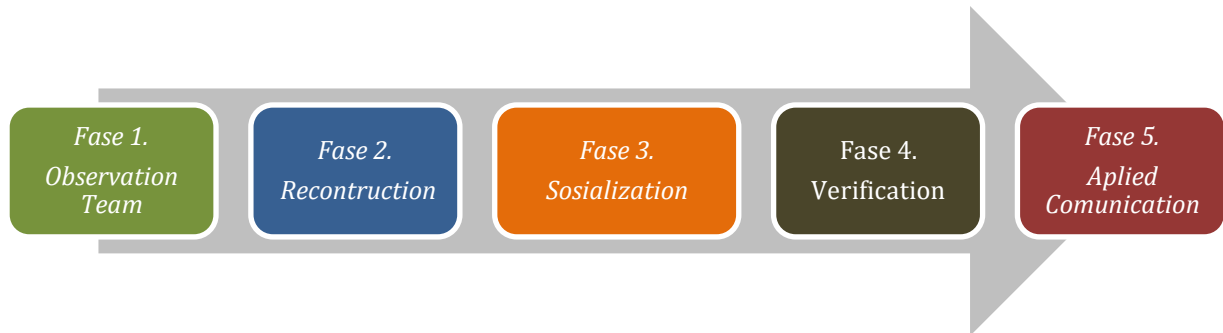
includes physical, psychological, social and emotional goals and their achievements. Physical aspects include attractiveness, practicality and appearance. Thoughts, feelings, courage, adaptability, honesty, independence, trust, and goals are examples of psychological aspects.(Musriandi, 2017)

The 21st century learning system requires schools to change teacher-centered learning to student-centered learning so that students are able to think critically, deductively and inductively. Students' abilities are honed through problems, so that students are able to improve their various competencies. The ability to solve problems is basically the main goal of the educational process. Because problem solving which includes methods, procedures and strategies is the core and main process in the mathematics curriculum and because problem solving is a basic ability in learning mathematics, it is very important for every student to have this ability. The ability to reason, connect, and communicate. This ability is essential for students to develop critical thinking and problem-solving skills. It also requires them to think logically and analytically. Finally, it enables them to develop an aptitude for problem-solving and the ability to apply their knowledge to real-world scenarios. (Sumartini, 2018)

The Inquiry Social Complexity (ISC) learning model is a learning model that can accommodate students to interact based on effective communication indicators to gain broader knowledge and skills. The Inquiry Social Complexity (ISC) learning model is a model that emphasizes activity, thinking skills, knowledge integration, constructivism, and discovery so that students' cognitive and communicative competencies can integrate with other students during learning and develop communication skills which are a special aspect of social unity among individuals and knowledge that can be improved simultaneously with other people to be more useful.(Perdana dkk, 2020) The implementation of learning using the inquiry social complexity learning model can be seen by changes in the attitude of students who are enthusiastic in learning to find and solve their own problems. The main obstacle faced by researchers is convincing students to be confident and dare to learn new things.(Rika et al., 2022). Apart from that, in research conducted by Diah Ayu Pertiwi, it was stated that there was an influence of the inquiry learning model on mathematical problem-solving abilities. Based on previous research, the inquiry social complexity learning model is expected to provide solutions and increase students' enthusiasm for learning to solve problems.(Ayu Pertiwi, 2017) This model is based on the idea that students should be involved in the learning process, both individually and in groups. This model encourages students to think critically, ask questions, and solve complex problems. It also allows for collaboration between peers, helping to build teamwork and collaboration skills.(Rudibyani & Perdana, 2020)

This research aims to focus students on being able to contribute actively to the learning process and also improving students' mathematical problem-solving abilities. Students will get a useful learning process because they learn from direct events individually. Learning activities using this learning model are able to foster curiosity and expand knowledge. The inquiry social complexity learning model in this research has learning steps, namely (1) Observation Team, Students work together in teams or groups to observe and collaborate in discussing several example questions given. Students work together and exchange opinions to solve the problem. (2) Reconstruction, Students divide tasks to solve the example problem. Students identify examples of these questions and can solve these questions correctly. (3) Socialization, Students carry out discussions and argue based on the results of working on examples of questions that have been worked on. Students in small groups explain examples of questions that have been worked on by their respective groups. (4) Verification, Students explain the types of questions they have worked on together. Students present the results of the example questions they have worked on. (5) Applied Communication, Students in groups present their arguments in turns and then agree on the truth according to the teacher's recommendations. Students apply it in everyday life. Students carry out discussions and argue from

the results of working on examples of questions that have been worked on. Students in small groups explain examples of questions that have been worked on by their respective groups. (Perdana dkk, 2020) The steps of the inquiry social complexity learning model can be seen in Figure 1.



Apart from that, self-concept has an important impact or influence on problem solving, especially mathematics learning. This is supported by the results of previous research with the results that self-concept has a positive and significant influence on mathematical problem-solving abilities even though it is relatively low. This means that the level of self-concept influences students' mathematical problem-solving abilities even though the contribution is not that big. By increasing students' self-concept in learning mathematics, it is likely that their academic achievement will also increase. (Haditia et al., 2021) This self-concept is the center of personality formation as well as being the core of personality. This will further determine personality development during the learning process in class and have an impact on learning outcomes. (Samron et al., 2017)

B. METHODS

1. Research Design

This research is Quasi Experimental research, using quantitative data analysis. This research uses two independent variables, namely the inquiry social complexity learning model and self-concept, in this research self-concept is also a covariate variable and mathematical problem-solving ability is the dependent variable. The sampling technique used in this research was the Cluster Random Sampling technique and two samples were obtained, namely the experimental class which was given treatment using the inquiry social complexity learning model and the control class was given treatment using the conventional expository model. Based on the research method that has been explained, the researcher will use an experimental method with a 1x2 factorial design which can be depicted in Table 1.

Table 1. 1x2 Factorial Design

Group			
Experiment		Control	
X1	Y1	X2	Y2
X1.1	Y1.1	X2.1	Y2.1
X1.2	Y1.2	X2.2	Y2.2
X1.3	Y1.3	X2.3	Y2.3
...
...
X1.n	Y1.n	X2.n	Y2.n

2. Data Collection Instrument

The instruments used in this research are questionnaires and description tests, where questionnaires are used to measure self-concept students and description tests to measure students' mathematical problem-solving abilities. The questionnaires and description tests used in this research have been validated by expert lecturers, namely mathematics education lecturers. Data analysis techniques include how to interpret the data obtained, its relation to the problem and research objectives. For experimental research, there is no need to write statistical formulas, but it is enough to state what tests were used and the decision-making criteria. For qualitative research, researchers also need to describe the things that are done to ensure the validity and consistency of research results. The questionnaire consists of 20 statements, each answer has a score according to the Likert scale level including: strongly disagree (score 1), disagree (score 2), agree (score 3), and strongly agree (score 4) (Shantika & Bahri, 2022). The selected answers have levels from very positive to very negative, the scores for positive and negative statements are inversely related to each other. After validation, the next step was to test the questionnaire on 28 students and obtained 20 valid and reliable questionnaires with a Cronbach's Alpha value of 0.934. The mathematical problem solving ability test consists of 10 essay questions representing 4 indicators of problem solving ability. Next, a trial was carried out on 28 students and it was found that 6 questions were valid and reliable with a Cronbach's Alpha value of 0.881. So 6 questions are used to measure mathematical problem solving abilities.

3. Research Participan

Participants in the research were 70 students aged 17-18 years, with details of 35 students who used the inquiry social complexity learning model and 35 students who used the conventional expository learning model. The 70 students are class XII students at SMK Negeri 2 Bandar Lampung 2023/2024. This school was chosen because this school still uses the conventional expository learning model.

4. Data Collection Technique

The data collection techniques used in this research are questionnaires and tests, questionnaires are used to measure self-concept and tests are used to measure mathematical problem-solving abilities. In this research, the tests applied were an initial test (pretest) and a final test (posttest). The pretest is used before implementing the inquiry social complexity learning model to see the initial abilities between the experimental class and the control class. The posttest was used after implementing the inquiry social complexity learning model to see whether there were significant differences between the experimental group and the control group. The self-concept indicators used are indicators according to Cahoun and Acocella's theory (Haditia et al., 2021) can be seen in Table 2.

Table 2. Self Concept Indicators

NO	Indicator	Description
1	Knowledge	The ability to appear or speak in front of the class in mathematics learning
2	Hope	Attention from friends or teachers in mathematics lessons regarding one's appearance
3	Evaluation	Ability to accept mathematics lessons
		Able to complete math assignments and tests
		Be confident in yourself when taking math tests

Based on Table 2, it can be seen that there are three self-concept indicators used in making the questionnaire, namely Knowledge, Hope, Assessment (Haditia et al., 2021). The indicators of mathematical problem solving abilities used in this research can be seen in Table 3.

Table 3. Indicators of Mathematical Problem Solving Ability

No	Indicator	Description
1	Understanding the Problem (Understanding the problem)	Determine what is known and what is asked in the question given
2	Drawing up a plan (Devising a plan)	Determine which formula can be used in the problem
3	Carrying out the plan (Carry out the plan)	Solve the questions according to the formula that has been created
4	Checking Back (Looking back)	Check the results that have been done

Based on Table 3, it can be seen that the indicators of mathematical problem-solving ability used are understanding the problem (Understanding the problem), drawing up a plan (Devising a plan), implementing the plan (Carry out the plan), and checking again (Looking back). The indicators used are indicators according to Polya's theory (Mahanal et al., 2022; Maulyda et al., 2019; Sarai et al., 2022; Son et al., 2019; Tambunan, 2019; Yu et al., 2014; Zamnah, 2019).

5. Data Analysis

The data analysis techniques used in this research are the independent sample t test and analysis of covariance (one-way ANCOVA). The independent sample t test was used to determine the initial class balance. The analysis of covariance test (one-way ancova) is a hypothesis test that is used after fulfilling four prerequisite tests, namely normality test, homogeneity test, regression linearity test, regression coefficient homogeneity test (Kadir, 2020; Supriadi et al., 2022). T test, hypothesis test and prerequisite test using SPSS 25 for Windows software.

C. RESULT & DISCUSSION

1. Results

Class Balance Test

The balance test was carried out to determine the initial abilities of the experimental class and the control class. The data used in the balance test is pretest data on mathematical problem-solving abilities. The data has previously been tested for normality and homogeneity. The conclusion obtained is that the pretest data is normal and homogeneous. Next, to determine the initial abilities of the control and experimental classes, a t test analysis was carried out on pretest scores using SPSS 25 software, the following pretest t test results can be seen in Table 4.

Table 4. t test Results of Pretest Mathematical Problem-Solving Ability

Independent Samples Test										
		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Y	Equal variances assumed	3,087	,083	,508	68	,613	,686	1,351	-2,009	3,381
	Equal variances not assumed			,508	64,432	,613	,686	1,351	-2,012	3,383

Note. Independent Sample t Test on mathematical problem solving ability with n= 70 (M = 22,260, SD = 6,279), with p-value < 0.05

Table 4 shows the results of the t test on mathematical problem solving abilities. It can be seen that ((70) = 0.508, $p > .05$). So it can be concluded that there is no difference in the problem solving abilities of the control class and the experimental class. Based on this, this research can be continued by implementing inquiry social complexity learning model and conventional expository inquiry learning models.

Prerequisite Test for Analysis of Covariance (One-Way Ancova)

The first prerequisite test for Analysis of Covariance (One-Way Ancova) is the normality test. The normality test was carried out to determine whether the research results in the form of questionnaires and questions in the experimental and control classes were normally distributed or not. The data used is posttest data. The normality test calculation uses Kolmogorov Smirnov with the help of SPSS 25 software. The following are the results of the normality test in Table 5.

Table 5. Normality Test

Tests of Normality							
X1		Kolmogorov-Smirnova			Shapiro-Wilk		
		Statistics	df	Sig.	Statistics	df	Sig.
X2	Experiment	.123	35	,200*	,957	35	,189
	Control	,120	35	,200*	,942	35	,063
Y	Experiment	,147	35	,053	,923	35	.017
	Control	.127	35	,170	,939	35	,052
*. This is a lower bound of the true significance.							
a. Lilliefors Significance Correction							

Based on Table 5, it shows that the results of the student self-concept pretest normality test at a significance level of $\alpha = 0.05$ can be concluded that the experimental and control class data are normally distributed because the $p\text{-value} > \alpha$. The next prerequisite test is the homogeneity test. Following are the results of the data variation homogeneity test which can be seen in Table 6.

Table 6. Homogeneity Test Results

Levene's Test of Equality of Error Variances			
Dependent Variable: Y			
F	df1	df2	Sig.
,034	1	68	,855
Tests the null hypothesis that the error variance of the dependent variable is equal across groups.			
a. Design: Intercept + Self_Concept + Model_ISC			

The results from Table 6 show that the results of the homogeneity test *Self Concept* and Mathematical Problem-Solving Ability comes from the same or homogeneous variant because it meets the criteria, namely $p\text{-value} > \alpha$. The next test is the linearity regression test carried out to see the linear relationship between covariates and the dependent variable. The results of the regression linearity test can be seen in Table 7.

Table 7. Data Regression Linearity Test Results

Tests of Between-Subjects Effects					
Dependent Variable: Y					
Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	1598.939a	2	799,470	1129.962	,000
Intercept	,883	1	,883	1,248	,268
X1	4,687	1	4,687	6,625	.012
X2	1438.425	1	1438.425	2033,056	,000
Error	47,404	67	,708		
Total	469706,000	70			
Corrected Total	1646.343	69			
a. R Squared = .971 (Adjusted R Squared = .970)					
<i>Note.</i> Regression linearity test with $n= 70$ ($M= 81.770$ $SD = 4.885$), with p -value $< .05$					

The regression linearity test is fulfilled if there is a linear relationship between the covariate variable and the dependent variable, then it can be said that the regression linearity test is fulfilled. The covariate (X2) in Table 7 shows that it is smaller than α or $0.000 < 0.05$. So with this it can be said that there is a linear relationship between the covariate variable and the dependent variable.

Table 8. Results of Homogeneity Test for Linear Regression Data Coefficients

Tests of Between-Subjects Effects					
Dependent Variable: Y					
Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	1599.302a	3	533.101	747,954	,000
Intercept	,760	1	,760	1,067	,306
X1*X2	,363	1	,363	,509	,478
X1	,527	1	,527	,740	,393
X2	1410.207	1	1410.207	1978,557	,000
Error	47,041	66	,713		
Total	469706,000	70			
Corrected Total	1646.343	69			
a. R Squared = .971 (Adjusted R Squared = .970)					
<i>Note.</i> Test the homogeneity of data linear regression coefficients with $n= 70$ ($M= 81,770$, $SD= 4.885$), n p -value $< .05$					

Based on Table 8, there is a linear relationship between the covariate variables and the independent variables, so it can be said that the homogeneity test for the linear regression coefficient of the data is fulfilled. Sig. Covariate (X2) in table 8 shows that it is more than α or $0.478 > 0.05$. This is in accordance with the initial statement, so it can be said that there is no linear relationship between the covariate variable (self-concept) and the independent variable (Inquiry Social Complexity learning model). So it can be concluded that the homogeneity test for the linear regression coefficient of the data is fulfilled.

Hypothesis Test Analysis of Covariance (One-Way Ancova)

After the four prerequisite tests are fulfilled, the hypothesis test is then carried out using one-way ANCOVA. The one-way ANCOVA test is a difference test or comparative test with the dependent

variable on an interval or ratio (quantitative) data scale, while the independent variable consists of a mixture of factor data and numerical data.(Kadir, 2020a). The first test carried out was the Test of Between-Subjects Effects. The ANCOVA technique adjusts the dependent variable score by eliminating treatment impact bias. The aim of eliminating treatment impact bias is to reduce error variance by controlling the influence of covariate variables that are believed to bias the analysis results. Statistical analysis of covariance can be used to equate groups in terms of the influence of variables outside the treatment variable(Kadir, 2020b; Miller & Chapman, 2001). The results of the analysis of covariance test (one-way ANCOVA) in this study using SPSS 25 for Windows software can be seen in Table 9.

Table 9. Results Analysis of Covariance Test (One-Way Ancova)

Tests of Between-Subjects Effects						
Dependent Variable: Y						
Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	1598.939a	2	799,470	1129.962	,000	,971
Intercept	,883	1	,883	1,248	,268	.018
X1	4,687	1	4,687	6,625	.012	,090
X2	1438.425	1	1438.425	2033,056	,000	,968
Error	47,404	67	,708			
Total	469706,000	70				
Corrected Total	1646.343	69				
a. R Squared = .971 (Adjusted R Squared = .970)						
<i>Note.</i> Test analysis of covariance with $n= 70$ ($M= 81,770, SD=) 4.885$, with $p\text{-value} < .05$						

Based on Table 9, it can be observed that row X1 shows that the F count = 6.625 with p-value = 0.012. Based on the degree of significance that has been determined at 0.05, this shows that the p-value is <0.05. So H0 is rejected and H1 is accepted. The conclusion that can be drawn is that there is an influence of the Inquiry Social Complexity learning model on mathematical problem-solving abilities by controlling self-concept. Furthermore, in Table 9 it can be observed that row X2 shows that the F count = 2033.056 with p-value = 0.00. Based on the degree of significance that has been determined at 0.05, this shows that the p-value is <0.05. So H0 is rejected and H1 is accepted. Based on the Corrected model results in Table 9, it can be observed that the F count = 1129.962 with p-value = 0.00. Based on the degree of significance that has been determined at 0.05, this shows that the p-value is <0.05. So H0 is rejected and H1 is accepted. The conclusion that can be drawn is that there is a simultaneous influence of the Inquiry Social Complexity learning model and self concept on mathematical problem-solving abilities. Apart from that, further tests were carried out which aimed to see which learning model was better between the inquiry social complexity learning model and the conventional expository learning model using the estimated parameter test, namely as follows.

Table 10. Advanced Test Results

Parameter Estimates							
Dependent Variable: Mathematical Problem Solving Ability							
Parameter	B	Std. Error	Q	Sig.	95% Confidence Interval		Partial Eta Squared
					Lower Bound	Upper Bound	
Intercept	-1,802	1,825	-.987	,327	-5,446	1,842	.014
[X1=1]	-.557	,216	-2,574	.012	-.988	-.125	,090
[X1=2]	0a
Self_Concept	,996	,022	45,089	,000	,952	1,040	,968
a. This parameter is set to zero because it is redundant.							

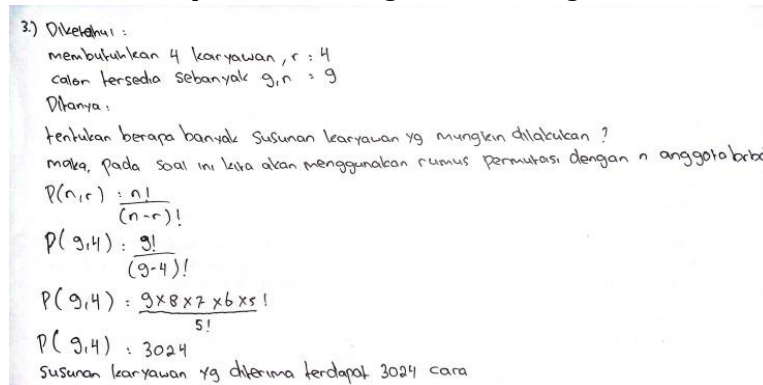
Based on table 10, it can be observed that the row [X1=1] shows that the value of $t_0 = -2.574$ with $p\text{-value} = 0.012$. Based on the degree of significance that has been determined at 0.05, this shows that the $p\text{-value}$ is <0.05 . So H_0 is rejected and H_1 is accepted. The conclusion that can be drawn is that the mathematical problem-solving abilities of students who are treated with the inquiry social complexity learning model are better than students who are given the conventional expository learning model after controlling for self-concept.

2. Discussion

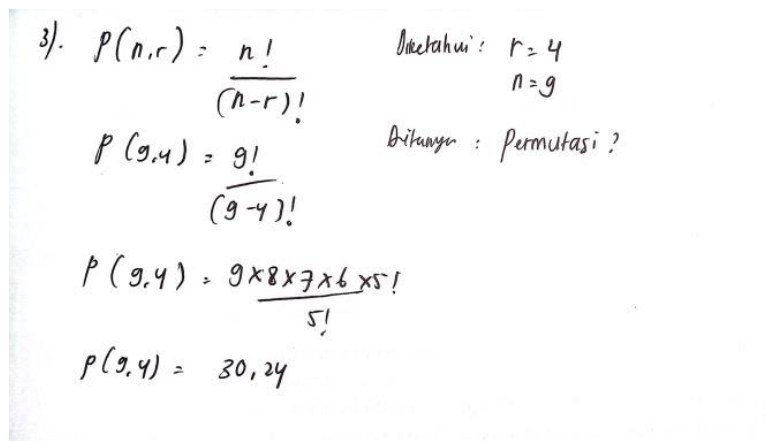
This research was conducted at SMK Negeri 2 Bandar Lampung. Began on July 17 to August 14 2023 with 5 meetings. The first meeting was filled with introductions and pretests, the second to fourth meetings were filled with proper learning and the last meeting was used to collect posttest data. Meetings are held twice a week, namely on Tuesday and Thursday. This research consists of one independent variable, namely the inquiry social complexity learning model, one dependent variable, namely mathematical problem-solving ability, and one covariate variable, namely self-concept. Researchers took samples from two classes, namely class XII TKR 1 and class XII TSM 1 with the same class members totaling 35 people. So the total is 70 students. Class XII TKR 1 was treated with the inquiry social complexity learning model (experimental class) and class XII TSM 1 was treated with the conventional expository learning model (control class). The material studied is Permutations and Combinations. After being given treatment in both classes, a posttest of self-concept and mathematical problem-solving abilities was carried out.

The learning process is carried out directly or face to face in class using the quantum teaching learning model. The inquiry social complexity learning model has 5 stages, namely *Observation Team*, *Reconstruction*, *Socialization*, *Verification*, *Applied Communication*. The first stage is *Observation Team* namely the stage where students are asked to observe and collaborate in discussing several example questions given. The second stage is *Reconstruction*, which is the stage where students divide the task to solve the example questions and identify the example questions and be able to solve the questions correctly. The third stage is *Socialization*, at this stage students carry out discussions and argue based on the results of working on examples of questions that have been worked on. The fourth stage is *Verification*, at this stage students explain the types of questions that have been worked on together. The fifth stage is *Applied Communication*, at this stage students in groups present their arguments in turns and then an agreement is reached on the truth according to the teacher's recommendations.

The first hypothesis in this research is whether there is an influence of the inquiry social complexity learning model on mathematical problem-solving abilities by controlling self-concept. After the learning process is complete, the researcher can continue by conducting a posttest to see the differences between the experimental class and the control class. The following are the posttest results of students' mathematical problem-solving abilities in Figure 2.



Based on Figure 2, it can be seen that students who receive the inquiry social complexity learning model can work on mathematical problem solving ability questions with indicators of understanding the problem. Students can understand the problem well, then the indicator is designing an overall plan that is made correctly and will lead to the correct solution. Based on the indicators of carrying out the correct, complete and clear answer plan, then the indicators look again, students carry out checks to see the correctness of the results and processes in Figure 3.



Based on Figure 3, it can be seen that students who receive the conventional expository learning model cannot work on mathematical problem-solving ability questions with indicators of mathematical problem-solving ability, namely understanding problems, designing plans, carrying out plans and looking back. Based on the description above, it can be seen that the inquiry social complexity learning model by controlling self-concept has better or more influential results. This is because the inquiry social complexity learning model has several advantages, namely this model focuses on students being able to contribute actively to the learning process and can also improve students' mathematical problem-solving abilities. Learning activities using this learning model are able to foster curiosity and expand knowledge. Previous researchers who are relevant to this research are research conducted by Venny Rika entitled Implementation of Inquiry social complexity to improve critical thinking skills and student learning outcomes in learning. The research results show that there has been an increase in critical thinking skills and student learning outcomes during the 2 cycles. The success of implementing the inquiry social complexity learning model can be seen

by changes in students' attitudes who are enthusiastic in learning to find and solve their own problems. The main obstacle faced by researchers is convincing students to be confident and dare to learn new things. Previous researchers who are relevant to this research are research conducted by Venny Rika entitled Implementation of Inquiry social complexity to improve critical thinking skills and student learning outcomes in learning.

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The experimental class received treatment carried out simultaneously with the inquiry social complexity learning model and self-concept on mathematical problem-solving abilities and the control class received the same treatment simultaneously with the conventional expository model and students' self-concept on mathematical problem-solving abilities. In this research, it can be seen that the inquiry social complexity learning model with other models can have a better effect than the model being compared. This is the case with the inquiry social complexity learning model which is compared with the conventional expository learning model. The average score of students who received inquiry social complexity learning model treatment was greater than students who received conventional expository learning model treatment, although the difference was not very significant. Apart from the inquiry social complexity learning model, self-concept is also a concern in this research. In line with this research, self-concept influences mathematical problem-solving abilities. This can be seen from the results of calculations or data processing using SPSS software which shows the influence on ability mathematical problem solving. Following are the calculation results. The following are the calculation results in Figure 4.

Tests of Between-Subjects Effects

Dependent Variable: Y

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	1598.939 ^a	2	799.470	1129.962	.000
Intercept	.883	1	.883	1.248	.268
Model_ISC	4.687	1	4.687	6.625	.012
Self_Concept	1438.425	1	1438.425	2033.056	.000
Error	47.404	67	.708		
Total	469706.000	70			
Corrected Total	1646.343	69			

a. R Squared = .971 (Adjusted R Squared = .970)

Sig. Self_Concept covariate shows that it is smaller than α or $0.000 < 0.05$. So with this it can be said, there is a linear relationship between the covariate variable (self-concept) and the dependent variable (mathematical problem solving ability). So self-concept influences mathematical problem solving abilities. After completing the data analysis and results obtained from research at SMK Negeri 2 Bandar Lampung on the experimental class and control class, it can be concluded that there is an influence of the social complexity and self-concept inquiry learning model on students' mathematical problem-solving abilities.

D. CONCLUSION

The learning process is carried out directly or face to face in class using the inquiry social complexity learning model which has 5 stages, namely *Observation Team, Reconstruction, Socialization, Verification, Applied Communication*. After the learning process is complete, the researcher can continue by conducting a posttest to see the differences between the experimental class and the control class. Based on data analysis and discussion, it is stated that the mathematical problem-solving abilities of students in classes treated with the inquiry social complexity learning model are better than students in classes treated with the conventional expository model. So, it can be concluded that there is an influence of the inquiry social complexity learning model by controlling self-concept. There is an influence of the self-concept covariate variable on mathematical problem-solving abilities and there is a simultaneous influence of the inquiry social complexity learning model and self-concept on mathematical problem solving abilities.

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APLIKASI TIK-TOK: DESAIN PEMBELAJARAN AKIDAH AKHLAK UNTUK MENINGKATKAN MINAT BELAJAR DI MAN 1 LAMPUNG TIMUR

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Abstract. Problematika yang kerap terjadi dalam pendidikan Islam adalah kurangnya keterampilan guru dalam memanfaatkan teknologi sebagai media pembelajaran. Penelitian ini bertujuan untuk mengetahui kegiatan pembelajaran saat ini, mendesain pengembangan pembelajaran, dan mengetahui kepraktisan desain pengembangan pembelajaran akidah akhlak melalui aplikasi tik-tok. Metode penelitian ini adalah penelitian *Reseach and Development* (R&D) yang analisis, desain, development, implementasi dan evaluasi. Hasil penelitian ini menunjukkan bahwa pembelajaran akidah akhlak sudah berjalan dengan baik. Namun, metode pembelajaran yang digunakan masih menggunakan metode ceramah, diskusi dan hafalan. Desain pengembangan pembelajaran ini menggunakan beberapa aplikasi pendukung seperti *Benime, Text Voice Free, Picsart, Kine Master* dan *Video ke MP3 Converter* serta aplikasi bantuan WhatsApp. Penilaian 9 validator yang meliputi ahli materi 83,5%, ahli desain pembelajaran 84,4%, ahli media pembelajaran 84,4%, semua dikategorikan dangat layak. Tahap pengembangan uji kelompok kecil memperoleh 88,0%, dan implementasi uji coba kelompok besar perolehan tertinggi yaitu 67,7% predikat sangat sesuai. Perolehan uji pre-test dan post-test dengan rata-rata 90 naik 60%, jadi ketuntasan siswa selama belajar menggunakan media tik-tok 100% tuntas. Kemudian, uji kepraktisan memperoleh rerata skor 4,8 dengan kategori sangat praktis. Ini menunjukkan bahwa desain pengembangan yang telah diujicobakan sangat layak untuk dikembangkan lebih lanjut.

Keywords. Aplikasi Tik-Tok, Desain Pengembangan, Pembelajaran Akidah Akhlak, Minat Belajar

A. INTRODUCTION

Saat ini, proses pembelajaran pada pelajaran akidah akhlak kurang diperhatikan oleh guru. Selama bertahun-tahun, proses pembelajaran di sekolah tetap menjadikan siswa sebagai objek dan guru sebagai subjek (Hidayat et al. 2019). Menurut Fauzia, salah satu konflik yang kerap terjadi dalam dunia pendidikan yakni konflik mengenai lemahnya proses pembelajaran (Fauzia 2020). Seorang guru seharusnya menemukan metode atau model yang tepat, agar materi yang disampaikan mudah dipahami oleh siswa (Nurjanah, Yahdiyani, and Wahyuni 2020). Namun, terkadang beberapa metode yang digunakan guru sering kali menyulitkan untuk di pahami oleh siswa, dikarenakan jumlah siswa yang terlalu banyak menjadi proses pembelajaran tidak kondusif dan efektif (Shim 2023). Guru tampaknya lebih sering memberikan bukti dari contoh umum. Tidak hanya itu, fakta yang ada terlihat bahwa beberapa guru kurang untuk memberikan bukti yang nyata dalam kehidupan (Rø and Arnesen 2020). Bahkan, masih banyak dari beberapa guru yang belum menerima pelatihan guna meningkatkan profesionalitas mereka, dan mereka juga masih merasa kesulitan dalam mengatasi berbagai permasalahan saat di kelas (Llorent-Bedmar, Cobano-Delgado Palma, and Navarro-Granados 2020).

Apikasi tik-tok adalah sebuah jenis media sosial yang populer di seluruh dunia, sebuah survei *online* melaporkan bahwa tik-tok telah diunduh dengan 738 juta unduhan dan total unduhan lebih dari 1,5 miliar (Su et al. 2021). Salah satu daya tarik utama tik-tok yaitu pengguna dapat dengan mudah merekam video mereka sendiri atau menggunakan berbagai alat pengeditan yang tersedia untuk dapat menciptakan konten yang kreatif dan menghibur (Zhou, Sotiriadis, and Shen 2023; Barta et al. 2023). Melihat platform tersebut semakin populer, seharusnya proses pembelajaran melalui aplikasi tik-tok dapat menjadi sebuah inovasi dalam belajar siswa supaya mereka memperoleh pengetahuan dan keterampilan yang lebih luas (Estrada Guillén, Monferrer Tirado, and Rodríguez Sánchez 2022). Aplikasi ini memberi beberapa manfaat dalam proses pembelajaran seperti, sebagai media pembelajaran yang menyenangkan, menjadikan siswa lebih aktif, dan lain sebagainya (Puspitasari 2021). Menurut Nurlaeli, bahwa guru madrasah harus memiliki kemampuan untuk mengubah perkembangan kurikulum tetapi tetap mempertahankan ciri khas madrasah sebagai sekolah agama Islam (Nurlaeli 2020). Namun, belum sepenuhnya guru akidah akhlak yang memanfaatkan aplikasi tik-tok sebagai media pembelajaran. Maka perlunya mengkonseptualisasikan kembali makna pendidikan yang selalu berubah, dengan setiap perubahan tersebut maka perlu tindak lanjut yang lebih baik (Suyadi et al. 2022).

Peningkatan minat belajar siswa dapat dilakukan melalui aplikasi tik-tok (Nadiva 2022). Maka ini menuntut guru untuk memberikan suatu inovasi dalam proses pembelajaran, dan pendidikan harus melakukan revolusi demi meningkatkan kualitas individu siswa (Priyanto 2020). Menurut Reski, minat belajar sangat diperlukan dalam proses belajar siswa, karena ini yang akan mempengaruhi kualitas pendidikan itu sendiri (Reski 2021). Dengan fakta yang ada, bahwa minat belajar siswa masih kurang termotivasi dikarenakan proses pembelajaran yang berjalan hanya sebatas formalitas (Mohamad Aso Samsudin and Ukhtul Iffah 2020). Bahkan, terdapat pengaruh yang signifikan terhadap minat siswa dalam pelajaran akidah akhlak kini cenderung menurun (Herlina 2020). Dengan mempertimbangkan situasi ini, bimbingan belajar sangat penting untuk pertumbuhan siswa itu tidak hanya dapat diperoleh di sekolah saja, tetapi juga pembelajaran di luar sekolah dapat sangat membantu menumbuhkan minat siswa dalam belajar (Prasetya et al. 2019). Dengan demikian, tuntutan perbaikan kualitas dan kuantitas pendidikan mesti diimbangi dengan kualitas guru, salah satu yang harus dikuasai oleh guru yaitu dengan mendesain proses pembelajaran agar lebih menarik dan siswa semakin senang untuk terus menerus untuk belajar (Hidayat and Asyafah 2019).

Perkembangan teknologi telah menjadi solusi yang sangat relevan dan efektif dalam menghadapi tantangan pendidikan modern (Degner, Moser, and Lewalter 2022). Dalam pemanfaatan teknologi seperti media sosial tidak hanya meningkatkan aksesibilitas, tetapi juga memperkaya pengalaman belajar siswa yang membantu memahami dan mengaplikasikan dari hasil belajar yang lebih baik (Banks et al. 2019). Mengingat bahwa pembelajaran semakin dimediasi oleh teknologi digital, tentu pengalaman belajar siswa dengan teknologi semakin penting karena dapat memengaruhi keberhasilan mereka dalam belajar (Rohles et al. 2022). Guru semakin diharapkan untuk memberikan kontribusi terhadap pengembangan siswa untuk yang memperoleh keilmuan yang komprehensif (Zweeris, Tigelaar, and Janssen 2023). Maka, upaya guru dalam mewujudkan inovasi dalam pembelajaran tentu akan memberikan kesempatan siswa dan menjadi sebuah solusi untuk mengatasi berbagai problematika yang sedang terjadi dalam pendidikan (Maynard, Symonds, and Blue 2023). Menurut Benny A. Pribadi, media atau teknologi pembelajaran melalui sosial media ini memiliki ragam dan klasifikasi yang meliputi (1) media cetak, (2) media grafis dan media pameran, (3) media audio, (4) media gambar bergerak, (5) media multimedia, (6) media berbasis web atau internet (Pribadi 2019).

Penelitian ini berusaha memberikan suatu inovasi guru akidah akhlak dalam melaksanakan kegiatan pembelajaran. Kemudian, artikel ini memiliki tujuan yaitu (1) untuk mengetahui pembelajaran akidah akhlak saat ini, (2) mendesain pembelajaran akidah akhlak, (3) mengetahui tingkat kepraktisan desain pengembangan pembelajaran akidah akhlak melalui aplikasi tik-tok. Berdasarkan permasalahan tersebut, maka penelitian ini sangat penting untuk dilakukan sebagai inovasi baru bagi guru dalam memanfaatkan aplikasi tik-tok dalam media pembelajaran. Penelitian ini tidak terlepas dari penelitian sebelumnya yang bertujuan untuk menentukan kebaruan dalam penelitian ini. Berbagai penelitian terdahulu yang terkait dengan penelitian ini adalah (Taubah 2020; Nadiyah 2021; Pea et al. 2021; Syaibani and Zainiyati 2022; Vidyastuti, Effendi, and Darmayanti 2022; Setiawati 2023; Bempa et al. 2023). Namun, penelitian terdahulu memiliki corak atau tujuan masing-masing. Sehingga ada perbedaan pada penelitian dengan judul Aplikasi Tik-Tok: Desain Pembelajaran Akidah Akhlak untuk Meningkatkan Minat Belajar di Madrasah Aliyah Negeri 1 Lampung Timur.

B. METHODS

Jenis yang digunakan dalam penelitian ini adalah penelitian dan pengembangan atau disebut dengan *Research and Development (R&D)*. Dalam penelitian yang dikembangkan ini memakai model pengembangan ADDIE. Pada model pengembangan ADDIE terdapat lima tahapan-tahapan. Adapun dari tahapan tersebut meliputi Analisis, Desain, Development, Implementasi dan Evaluasi (Branch 2009). Penelitian ini dilakukan di MAN 1 Lampung Timur, karena penelitian yang dikembangkan memiliki kepentingan dengan rumusan masalah dalam penerapan kurikulum 2013. Waktu dalam penelitian ini dibutuhkan selama 3 bulan. Metode pengumpulan data yang peneliti gunakan dalam penelitian ini yang meliputi wawancara, observasi, kuisisioner dan dokumentasi. Kemudian untuk teknik analisis uji kelayakan produk yaitu *Pertama*, data kualitatif diperoleh pada tahap validasi ahli validator sebanyak 9 tim validator yang meliputi ahli materi, desain pembelajaran, ahli media pembelajaran, dan instrumen kepraktisan yang di isi oleh guru, serta pengisian kuesioner siswa terkait dengan desain pembelajaran yang dikembangkan. *Kedua*, data kualitatif diperoleh dari penilaian validator, penilaian guru dan respon peserta didik.

Untuk menilai tingkat kelayakan tersebut, kriteria diinterpretasikan dengan menggunakan "*skala likert*" 5. Menurut (Riduwan 2015), berikut pedoman tingkat kriteria dari kelayakan nilai pada umumnya seperti di bawah ini.

Tabel 1. Uji Kreteria Kelayakan

Kriteria	Rangepersentase	Skala Nilai
Tidak Layak	00%-20%	5
Kurang Layak	021%-40%	4
Sedang	041%-60%	3
Layak	061%-80%	2
Sangat Layak	081%-100%	1

Kemudian, untuk menghiung tingkat kepraktisan, menurut Widoko yaitu menggunakan acuan pedoman menggunakan skala likert pada tabel di bawah ini (Widoyoko 2013).

Tabel 2. Uji Kriteria Kepraktisan

Rerata Skor	Kriteria	Simpulan
> 4,2	Sangat Praktis	Dapat dijadikan contoh
> 3,4 – 4,2	Praktis	Dapat digunakan tanpa perbaikan
> 2,6 – 3,4	Cukup Praktis	Dapat digunakan dengan sedikit perbaikan
> 1,8 – 2,6	Kurang Praktis	Dapat digunakan dengan banyak perbaikan
≤ 1,8	Tidak Praktis	Belum dapat digunakan

C. RESULT & DISCUSSION

1. Pembelajaran Akidah Akhlak saat ini di MAN 1 Lampung Timur

Saat ini, proses pembelajaran Akidah Akhlak di MAN 1 Lampung Timur terlihat efektif, dengan guru yang mampu memilih model, metode, dan media pembelajaran yang sesuai, menciptakan lingkungan pembelajaran yang kondusif. Meskipun demikian, metode pembelajaran yang digunakan masih kurang inovatif, terbatas pada ceramah, diskusi, demonstrasi, dan hafalan. Bahan ajar yang digunakan mencakup penggunaan lembar kerja siswa (LKS). Selain itu, ketika melihat praktik pembelajaran, ditemukan bahwa guru hanya memiliki buku cetak pribadi sebagai sumber pembelajaran, dan penggunaan media terkadang terbatas pada proyektor untuk menampilkan materi. Kendala ini merupakan tantangan yang dihadapi oleh guru karena belum sepenuhnya dapat memanfaatkan teknologi secara efektif. Oleh karena itu, peneliti bertujuan untuk mengembangkan inovasi yang dapat membantu pendidik meningkatkan kreativitas mereka dalam proses pembelajaran. Dengan memanfaatkan teknologi dalam pembelajaran diharapkan akan mempermudah proses belajar siswa, memberikan hasil yang lebih baik, serta memberikan pengetahuan yang lebih luas kepada siswa, yang pada gilirannya akan memberikan dampak positif.

Dalam proses pembelajaran guru mata pelajaran Akidah Akhlak telah sukses dalam melaksanakan pembelajaran, namun belum adanya sebuah inovasi seperti pemanfaat teknologi melalui aplikasi atau media sosial. Menurut Yetti, dalam menentukan model pembelajaran dengan benar tentu dapat mengelola kelas secara efektif. Tidak hanya sebatas pengalaman yang dimiliki saja, guru juga harus terus mengembangkan kemampuan yang didapatkan melalui workshop atau jenis kegiatan lainnya. Agar kemampuan guru semakin terus berkembang dan mampu menyelesaikan berbagai permasalahan saat di kelas (Yetti 2021). Selain itu, guru yang berpengalaman tentunya menggunakan strategi pembelajaran berupa pemilihan pendekatan, metode, dan media yang lebih variatif. Selain itu, pemilihan metode juga dapat mempengaruhi selama kegiatan pembelajaran (Mutanaffisah, Ningrum, and Widodo 2021). Hal ini tentu membantu guru dalam mengatasi problematika untuk dapat memanfaatkan teknologi atau media lainnya dengan baik.

2. Desain Pembelajaran Akidah Akhlak melalui Aplikasi Tik-Tok

Bentuk produk yang ingin dibuat atau dikembangkan sebaiknya mengikuti model pengembangan yang sudah ditentukan, supaya model tersebut menjadi panduan dalam proses penyusunan sebagai kerangka kerja yang terstruktur. Dalam tahap ini ada lima langkah untuk mendesain dan mengembangkan pembelajaran akidah akhlak dengan menggunakan aplikasi tik-tok yang meliputi (1) Analisis, (2) Desain, (3) Development, (4) Implementasi, (5) Evaluasi (Branch 2009). Adapun perolehan datanya disajikan sebagai berikut:



Gambar 1. Pengembangan Model ADDIE

a. Analisis

Pertama, Menganalisis kebutuhan. Pelajaran akidah akhlak adalah mata pelajaran yang wajib bagi siswa di madrasah. Dimana, dalam pembelajaran akidah akhlak melibatkan pemahaman mendalam terhadap tuntutan siswa terkait pemahaman agama dan pembentukan karakter. Manfaat pendidikan akidah akhlak ini membantu merancang kurikulum yang sesuai dengan tahap perkembangan moral, intelektual dan emosional siswa, memperhitungkan konteks sosial dan budaya mereka. Melihat perkembangan zaman yang semakin pesat, maka penting bagi guru untuk mengintegrasikan teknologi, interaksi sosial, dan pendekatan berbasis masalah dalam pembelajaran menjadi bagian sentral dalam memenuhi kebutuhan siswa untuk mengembangkan pemahaman serta penggunaan secara bijak. Dengan begitu, perolehan analisis ini dijadikan sebagai pedoman dalam menyusun dan mendesain suatu produk bahan ajar yang dikembangkan melalui media tik tok.

Kedua, Menganalisis karekteristik penggunaan aplikasi tik-tok. Untuk mengetahui lebih jauh terkait penggunaan tik-tok, maka peneliti menyediakan terlebih dahulu pertanyaan yang kemudian di jawab ebanyak 85 siswa yang telah menjadi responden. Adapun untuk perolehan data tersebut disajikan pada tabel di bawah ini.

Tabel 3. Respon Siswa tentang Penggunaan Aplikasi Tik-Tok

No	Pertanyaan	Jawaban		
		Ya	Netral	Tidak
1	Apakah anda memiliki akun aplikasi tik-tok?	97,0%	0%	3,0%
2	Apakah anda sudah lama mengenal aplikasi tik-tok?	92,1%	4,7%	3,2%
3	Apakah anda suka saat bermain aplikasi tik-tok?	87,0%	8,0%	5,0%
4	Apakah pihak sekolah memperbolehkan memakai HP untuk proses belajar?	100%	0%	0%
5	Apakah anda tahu tentang manfaat menggunakan aplikasi tik-tok?	81,5%	13,8%	4,7%
6	Apakah aplikasi tik-tok dapat memberi informasi bagi anda?	78,0%	16,0%	6,0%
7	Apakah anda setuju jika aplikasi tik-tok digunakan sebagai media pembelajaran?	95,0%	0%	5,0%

Berdasarkan perolehan data di atas dapat dilihat bahwa 97,0% siswa sudah memiliki aplikasi

tik-tok di ponsel pribadi. Mereka juga sudah menganal aplikasi sejak lama, bahkan mereka sangat suka ketika bermain tik-tok. Data tersebut juga menunjukkan bahwa aplikasi tok-tok banyak membawa kemanfaatan dan mereka sering mendapatkan informasi dari beberapa konten video yang dilihat. Kemudian, kebijakan sekolah telah memberi respon baik, siswa diperbolehkan membawa ponsel di kelas hanya digunakan untuk proses pembelajaran atau kegiatan positif lainnya. Selain itu, respon siswa juga setuju jika proses belajar mereka menggunakan media aplikasi tik-tok. Hal ini tentu membawa bentuk inovasi baru, dapat meningkatkan kreatifitas guru, membuat pembelajaran yang menyenangkan, dan berjalan secara efektif.

Ketiga, Mengalisis kurikulum. Saat ini, Kurikulum yang telah diterapkan di MAN 1 Lampung Timur adalah Kurikulum 2013 (K13), yang dirancang berdasarkan tiga pilar utama, yaitu respons terhadap kebutuhan siswa, persyaratan dari masyarakat dan dunia kerja, serta kebijakan pemerintah. Struktur kurikulum di MAN 1 Lampung Timur mencakup seluruh materi pembelajaran yang diselenggarakan selama tiga tahun. Kurikulum ini terdiri dari 16-20 mata pelajaran, muatan lokal, dan pengembangan diri yang diberikan kepada siswa. Untuk menentukan tingkat kelulusan, setiap indikator menggambarkan pencapaian siswa pada kompetensi dasar, dengan persentase ketuntasan yang diharapkan setidaknya mencapai 75%. Selain itu, madrasah perlu menentukan kriteria ketuntasan minimal sebagai Target Pencapaian Kompetensi (TPK), yang mempertimbangkan kemampuan rata-rata siswa.

Dalam rangka memperoleh hasil produk yang ingin diharapkan, maka perlu dilakukan observasi awal untuk menentukan analisis kebutuhan, kemudian memastikan produk tersebut berfungsi secara efektif ketika diimplementasikan pada siswa (Andi Rustandi and Rismayanti 2021). Menurut Rusdi, setidaknya dalam tahap ini diutamakan untuk menganalisis kebutuhan, kareakteristik penggunaan media siswa, mengetahui kemampuan awal, melihat ketersediaan fasilitas pendukung, menganalisis kurikulum (Rusdi 2018). Dengan analisis kebutuhan ini, peneliti memiliki peran yang sangat signifikan karena menjadi dasar perancangan. Tujuannya ialah untuk menghindari implementasi yang tidak sesuai atas ketidak relevanannya dengan kebutuhan terhadap siswa (Rahmi Anita Azmi, Kasman Rukun 2020). Selain itu, seorang guru harus memiliki pemahaman yang baik tentang karakteristik dan kemampuan awal siswa. Maka perlu dilakukan analisis kemampuan awal siswa adalah langkah penting yang bertujuan untuk mengidentifikasi kebutuhan dan karakteristik mereka, supaya guru dapat menetapkan tujuan serta materi yang sesuai untuk perubahan perilaku yang diinginkan (Taufik 2019). Selanjutnya, perlu bagi guru untuk menganalisis kurikulum untuk memperoleh tujuan yang diharapkan dalam membantu siswa memahami materi dan menjalani proses pembelajaran (Arnes, Musparidi, and Yusmanila 2023).

b. Desain

Tahap yang kedua ini adalah langkah mendesain untuk menghasilkan suatu produk yang kemudian bertujuan dalam menemukan model pembelajaran baru melalui aplikasi tik tok. Dalam desain ini, terdapat beberapa langkah yang perlu diikuti. Pertama, langkah awal adalah menentukan struktur materi. Materi yang akan disampaikan tidak hanya terbatas pada sumber-sumber buku yang ada, melainkan juga dapat bersumber dari berbagai sumber lain-lain, seperti buku cetak, LKS, internet, dan media lain yang dapat mendukung. Setelah itu, seluruh materi yang telah dipilih dengan cermat akan diatur agar sesuai dengan tujuan pembelajaran yang telah direncanakan. Kedua, spesifikasi menentukan spesifikasi desain yang dikembangkan. Berdasarkan pada produk yang dikembangkan dengan kebutuhan peserta didik secara kontekstual, spesifikasi yang harus ditentukan dengan kebutuhan, ketersediaan sumber dan orientasi pada produk yang ingin dikembangkan. Dalam hal ini meliputi dua aspek yaitu aspek pedagogik dan aspek non pegagogik. *Ketiga*, Membuat desain pembelajaran pada aplikasi yang sudah tersedia. Dalam langkah ini desain pembelajaran pada

pembelajaran Akidah Akhlak terlebih dulu menentukan aplikasi pendukung dapat dapat didownload pada *Play Store*. Beberapa aplikasi tersebut dapat dilihat pada tabel sebagai berikut.

Tabel 4. Aplikasi Pendukung untuk Mendesain Pembelajaran Akidah Akhlak

NO	Nama Aplikasi	Gambar dan Sumber
1	Benime	 <p>Sumber: https://play.google.com/store/apps/details?id=com.benzveen.doodlify</p>
2	Text Voice Free	 <p>Sumber: https://play.google.com/store/apps/details?id=com.TextVoice.TextVoiceG</p>
3	Picsart	 <p>Sumber: https://play.google.com/store/apps/details?id=com.picsart.studio</p>
4	Kine Master	 <p>Sumber: https://play.google.com/store/apps/details?id=com.nexstreaming.app.kinemasterfree</p>
5	Video ke MP3 Converter	 <p>Sumber: https://play.google.com/store/apps/details?id=mp3videoconverter.videotomp3.videotomp3converter</p>

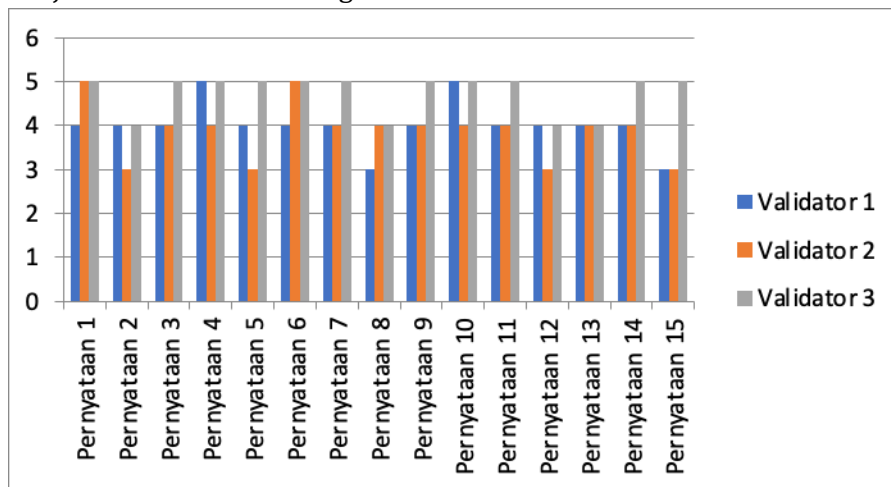
Setelah pembuatan desain pembelajaran dalam bentuk video, kemudian produk tersebut diujicobakan pada para ahli yang berjumlah 9 validator. Hal ini untuk mengetahui kelayakan dan kesesuaian sebelum diimplementasikan kepada peserta didik. Adapun tampilan video yang sudah disiapkan dalam proses pembelajaran akidah akhlak berjumlah 28 *slide* video, yang terdapat pada akun "bimapanay_99" atau dapat dilihat melalui link (<https://vt.tiktok.com/ZSLVtPhSo/>).

Selanjutnya, penilaian tim validator meliputi ahli materi, ahli desain pembelajaran dan ahli media pembelajaran. Berikut hasil perolehan dari ahli validator.

Pertama, Validasi ahli materi. Perolehan penilaian ahli materi berjumlah tiga orang yang mencakup aspek indikator terkait kebenaran dan kelayakan materi dengan kajian keilmuan, penyajian materi dan partisipasi belajar peserta didik, penggunaan bahasa dan uraian materi memperoleh jumlah nilai sebesar 188. Untuk menghitung nilai yang didapat menggunakan rumus di bawah ini.

$$\frac{\text{Jumlah Penilaian Validasi}}{\text{Jumlah Nilai Tertinggi}} \times 100 = 83,5\%$$

Nilai range persentase 83,5% dengan kategori Sangat Sesuai. Untuk lebih jelas perolehan dari tim validator disajikan dalam bentuk diagram di bawah ini.

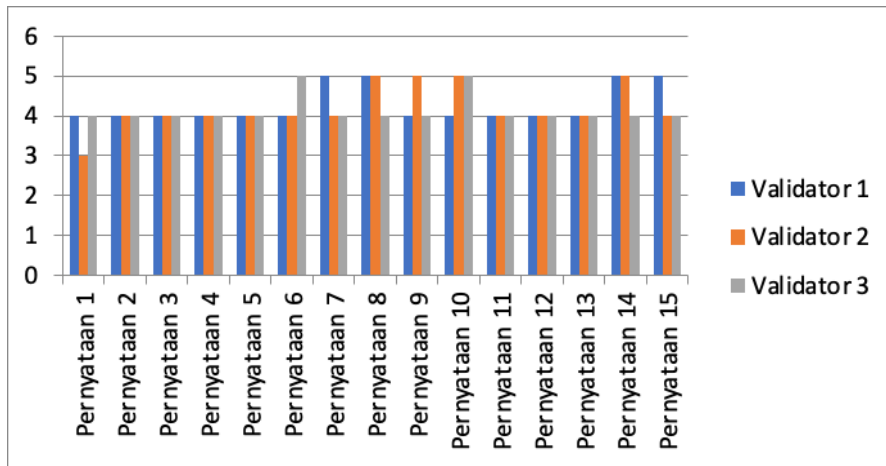


Gambar 2. Penilaian Validator Ahli Materi

Kedua, validasi ahli desain pembelajaran. Penilaian tim validator ini dilakukan sebanyak tiga orang. Validasi yang dilakukan oleh pakar desain pembelajaran melibatkan evaluasi aspek seperti perumusan kompetensi dasar (KD), kesesuaian strategi instruksional dengan KD, kualitas teknis desain pembelajaran, penggunaan sumber belajar *online*, daya tarik desain pembelajaran, dan akurasi perolehan nilai sebesar 189. Untuk menghitung nilai yang didapat menggunakan rumus di bawah ini.

$$\frac{\text{Jumlah Penilaian Validasi}}{\text{Jumlah Nilai Tertinggi}} \times 100 = 84,0\%$$

Nilai range persentase 84,0% dengan kategori Sangat Sesuai. Untuk lebih jelas perolehan dari tim validator disajikan dalam bentuk diagram di bawah ini.

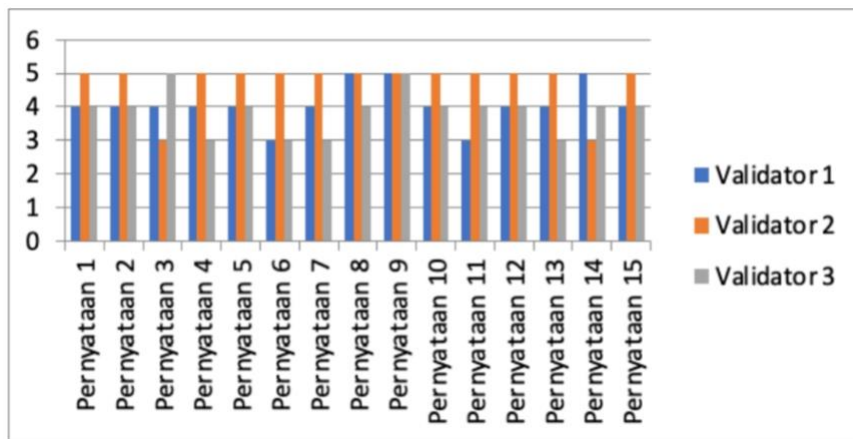


Gambar 3. Validator Ahli Desain Pembelajaran

Ketiga, Validasi ahli media pembelajaran. Penilaian yang dilakukan oleh ahli desain pembelajaran terkait yang mencakup aspek indikator terkait kemenarikan tampilan, huruf dan penulisan, tingkat interaksi desain pembelajaran dan kegrafisan tampilan memperoleh jumlah nilai sebesar 190. Untuk menghitung nilai yang didapat menggunakan rumus di bawah ini.

$$\frac{\text{Jumlah Penilaian Validasi}}{\text{Jumlah Nilai Tertinggi}} \times 100 = 84,4\%$$

Nilai range persentase 84,4% dengan kategori Sangat Layak. Untuk lebih jelas perolehan dari tim validator disajikan dalam bentuk diagram di bawah ini.



Gambar 4. Penilaian Validator Ahli Media Pembelajaran

Desain yang telah dilakukan untuk mengembangkan pembelajaran akidah akhlak melalui aplikasi tik-tok dapat dibantu oleh beberapa aplikasi pendukung. Menurut Purba and Harahap, dengan pemanfaatan media sosial dalam konteks pembelajaran, tentu dapat memberikan dukungan penting dalam meningkatkan motivasi belajar siswa. Oleh karena itu, diperlukan bahan ajar yang memiliki daya tarik agar siswa semakin bersemangat selama proses pembelajaran dan mereka juga tidak merasa bosan (Purba and Harahap 2022). Pembelajaran dengan teknologi memberikan beragam manfaat, termasuk akses global terhadap informasi, pembelajaran berbasis mandiri, adaptasi kurikulum personal, meningkatkan keterampilan digital, serta memungkinkan kolaborasi antar-siswa di seluruh dunia (Sinta et al. 2020). Melalui pengembangan melalui media tik-tok memberi kemudahan dalam mempersiapkan materi, video percakapan dengan memerankan orang

yang kemudian akan diduet antara pengguna lain (Ahmad Zubaidi, Junanah 2021; Proborini 2021). Banyak sekali manfaat yang ada pada media tik-tok, salah satunya adalah pembelajaran yang dilakukan jarak jauh (Puspitasari 2021). Dengan begitu, siswa dapat belajar secara mandiri ketika berada di rumah atau dimana pun mereka berada.

c. Development

Dalam tahap pengembangan ini, produk yang siap untuk disajikan kepada siswa terlebih dahulu diujicobakan pada kelompok kecil dengan jumlah 5 orang dari kelas X. Kategori 3 siswa yang menjadi sample yaitu peserta didik yang memiliki prestasi hasil belajar yang sangat baik, baik dan cukup baik. Kemudian 2 siswa dengan kategori yang suka bermain media sosial dan tidak terlalu suka bermain media sosial. Untuk tabel hasil penilaian respon peserta didik uji kelompok kecil sebagai berikut:

Tabel 5. Penilaian Siswa Uji Kelompok Kecil

No	Penilaian Siswa	Jumlah Nilai
1	Siswa 1	63
2	Siswa 2	66
3	Siswa 3	68
4	Siswa 4	64
5	Siswa 5	69
Total Nilai		330
Presentase		88,0%
Kategori		Sangat Sesuai

Dari hasil tabel tersebut kemudian di hitung dengan menggunakan rumus $P = \frac{\sum N}{N.T} \times 100 \%$, $P = \frac{330}{375} \times 100 \%$, $P = 88,0 \%$. Dapat diketahui bahwa pengembangan Akidah Akhlak melalui tik-tok yang mencakup aspek penilaian keefektifan, kemenarikan dan ketertarikan mendapatkan nilai rangepersentase 88,0%. Nilai tersebut masuk dalam kategori sangat sesuai.

Setelah produk selesai di desain dan dinilai oleh tim validator, tahap selanjutnya adalah pengembangan. Namun, sebelum produk tersebut diimplementasikan pada kelompok besar, seyogyanya terlebih dahulu diujikan pada kelompok kecil. Tentu ini bertujuan untuk memastikan produk yang dikembangkan memperoleh respon baik terhadap siswa (Latip 2022). Dimana, uji kelompok kecil yakni suatu metode atau prosedur yang digunakan untuk mengukur sejauh mana ketertarikan dan kemampuan siswa menggunakan dari produk yang dikembangkan, tetapi ini hanya sebatas mengetahui pada skala kecil. Ini biasanya dilakukan untuk mengatur kelas supaya lebih memudahkan dan lebih terfokus (Rohma, Subandowo, and Atiqoh 2022). Selain itu juga untuk mendeteksi masalah atau kelemahan dalam produk sebelum produk dikembangkan pada tahap yang lebih lanjut. Dengan melau uji kelompok kecil ini dapat membantu dalam memahami preferensi dan kebutuhan pengguna. Hal ini memungkinkan kelayakan desain yang dibuat benar-benar sesuai dengan target yang hendak dicapai (Fitriyah, Wiyokusumo, and Leksono 2021).

d. Implementasi

Tahap ini merupakan uji coba produk pengembangan pembelajaran akidah akhlak melalui media tik tok pada peserta didik kelompok besar dengan jumlah 85 orang. Acuan pedoman respon yang diberikan yaitu (1) sangat tidak sesuai, (2) tidak sesuai, (3) cukup sesuai, (4) sesuai, (5) sangat sesuai. Adapun penilaian pernyataan respon siswa disajikan dalam tabel di bawah ini.

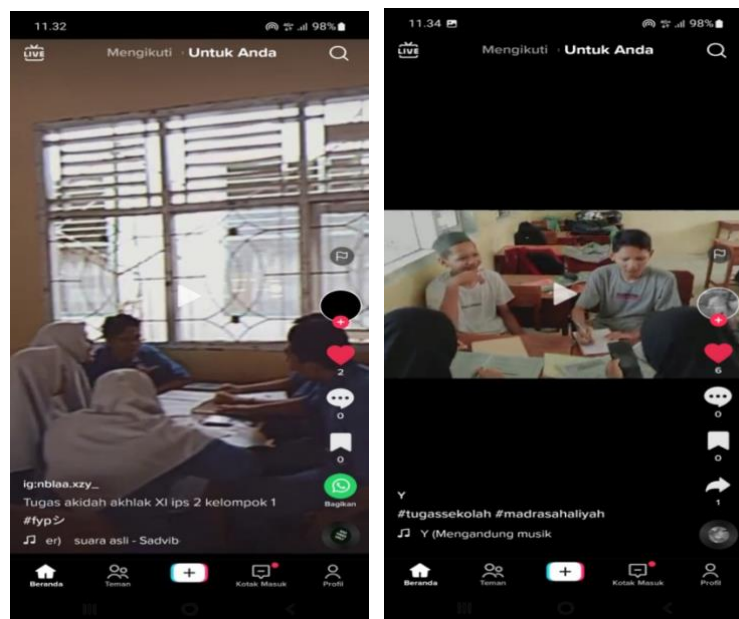
Tabel 6. Penilaian Siswa Uji Kelompok Besar

No	Pernyataan	Respon				
		1	2	3	4	5
1	Isi materi yang disajikan serasi dengan materi mata pelajaran akidah akhlak.	0%	0%	7,0%	62,0%	30,5%
2	Rancangan isi materi tersusun secara sistematis dan dapat diputar berulang-ulang.	0%	0%	12,9%	42,3%	44,7%
3	Isi materi dikembangkan memberi kemudahan untuk dipahami.	0%	0%	18,8%	55,2%	25,8%
4	Uraian pembahasan dan pemberian latihan soal mudah dipahami dengan baik.	0%	0%	9,4%	47,0%	43,5%
5	isi materi dapat memotivasi minat belajar.	0%	0%	10,5%	47,0%	42,3%
6	Penggunaan media memudahkan dalam proses pembelajaran.	0%	0%	5,8%	34,1%	60,0%
7	Pemilihan tulisan dan warna sesuai dengan isi materi	0%	0%	9,4%	31,7%	58,8%
8	Pemilihan gambar dan animasi sesuai dengan isi materi.	0%	0%	4,7%	41,1%	54,1%
9	Bahasa dan kata yang digunakan mudah dipahami.	0%	0%	5,8%	31,7%	62,0%
10	Waktu dalam penyajian isi materi akidah akhlak mudah dipahami.	0%	0%	5,8%	48,2%	45,8%
11	Bahan ajar yang dikembangkan dapat menumbuhkan semangat belajar.	0%	0%	8,2%	44,7%	47,0%
12	Desain yang dikembangkan dapat memberi keterampilan.	0%	0%	7,0%	40,0%	52,0%
13	Desain yang dikembangkan memberi bantuan untuk belajar.	0%	0%	7,0%	35,2%	57,6%
14	Desain yang dikembangkan memberi daya tarik untuk menarik perhatian.	0%	0%	2,3%	34,1%	63,5%
15	Desain yang dikembangkan memberi dampak positif dalam proses pembelajaran.	0%	0%	2,3%	30,5%	67,0%

Perolehan respon dari jawaban siswa menunjukkan kategori cukup sesuai, sesuai, dan sangat sesuai. Nilai tertinggi didapatkan pada item pernyataan 15 dengan perolehan persentase 67,7% kategori sangat sesuai, ini menegaskan bahwa desain yang dikembangkan melalui aplikasi tik-tok pada mata pelajaran akidah akhlak memberikan dampak yang positif terhadap siswa. Dengan begitu, implementasi yang telah dilakukan melalui aplikasi tik-tok banyak memberi banyak kemanfaatan bagi guru dan siswa. Siswa merasa lebih senang untuk belajar, termotivasi karena dapat memanfaatkan media tik-tok sebagai sarana untuk belajar, proses pembelajaran semakin lebih kondusif, dan siswa juga dapat memutar berulang kali dari materi yang disampaikan ketika berada di rumah. Dalam proses implementasi ini siswa hanya mengerjakan tugas yang tersajikan pada aplikasi tik-tok. Untuk mempermudah guru memberikan link kepada siswa, guru terlebih dahulu membuat grub melalui *WhatsApp*, agar siswa juga semakin lebih terkontrol dalam pelaksanaan belajar. Selain berdiskusi, mereka juga diberikan tugas untuk membuat video dari hasil diskusi kelompok. Hal ini, supaya siswa memiliki kreatifitas untuk dapat memanfaatkan teknologi dengan baik.

Proses pengembangan produk yang diimplementasikan memang membutuhkan waktu yang signifikan, karena tahap implementasi ini merupakan inti dari semua kegiatan yang terlibat dalam

proses pengembangan produk yang telah dibuat (Puspasari 2019). Pada tahap implementasi, guru menggunakan bahan ajar, metode pembelajaran, dan media pembelajaran yang telah dirancang dalam situasi kelas untuk mencapai tujuan pembelajaran yang telah ditetapkan. Ini melibatkan penggunaan strategi pembelajaran yang bertujuan membantu siswa mencapai kompetensi yang diharapkan setelah mengikuti pembelajaran dari produk yang dikembangkan (Nurhikmah et al. 2023). Pada tahap implementasi, peneliti juga perlu mendistribusikan bentuk kuesioner pada awal sebagai tes awal (pre-test) dan pada akhir implementasi sebagai data tes akhir (post-test) untuk tujuan evaluasi. Semua data yang terkumpul kemudian dikonversi menjadi data kuantitatif dengan menggunakan pedoman *skala likert* dan menggunakan pendekatan acuan kategori yang sudah ditentukan (Ambarita and Siahaya 2023). Berikut bukti siswa telah membuat konten video yang kemudian di *upload* melalui aplikasi tik-tok disajikan pada gambar di bawah ini.



Gambar 5. Proses Diskusi Siswa saat Belajar melalui Aplikasi Tik-Tok

e. Evaluasi

Dalam tahap ini untuk mengetahui sejauh mana keefektifan pengembangan pembelajaran akidah akhlak melalui tik tok. Untuk melihat hasil keefektifan dari desain yang dikembangkan, maka ada uji pre-test dan post-test. Nilai yang akan dibandingkan yakni perolehan nilai rata-rata ulangan harian yang sudah dilakukan oleh guru. Sebelum adanya desain pengembangan, terdapat 51 ketidak tuntasan nilai harian siswa, hal ini jika sample yang digunakan sebanyak 85 sebagai responden maka diperoleh 40% belum tuntas dari standar ketuntasan. Namun, sesudah desain pengembangan tersebut dikembangkan terhadap siswa, nilai mereka setelah diberikan pertanyaan yang tersaji dalam aplikasi tik-tok memperoleh rata-rata 90 dengan kenaikan ketuntasan siswa menjadi 60%. Dengan demikian, maka dapat disimpulkan bahwa nilai yang siswa 100% tuntas.

Evaluasi terdiri dari dua macam yang meliputi evaluasi formatif adalah jenis evaluasi yang dilakukan oleh guru atau pendidik setelah pelajaran berakhir di dalam kelas. Sementara, evaluasi sumatif merupakan jenis evaluasi yang diterapkan oleh guru dan tenaga pendidik pada akhir semester (Hendra et al. 2022). Namun, dalam tahap evaluasi ini untuk mengetahui keefektifan dari produk yang telah dikembangkan, tujuannya adalah untuk menilai efektivitas produk yang telah

dikembangkan. Evaluasi pada tahap *Pre-test* adalah evaluasi awal yang digunakan untuk mengukur kemampuan siswa sebelum mereka terlibat dalam proses pembelajaran, sedangkan *post-test* merupakan bentuk evaluasi yang diterapkan setelah siswa mendapatkan desain produk yang sudah dikembangkan dalam pembelajaran (Rohman et al. 2023). Dengan begitu, peneliti mampu melihat hasil perolehan dari desain produk yang telah dikembangkan kepada siswa.

3. Kepraktisan Desain Pembelajaran Akidah Akhlak melalui Aplikasi Tik-Tok

Setelah produk desain pengembangan diimplementasikan pada siswa. Maka perlunya untuk mengetahui tingkat kepraktisan yang dikembangkan melalui media tik-tok. Beberapa komponen model pembelajaran yang digunakan untuk menguji meliputi sintaks, prinsip sosial dan prinsip reaksi. Untuk hasil nilai kepraktisan dapat dilihat pada tabel sebagai berikut:

Tabel 7. Hasil Penilaian Kepraktisan

Aspek Pengamatan	Hasil Pengamatan				
	1	2	3	4	5
Fase memperkenalkan desain pembelajaran					√
Fase mengajarkan materi dengan menggunakan media pembelajaran					√
Fase menyimpulkan					√
Guru menyediakan dan mengelola media pembelajaran sesuai dengan KD					√
Guru menciptakan suasana yang nyaman dan membangkitkan motivasi siswa untuk belajar					√
Guru memperhitungkan rasionalitas alokasi waktu					√
Guru membimbing siswa saat menyelesaikan tugas					√
Guru memotivasi siswa untuk saling berdiskusi dan berbagi secara aktif					√
Guru memberikan penguat positif kepada siswa					√
Interaksi guru dengan siswa dan antara siswa dengan siswa					√
Keaktifan siswa memahami materi pada media yang digunakan				√	
Keaktifan siswa dalam menyelesaikan tugas pada media yang digunakan					√
Keaktifan siswa mengumpulkan jawaban					√
Keaktifan siswa dalam memecahkan masalah				√	
Keaktifan siswa dalam membuat kesimpulan					√
Rerata Skor	4,8				

Berdasarkan penilaian tersebut, pengembangan pembelajaran melalui aplikasi tik-tok pada mata pelajaran akidah akhlak dinilai sangat praktis dengan perolehan rerata skor 4,8, ini menunjukkan bahwa pengembangan ini efektif setelah diujicobakan kepada siswa. Kepraktisan pengembangan pembelajaran akidah akhlak melalui aplikasi tik-tok juga membantu guru dalam pengelolaan waktu dan memungkinkan siswa untuk mendengarkan materi dengan baik, baik di sekolah maupun di rumah.

Menurut Widiastuti Penggunaan media tik-tok dalam pembelajaran memang terbukti dapat meningkatkan motivasi peserta didik untuk belajar, dan menciptakan suasana kelas semakin lebih dinamis. Media ini sangat menarik karena kepraktisannya dan kesesuaian dengan tren saat ini, terlihat bahwa banyak siswa yang sering menonton video yang mereka sukai dan siswa merasa senang jika materi yang disampaikan guru terkemas dalam aplikasi tik-tok (Widiastuti, Rusmawati,

and Hartono 2023). Media aplikasi tik-tok kerap sekali digunakan dari berbagai kalangan, bahkan seorang guru kini memanfaatkan media ini dalam proses pembelajaran. Siswa merasa senang jika belajar mereka dikaitkan dengan teknologi, ini juga membantu guru agar pembelajaran semakin lebih praktis dan membuat siswa semakin aktif (H. P.S. Muttaqin, Sariyasa, and N.K. Suarni 2021). Sehingga, aplikasi tik-tok sangat cocok dan praktis jika guru mampu mendesain dengan baik dalam proses pembelajaran yang memanfaatkan teknologi.

D. CONCLUSION

Pembelajaran akidah akhlak di MAN 1 Lampung Timur memang terlihat sudah berjalan dengan baik. Guru sudah melakukan berbagai pendekatan untuk membuat suasana pembelajaran berjalan dengan efektif. Namun, metode pembelajaran yang digunakan masih sering kali menggunakan pada umumnya seperti metode ceramah, diskusi dan hafalan. Maka perlu adanya sebuah inovasi yang dapat membangkitkan motivasi dan kreatifitas yang antara guru-siswa. Desain pengembangan pembelajaran ini menggunakan beberapa aplikasi pendukung yang meliputi *Benime, Text Voice Free, Picsart, Kine Master dan Video ke MP3 Converter* serta aplikasi bantuan *WhatsApp*. Penilaian validator terdiri 9 tim ahli yang meliputi ahli materi dengan range persentase 83,5%, ahli desain pembelajaran dengan range persentase 84,0%, ahli media pembelajaran dengan range persentase 84,4%. Kemudian, tahap pengembangan yang dilakukan uji kelompok kecil memperoleh 88,0% dengan kategori sangat sesuai, dan implementasi uji coba kelompok besar perolehan tertinggi yaitu 67,7% predikat sangat sesuai. Perolehan uji pre-test dan post-test dengan rata-rata 90 naik 60%, jadi ketuntasan siswa selama belajar menggunakan media tik-tok 100% tuntas. Selanjutnya, uji kepraktisan memperoleh rerata skor 4,8 dengan kategori sangat praktis. Hal ini menunjukkan bahwa desain pengembangan yang telah diujicobakan kepada siswa dikategorikan sangat praktis dan sangat layak untuk dikembangkan lebih lanjut.

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BREAKING BARRIERS IN RELIGIOUS EDUCATION: INSIGHTS FROM THE PROBING PROMPTING MODEL'S IMPLEMENTATION IN A JOMBANG SCHOOL

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Abstract. This study investigates the effectiveness of the Probing Prompting learning model in the instruction of Akidah Akhlak in class X-C at MAN 1 Jombang. Employing a qualitative descriptive approach and a case study methodology, the research examines the implementation stages, effectiveness, challenges, and specific modifications made during the application of this model. The findings demonstrate a substantial improvement in student learning outcomes, particularly in cognitive, affective, and psychomotor domains. Challenges such as students' shyness, varied public speaking skills, and feelings of saturation with extensive material were identified. However, the educator's innovative instructional strategies and modifications effectively mitigated these issues. The study concludes that the Probing Prompting model, which focuses on in-depth inquiry and active student engagement, significantly enhances the learning environment, improving overall educational outcomes in Akidah Akhlak instruction. These results underscore the model's potential applicability across various subjects and educational contexts.

Keywords: *Probing Prompting; Student Engagement; Instructional Strategies*

A. INTRODUCTION

The inculcation and development of "akhlakul karimah", or noble character in students, are acquired through their participation in learning activities, particularly in Akidah Akhlak. This subject is integral to Islamic Religious Education (PAI) and crucial in shaping students' character. Substantially, it also motivates the application of values of monotheism and noble behaviour (Hasbullah, 2005, p. 18). The characteristic nature of the Akidah Akhlak subject is its focus on the realms of knowledge, understanding, and the student's appreciation of faith and how this faith is actualized and visualized through their behaviour. Ultimately, this contributes to the specific objective of the Akidah Akhlak subject: to nurture and enhance students' faith, encouraging them to exhibit commendable behaviour.

The teaching of Akidah Akhlak at Madrasah Aliyah Negeri (MAN) 1 Jombang has a significantly urgent influence on forming the religious character of its students. Geographically, the school is situated in the heart of the Jombang District, making it susceptible to various external influences, both positive and negative. Moreover, MAN 1 Jombang stands as one of the favoured schools in the district, evidenced by its acceptance of 516 new students in the year (Humasy MAN 1 Jombang, 2022).

In terms of curriculum, MAN 1 Jombang adopted the independent curriculum in its teaching activities starting in July 2022. However, this curriculum was initially implemented only at the tenth-grade level, as its adoption was phased and relatively new. The school was among

the pioneers in employing the independent curriculum in Jombang District, as several other schools in the area continued using the 2013 curriculum at the time.

Based on observations made by researchers at MAN 1 Jombang, researchers found that in terms of teaching, Aqidah Akhlak educators at MAN 1 Jombang used the lecture method and asked students to look for examples of behaviour based on the material discussed. This teaching method is often used, so that some students become less active in the learning process because they feel bored and do not understand the material presented, especially since the Aqidah Akhlak subject in class X-C is in the last hour, namely 9-10 (13.05-14.25), so that it influences student learning outcomes. During the daily tests, the class received unsatisfactory grades and was considered far from the expected target grades. This was reinforced when researchers obtained data from class X-C MAN 1 Jombang. The highest score obtained by class X-C during the daily exam was 83, the lowest score was 29, and the average score was 54 from the total number of class X-C is 36 students. There were only 3 students who achieved completeness, the remaining 33 students had not achieved the completeness score (Pre-Research Observations at MAN 1 Jombang on 10 August-11 October 2022).

Implementing values in the Akidah Akhlak subject is crucial in shaping the students' good religious character. Furthermore, a strong understanding and character in religion, derived from the Akidah Akhlak lessons, enable students to discern and filter external influences. Given these issues, educators must create an active learning atmosphere. Indicators of such an atmosphere include students' engagement, demonstrated by their willingness to inquire about the lessons. The ability to ask questions is not only a measure of how well students receive and comprehend information but also aids them in obtaining complete information and exercising their cognitive abilities.

Therefore, educators must establish a pleasant learning environment to foster students' cognitive, affective, and psychomotor domains. One approach to achieving this is by selecting an appropriate model and strategy for the Akidah Akhlak subject that can accommodate the subject's content. Occasionally, educators should vary the learning models to maintain students' interest in the lessons. Inappropriate selection of learning models can impact students' learning outcomes, underscoring the importance of careful selection before conducting lessons.

The researcher employs the "probing prompting" learning model to enhance learning outcomes in this study. This model stimulates students' minds to present arguments, fosters self-confidence in expressing opinions, and encourages critical thinking, especially when the educator poses questions that need to be resolved or answered by the students.

The rationale for choosing the probing-prompting model is manifold: first, it involves students directly in the teaching and learning activities; second, it offers an alternative to conventional teaching methods that can lead to student disengagement and issues such as copying classmates' assignments, thereby affecting learning outcomes; third, the model ensures that no student can avoid participating in learning activities, as they may be engaged in a question-and-answer session at any moment. Therefore, students must maintain focus and full concentration during lessons, as the educator may query them anytime. Fourth, the Akidah Akhlak teacher for class X-C at MAN 1 Jombang has yet to utilize the probing-prompting learning model.

B. METHODS

In this research, researchers used a qualitative descriptive approach. The specific type of research used in this research is a case study. The reason for choosing a qualitative descriptive approach in the form of a case study was the researcher's aim to obtain comprehensive and detailed data regarding the uniqueness and background of the process of implementing the probing prompting learning model on the Aqidah Akhlak. subjects in class X-C MAN 1 Jombang. Next, the characteristic features of this process are generalized (Rusandi & Rusli, 2021).

The researcher will conduct detailed observations of the teaching process in class X-C, focusing on applying the probing prompting learning model. This involves both passive observations (without interaction) and active ones (with interaction), depending on the session and the necessity for clarification or deeper understanding.

In-depth interviews with the Akidah Akhlak teacher, students, and relevant school administrators will be carried out to gather first-hand accounts and perspectives on the learning model's implementation and effects. These interviews will be semi-structured, allowing for pre-planned questions and the flexibility to explore topics further based on the interviewee's responses (Hardani & dkk., 2020). The researcher will review relevant documents, such as lesson plans, student assignments, and assessment records, to understand the planning, execution, and outcomes of the probing prompting learning model.

The data collected will be analyzed using thematic analysis, which involves coding and categorizing data into themes that emerge from the data itself (Helaludin & Wijaya, 2019). This helps identify patterns and draw meaningful interpretations related to the implementation and effectiveness of the probing prompting model. Given the qualitative nature of the data, narrative analysis will be used to construct a cohesive story that depicts the learning process, challenges, successes, and unique instances experienced during the implementation of the probing prompting model.

A comparison might be made between the probing prompting model's outcomes and other teaching methods previously or concurrently used. This helps in understanding the relative strengths and weaknesses of the models. Combining these techniques aims to provide a holistic understanding of the probing prompting learning model's application in the Akidah Akhlak lessons at MAN 1 Jombang.

C. RESULT & DISCUSSION

1. Planning Phase

Before implementing the learning model, the researcher conducted preparations, including arranging learning tools such as the Learning Activity Plan (RKP) in alignment with the intended teaching material. Coordination with the Akidah Akhlak educator of class X-C was essential, considering they would be the ones to carry out this learning model. Preparation is a crucial initial step for educators, as it is the foundation upon which all basic skills, knowledge, and profound understanding of the learning situation and objects are built. Therefore, educators need to possess adequate preparation skills for teaching.

a. Implementation Process Phase

Regarding the syntax of the probing prompting learning model, the researcher adopted the theory from Nur Awaliyah (Awaliah et al., 2021). The researcher presents a discussion about the syntax of the probing prompting learning model in a descriptive analysis based on the research results as follows; first, Giving New Situation. At this stage, the educator first gave students a material orientation about Islam Wasathiyah. This method proved effective in delivering a good stimulus. As Setyati Puji W. opined, providing stimuli to students is essential for fostering a learning interaction that aids students in exploring the material or subject matter. This effort can unlock the students' knowledge reservoirs about the material, making the learning process more interactive.

Second, Formulating and Discussion. This stage, where the educator allows students to formulate answers regarding problems (Muthmainnah, 2019), also involves ice-breaking activities to invigorate the learning atmosphere. Effective learning requires optimal concentration (Marzatifa & Agustina, 2021). Sometimes, students lose focus due to various internal and external factors. Therefore, occasional Ice Breaking is necessary to revive enthusiasm and restore students' concentration.

Third, Asking Questions. In this step, the educator poses questions to the students, who will then formulate the answers (Muthmainnah, 2019). Questions are posed to a randomly selected student. An example of a question asked was, "How can one practice religion amidst different beliefs and convictions?" Here, the educator posed the Question with friendly gestures, ensuring the students were not scared or intimidated (Theriana, 2020).

Fourth, Answering Questions. This is the phase where students respond to the posed questions. Based on the researcher's observation, during the first term, students could answer without referring to notes, although some hesitated. However, in the second term, many students referred to their discussion notes with their desk mates. This outcome

resulted from the educator's previous policy, where, during the second term, problem formulation was conducted through discussion with desk mates, leading to two students producing one answer from their discussion, typically written down.

Fifth, giving a Hint Relating to the Question. If a student's answer is incorrect at this stage, the educator poses guiding follow-up questions to help the student get closer to the intended answer (Muthmainnah, 2019). Based on this, the educator must provide clues that students can understand, assisting them in responding to the initial question posed.

Sixth, Ensure Competency is Achieved. This stage involves the educator ensuring students have met the learning indicators, commonly called the evaluation phase. Therefore, during the observation, the educator tasked the students of class X-C with creating examples of current events or behaviours of radicalism. This method was employed to gauge the student's level of understanding following their learning experience.

2. Effectiveness of Implementing the Probing Prompting Learning Model in Akidah Akhlak Lessons in Class X-MAN 1 Jombang

To assess the learning outcomes of class X-C students, researchers referred to Bloom's classification of learning outcomes, encompassing three domains: cognitive, affective, and psychomotor (Halimah, 2022).

a. Cognitive Domain

Bloom defines the cognitive domain as all efforts related to brain activities, consisting of six levels of thinking processes: knowledge, comprehension, application, analysis, synthesis, and evaluation (Halimah, 2022). The researcher assessed these aspects by conducting daily evaluations comprising ten multiple-choice and five descriptive questions. The results showed that class X-C experienced an improvement in Akidah Akhlak post-implementation of the probing prompting learning model. Initially, the average score was 54, with only three students passing. After implementing the new learning model, the average score rose to 87.4, with 34 out of 35 students passing.

b. Affective Domain

This domain consists of values and attitudes (Sudjana, 2010). Affective learning outcomes were observed through students' behaviour towards lessons, learning motivation, discipline, social relationships, and the way they respect educators and peers. During field observations, particularly in class X-C, students were genuinely focused. There were no instances of playing, chatting, or indifference towards the educator's explanations, indicating that the students well-interpreted points of discipline and respect for the educator. Regarding learning motivation, students were enthusiastic about participating in the lessons. The researcher noted that students were motivated because they anticipated being questioned by the educator during the probing prompting learning model implementation, compelling them to pay attention and focus on the educator's instructions so as not to miss any material and be able to answer the questions posed.

c. Psychomotor Domain

Learning outcomes in the psychomotor domain involve skills and the ability to act. Moreover, these outcomes follow cognitive and affective learning outcomes (Sudjiono, 2011). The researcher measured the psychomotor learning outcomes of class X-C students from their skills and physical activities. For instance, when students were chosen to answer the educator's questions, they always responded based on their knowledge and experience, even though some answers were less than perfect, according to the educator. This indicated that class X-C students had gained confidence in taking action.

3. Evaluation Phase

In this phase, the author discusses the challenges and supporting factors encountered while implementing the probing prompting learning model in Akidah Akhlak lessons in class X-C MAN 1 Jombang.

a. Inhibiting Factors; first, Shyness due to a lack of understanding of the material. Some students who were not chosen to answer questions did not ask questions about the

discussed material. Consequently, the educator needed help determining which students had not understood the material on Islam Wasathi. Those students were actually confused but too embarrassed to ask questions. This embarrassment, identified as cognitive shyness, stems from feeling inferior or believing others have greater influence (Afandi et al., 2014). This was evident when students saw their peers answering the educator's questions well.

Second, Students' inability to articulate well. The public speaking abilities of class X-C students were uneven, posing a challenge when the educator employed a student-centred learning model (Marlina & Sholehun, 2021). While the students' answers were correct, their delivery needed improvement. This aligns with Dale Carnegie's opinion (Khoriroh, 2018) that becoming a public speaker requires practice and learning. The learning model used in class X-C often involved creating examples from discussed commendable or reprehensible behaviours, limiting opportunities to foster public speaking skills.

Third, students feel overwhelmed due to excessive material explanations. One of the syntaxes of the probing prompting learning model is "Giving new situation," where educators present a new problem-related situation. Before doing this, the educator explained the material on Islam Wasathi. However, the lengthy explanation led to students feeling overwhelmed.

Fourth, students feel panicked when selected by the educator. Based on interviews with class X-C students, they felt panic when randomly chosen by the educator to answer questions, fearing their answers might be incorrect. Sigmund stated that such panic or anxiety falls under neurotic anxiety, where an individual fears losing control of their instincts (Karauwan, Matthew Zico., 2020), leading to actions that might result in punishment or sanctions. The students' fear of giving the wrong answer and facing the consequences was unwarranted, as the educator did not penalize incorrect responses but helped by providing additional guiding questions.

b. Supporting Factors; first, Students' understanding of the material. Students' comprehension of the material is a primary asset in following the probing prompting learning model, especially during the probing question phase, where educators randomly select students to answer questions. According to Yusuf Anas, understanding means using existing knowledge or recalling something similar to previously taught material (Alfiani & Firmansyah, 2022). Thus, students relied on their understanding to answer the educator's questions. Therefore, the educator initially explained the material to equip students with material comprehension, as done by Mrs. Ida Inayahwati, the Akidah Akhlak teacher for class X-C. Consequently, the implementation of the probing prompting learning model was successful, with most selected students answering the educator's questions.

Second, the Educator's effective delivery of the learning model and material. Based on the researcher's observations, the Akidah Akhlak teacher for class X-C effectively implemented the probing prompting learning model, from the method of delivery to posing questions in a friendly, non-intimidating manner, respecting students' answers and providing clues through questions tailored to each student's understanding level.

Third, Students' orderly and conducive participation in learning. A well-ordered and conducive class enables students to focus optimally on lessons, enhancing their interest and motivation (Aulia Dini Hanipah et al., 2022). The researcher observed that students were attentive during the learning model's implementation, not playing, chatting or sleeping. Therefore, it is unsurprising that class X-C's learning outcomes in Akidah Akhlak improved compared to previous results, attributable to the orderly and conducive learning environment.

4. Modifications During the Implementation of the Probing Prompting Learning Model in Akidah Akhlak Lessons in Class X-C MAN 1 Jombang

The educator made several modifications while implementing the Probing Prompting learning model in class X-C. These were necessary to align the educator's teaching approach with the classroom conditions. As a result of these adjustments, certain elements outside the conventional Probing Prompting learning model concept were incorporated by the educator,

including:

a. Providing Material Orientation Related to the Subject Under Study

The educator provided material orientation to students during the "giving new situation" phase. This orientation was intentionally given to equip students with the necessary background on the subject, especially for those unfamiliar with the material. Additionally, this orientation helped students with previous knowledge of the material refresh their memory, enabling them to participate in subsequent stages of the learning process actively. As Setyati Puji W. suggests, providing stimuli to students, in this case, material orientation, helps foster a learning interaction that enables students to explore the material or subject (Kurniawan & Astuti, 2017). This approach is vital, considering the Probing Prompting learning model requires students to be at the centre of the learning activities (Student-Centered Learning), with the educator acting as a facilitator.

b. Use of Ice Breaking

Ice-breaking activities were conducted to rejuvenate the learning atmosphere. Effective learning requires optimal concentration (Marzatifa & Agustina, 2021). Sometimes, due to various internal and external factors, students lose their focus. Therefore, occasional ice-breaking is necessary to revive their spirit and concentration. While implementing the Probing Prompting learning model in class X-C, the educator occasionally initiated ice breaking, considering the Akidah Akhlak lesson was scheduled at the end of the day, and students were already exhausted from previous classes.

c. Allowing Students to Note Down Answers to Questions Posed

The educator instructed students to write down their answers. This practice was not without reason, given the uneven public speaking capabilities among class X-C students, which still needed nurturing. This was due to the infrequent use of learning models that encouraged students to speak up and express their opinions directly in previous lessons. Thus, having students write their answers facilitated them when they were called upon to respond to questions. This aligns with Smith and Ragan's theory, cited by Punaji Setyosari, that learning is a process of delivering information or facilitating activities that help students achieve specific learning goals (Setyosari, 2017). This convenience provided by the educator would positively impact the students, especially in making classroom activities more interactive.

d. More Frequently Redirecting Questions to Other Students Rather Than Providing Clues

When a student's answer was incomplete or imperfect, the educator preferred to redirect the question to another student rather than giving a clue. This strategy was adopted to save time, considering that if 3-5 students could not provide perfect answers, giving each a clue would be time-consuming. In contrast, passing the question to another student saved time and ensured that other students could respond to the educator's questions. The students who could not initially provide perfect answers could listen to their peers' responses and construct new knowledge based on the information provided by others.

D. CONCLUSION

In this research, implementing the probing prompting learning model in Akidah Akhlak lessons at class X-C MAN 1 Jombang has proven effective in enhancing student engagement and learning outcomes. This model, emphasizing thorough and continuous inquiry through questioning, has facilitated a more interactive and responsive learning environment where students can be more active in the learning process. Challenges encountered during the implementation, such as students' shyness, imbalances in public speaking skills, and material saturation, have presented significant opportunities for reflection and instructional strategy adjustments. Modifications made by the educator (including providing material orientation, using ice breaking, allowing students to note down answers, and passing questions around) have effectively addressed some of these hurdles. There has been a significant increase in achievements in the cognitive domain, evident from the improvement in students' average scores and the number of students achieving academic

completeness. Moreover, the affective domain, related to values and attitudes, has also seen positive development in students' behaviour, learning motivation, discipline, social relationships, and respect towards educators and peers. In the psychomotor domain, students demonstrated courage in action, enhancing their skills and physical activities. In conclusion, the probing prompting learning model's adaptability and the educator's innovative modifications significantly contribute to a more dynamic, engaging, and effective learning experience in Akidah Akhlak lessons. This approach supports academic performance and holistically nurtures students' cognitive, affective, and psychomotor development. Further research is recommended to explore similar strategies across diverse educational settings and subjects.

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COLLEGIAL LEADERSHIP: AN EDUCATIONAL LEADERSHIP FOR STUDENTS WITH SPECIAL NEEDS IN MUHAMMADIYAH SCHOOLS

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Abstract. This research aims to describe the form of collegial leadership as an effort to optimize education for students with special needs in Muhammadiyah schools. Furthermore, this study employs an ethnographic approach. The research locus is SMP Muhammadiyah 2 Malang. Data were collected through observation and unstructured interviews with key informants. After data collection, it was analyzed using the Miles and Huberman analysis model. The results of the research indicate that SMP Muhammadiyah 2 Malang implements several programs related to the education of Children with Special Needs (CSN) that align with the principles of collegial leadership. These include making regular students shadow teachers, involving all teachers and school staff, and engaging CSN parents in various activities. However, the education of disabled individuals in the school faces challenges in several aspects, such as continuous curriculum development, negative societal perceptions, and financing.

Keywords: *Collegial Leadership, Inclusive Education, Children with Special Needs (CSN), Disabilities, Muhammadiyah Schools*

A. INTRODUCTION

Collegialism, Progressivism, and Autonomy as the Distinctive Features of the Muhammadiyah Educational Movement, which have subsequently become organizational culture in nearly all educational institutions under its umbrella (Puspitasari & Sulaiman, 2020). The concept of collegialism is indeed a manifestation of the teachings of the founder of this organization, KH. Ahmad Dahlan, who emphasized a collective missionary movement founded on progressive and modern thinking (Fuad, 2004). Collegialism also represents the pinnacle of organizational consciousness within every member of Muhammadiyah, as they firmly believe that this principle is closely connected to the noble message in Surah Ali 'Imran; 104. This verse conveys the message to always prioritize unity over individual interests, serving as the philosophical foundation for the movement, allowing it to overcome various dynamics for over a century (Qodir et al., 2020). In the effort to establish a sound educational institution, the rationale of collegialism also generally permeates every policy and action in Muhammadiyah schools. Collegialism is understood as a sense of binding, an equality of responsibility, and mutual ownership between leaders and members of the organization (Printy, 2009).

The provision of fair education for individuals with disabilities cannot be entrusted to just one or two teachers; it requires awareness and involvement from all parties, including special

education teachers, general subject teachers, staff, and parents, who must collaborate closely (Triyanto et al., 2022). All parties must kindle awareness regarding the education of special needs children. The principle of humanity serves as the most crucial foundation for this noble endeavor. This commitment is necessary to eliminate the feelings of isolation commonly experienced by most disabled students and their parents (Ainscow, 2020).

Regarding education for individuals with disabilities, it is fundamentally mandated by National Minister of Education Regulation No. 70 of 2009 on inclusive education for students with special needs who have the potential for intelligence and/or exceptional talents, as outlined in Article 1. Thus, it is imperative that schools in Indonesia, both public and private, present themselves as child-friendly institutions. Inclusive education policies require support from three crucial elements: structural (*stakeholders*), social (*society*), and emotional (*heartfelt involvement*) (Nikula et al., 2021); (Triyanto et al., 2022). The challenges in implementing child-friendly (inclusive) education are not unique to Indonesia; the United Arab Emirates (UAE) has also struggled with this issue (Khaleel et al., 2021). He argues that the role of an institution's leader is essential in achieving quality educational services for special needs children, given their complete authority over an institution's policy decisions (Khaleel et al., 2021).

Equity in access to education for children with special needs continues to face various challenges, including the availability of capable human resources, limited learning facilities, equal and fair learning service provision, training for schools offering inclusive education services, and the empathy of various parties, which remains relatively minor (Triyanto et al., 2022). Triyanto's scholarly exposition offers valuable insights into the challenges of inclusive education in Indonesia. Schools also require the involvement of various stakeholders in monitoring the development of students with special needs; in this regard, school principals need to engage existing structures such as special education teacher teams and other teachers (Lüddeckens et al., 2022).

In Malang, a city renowned for its educational institutions, the performance of inclusive education has not exhibited remarkable progress up to 2023. The number of schools consistently providing education for children with special needs in Malang does not match the number of students with special needs. This discrepancy arises because providing education for children with special needs demands substantial resources and efforts. Moreover, government funding falls short of the required amount. Furthermore, there is still no clarity regarding the career progression of Special Needs Teachers (GPK). They are unable to attain the certification allowances coveted by all teachers, resulting in relatively low salaries. The Malang City Education and Culture Office has indicated that, up to now, there is no specific policy for schools that offer education for children with special needs, such as GPK allowances, School Operational Assistance (BOS) Performance, and so forth. Career progression and financing remain unresolved issues. The number of GPKs in each school does not match the number of students with special needs, and a culture of inclusivity has not been holistically established in schools. Consequently, the acceptance of regular (normal) students and parents is not yet fully inclusive (Tholkhah, 2013). Negative societal perceptions also pose challenges in providing equitable education for disabled students (Sari & Saleh, 2020).

SMP Muhammadiyah 2 Malang has attempted to incorporate the tradition of collegialism in Muhammadiyah as a guiding principle for providing education to students with special needs. The principles of equal rights and responsibilities and a sense of ownership, which form the basic tenets of collegialism, are embodied in every policy related to education for disabled students at the school. The results have been quite positive, as evidenced by the selection of this school as a reference inclusive school in Malang, and most importantly, the consciousness of all school members in serving special needs children has been considerably nurtured.

In conclusion, this research seeks to answer two key questions: (1) how is the implementation of collegial leadership principles able to provide quality education for students with special needs? (2) What issues can be resolved through the implementation of collegial leadership principles? Therefore, the findings of the research conducted at SMP Muhammadiyah 2 Malang are expected to contribute to the body of knowledge for other schools, even beyond Muhammadiyah-affiliated institutions.

B. METHODS

This research employs a qualitative descriptive method based on ethnography. The ethnographic approach was chosen because the researcher was extensively involved in the research locus, interacting with disabled students on a daily basis for more than three years. Data were gathered by examining various school policy documents related to education for disabled students and previous research results related to collegial leadership. These previous studies were accessed through Google Scholar and Mendeley. Subsequently, the researcher conducted observations while positioning themselves as a participant observer to authentically capture the on-site conditions (Mertens, 2009). Unstructured interviews were also conducted to enrich perspectives, with key informants including teachers, school committee members, and disabled students. The collected data and information were then analyzed using the Miles and Huberman analysis model, including data collection, data reduction, data presentation, and drawing conclusions. The research steps undertaken were as follows:

1. The researcher collected various research articles related to the research title, collecting at least 20 scholarly articles discussing inclusive education and collegial leadership.
2. The researcher selected 10 articles published in reputable journals for in-depth examination.
3. The researcher documented findings obtained through observations and interviews.
4. The researcher conducted data reduction, where important data were elaborated, and information deemed irrelevant to the research was reduced.
5. After the data reduction process, the researcher performed data coding.
6. Subsequently, the researcher organized the data into a framework for writing.

Finally, the researcher compiled the complete research findings into the form of a scholarly article.

C. RESULT & DISCUSSION

Collegial Leadership in SMP Muhammadiyah 2 Malang

The collegial leadership model has seamlessly integrated into the operational framework of SMP Muhammadiyah 2 Malang, facilitating the creation of an inclusive and accommodating educational environment for all students, including those with special needs or disabilities. Since 2012, this educational institution has been actively engaged in the implementation of inclusive education services, currently catering to the educational needs of 28 students with diverse disabilities. These disabilities encompass a wide range, from slow learners and cognitive impairments to autism, ADHD, dyslexia, physical disabilities, and emotional impairments. It is noteworthy that the school has demonstrated the capability to address nearly all forms of disabilities, with the exception of visual impairments, due to the lack of specialized facilities and educators for this particular group.

In the context of SMP Muhammadiyah 2 Malang, a collegial leadership approach emerges as the linchpin in fostering an environment conducive to inclusive education. Parents find solace in enrolling their children in this institution due to the inclusive atmosphere nurtured by the collegial

approach. Special needs students, too, are able to learn and interact harmoniously with their peers and educators. Emanating from this approach are several key facets of collegial leadership:

1. Involvement of all subject teachers: The engagement of all subject teachers in the support and oversight of the routines of students with special needs underscores the collective commitment of the educators in executing inclusive education.
2. Positioning regular students as shadow teachers: The active involvement of regular students as "shadow teachers" or mentors for their peers with special needs is a pivotal strategy. It not only promotes positive interactions but also enhances understanding and collaborative learning.
3. Involvement of parents of students with special needs in every inclusive program: Actively engaging parents in the educational process is a crucial step. Parents play an active role in supporting their child's development and collaborate with the school to ensure the success of their children.

Effective communication forms the bedrock of supporting these collegial leadership practices. Effective communication between educators, parents, and students with special needs fosters positive emotional relationships. The inclusive education services at this school are also recognized as an instrumental facet of collegial leadership, as they maintain customer satisfaction (*students and parents*) while exemplifying the dedicated commitment of the educators.

These findings illustrate that the implementation of the collegial leadership approach in this school has resulted in the establishment of an inclusive environment, supportive of the development of students with special needs. It further enables positive interactions between all stakeholders in the educational process. These developments align with the principles of Muhammadiyah, which emphasize the establishment of fair and inclusive education for all students, regardless of the nature or degree of their special needs.

Student as Shadow Teacher

In pursuit of optimizing services, SMP Muhammadiyah 2 has five Special Needs Teachers (GPK) dedicated to supporting the learning process of exceptional children. However, one of the distinctive features of this institution is the active involvement of all teachers beyond the GPK team. It can be said that the culture of inclusivity in the school has been well-established. From the school principal to the security guard and the gardening staff, everyone participates in assisting these exceptional children. In an effort to foster self-reliance among students with disabilities, parents are not allowed to bring shadow teachers or special educators for their children. Instead, regular students are actively engaged as peer mentors for exceptional students. When a student with special needs encounters difficulties, other students willingly come to their aid. This culture is intentionally nurtured to raise awareness among all members of the school community to protect and support these exceptional children. Moreover, students with disabilities gain exposure to real-life diversity and various personalities, enriching their knowledge. Furthermore, it instills a sense of self-sufficiency as they become accustomed to resolving challenges independently. There is concern that if exceptional students are continually accompanied by shadow teachers, they may not develop the ability to be self-reliant.

Involvement of All Teachers and School Staffs

With more than a decade of inclusive education at SMP Muhammadiyah 2 Malang, the school's organizational culture has matured, fostering mutual understanding among teachers regarding the conditions of exceptional children. In the early years of the program's launch, issues occasionally arose between subject teachers and special education teachers due to the lack of information. However, with the passage of time and the intensive training organized by the school's leadership at the time, the collective understanding and awareness of all teachers and staff

significantly improved. The school recognized that positive interaction between students with special needs and teachers was a critical prerequisite for establishing an inclusive culture in the school (Frumos, 2020).

Various activities have been employed to promote communication between subject teachers, Special Needs Teachers (GPK), and exceptional students. Home visit services, for example, aim to resolve issues that students face at home. This service also serves as a means to strengthen the emotional connection between exceptional students and their teachers at SMP Muhammadiyah 2 Malang. In some cases, these students develop a closer emotional bond with the GPKs than with their own parents. Hence, when students face challenges such as tantrums, declining motivation to learn, or behavioral changes, the GPKs promptly arrange home visits. The role of GPKs in such situations becomes critically important. Occasionally, students also contact teachers through WhatsApp or phone calls to share stories or express their concerns. On some occasions, teachers or staff members even accompany students home after school if parents are unable to pick them up, including assisting them with specific administrative requirements such as the legalization of certificates, report cards, and other administrative documents required by students.

Involvement of Parents

The school organizes annual parenting and camping activities specifically for parents of exceptional children. These events aim to monitor the development of their children and provide a forum for dialogue between parents and relevant experts on child development. Additionally, these activities are oriented toward building awareness among all parents regarding their children's education and serve as a platform for mutual motivation among parents. It is noteworthy that parents' perceptions of exceptional children vary, with some demonstrating a positive understanding (positive perception), while others may still perceive these children as burdens (negative perception). All parents of exceptional children are actively involved in activities organized by the school. In fact, some parents have even become sponsors of these events. In 2022, one parent of an exceptional child offered their villa as a venue for an inclusive camp at no cost, while other parents sponsored meals and accommodations for the participants. The active involvement of parents of exceptional children at SMP Muhammadiyah 2 Malang is a crucial pillar in the educational process for these special children.

Challenges and Solutions

Financing

The financing of education for exceptional children differs significantly from that of regular students. Implementing the basic principles of collegialism requires a substantial budget. Activities carried out together with students, parents, and teachers undoubtedly involve expenses beyond the students' monthly school fees (SPP). Moreover, these activities cannot be fully facilitated with government funding, whether through BOSNAS or BOSDA. Therefore, at SMP Muhammadiyah 2, parents are obliged to pay more than regular students. However, not all parents are capable of meeting the specified amount due to various reasons, including family economic conditions and job layoffs. In such circumstances, the school principal is compelled to find alternative solutions because these students must receive educational services like any other students. The school's principal actively seeks sponsorships to support various activities for exceptional children. Therefore, the ability to communicate and collaborate becomes a crucial instrument in delivering inclusive education (Ricci et al., 2022).

Effectiveness and Efficiency of Time

Raising awareness among the entire school community is a time-consuming endeavor. SMP Muhammadiyah 2 Malang, for instance, required nearly five years to establish this collective

awareness. While the principles of equal roles and responsibilities, as well as emotional attachment, can be easily articulated, their implementation proves to be challenging. Often, subject teachers relinquish their responsibilities to special education teachers when issues related to inclusive students arise. A sense of apathy also presents a challenge that needs to be addressed to foster collegialism among school community members, especially teachers.

Building an inclusive culture is not an instant undertaking. Several European countries, such as Austria and Finland, have needed a long time, more than a decade, to build a culture that is open and tolerant, including toward people with disabilities (Buchner & Proyer, 2020). Various training programs for school principals, general teachers, and special education teachers are frequently conducted during the initial phases of establishing inclusive education programs as part of efforts to deliver equitable education for all. The principles of justice and tolerance are prerequisites that must be met for an inclusive culture to materialize (Bemiller, 2019).

The efficiency and effectiveness of time are directly proportional to the required financing. In other words, the faster this process is realized, the less funding is needed. Therefore, other schools must devise more effective strategies to achieve efficiency and time effectiveness.

Parent and Community Acceptance

Resistance from some members of the community toward their children's unique intellectual condition is frequently encountered. Sometimes, parents and the originating schools are unaware that their children fall into the category of students with special needs (ABK), and thus, they do not receive the appropriate educational services. Often, parents refuse to acknowledge that their child has special needs, as they view ABK as a burden. However, if we refer to Qs. At-Tin: 4,

لَقَدْ خَلَقْنَا الْإِنْسَانَ فِي أَحْسَن تَقْوِيمٍ ٤

The meaning: "Indeed, we have created man in the best of stature."

This verse forms the basis for the perception of the condition of children with special needs and strengthens the hearts of humans, indicating that Allah has created a servant without neglecting its meaning. Furthermore, Allah also states in Qs. Al-Baqarah; 286,

لَا يُكَلِّفُ اللَّهُ نَفْسًا إِلَّا وُسْعَهَا ... ٢٨٦

The meaning: "Allah does not burden a soul beyond that it can capacity..."

Awareness of the condition of exceptional children is crucial because this condition is a manifestation of the perfection of creation. The perfection of iron and stone lies in their hardness, the perfection of fire lies in its heat, and water is considered perfect when it has the quality of coldness or liquidity. Similarly, humans have their own unique forms of perfection. If the condition of children is seen as a test, then it has been measured by the Almighty Creator, Allah. However, not all parents have an understanding of the holy advice in Allah's words.

Therefore, the school regularly organizes meetings with parents using a parenting design in the hope of fostering a collective awareness of the growth and development of all children, including those with special needs. A deeper look reveals that the emotional bond between the child (student) and the teacher as well as the parents is a crucial indicator of creating child-friendly and equitable education (Huda, 2018); (Pastore & Luder, 2021). Pastore (2021) also claims that the

quality of the emotional closeness between students and teachers is the most important foundation in creating inclusive education.

Society or the community also bears a similar responsibility to ensure that these exceptional children feel accepted in their environment. However, the reality is not all members of society are prepared to interact with children with disabilities. Integration between the school, the community, and the family is a strategic step in providing child-friendly education for children with special needs (Kozibroda et al., 2020). An awareness of their responsibility is one of the fundamental values of collegial leadership, and it is through this value that inclusive culture can be established.

D. CONCLUSION

Collegial leadership can serve as an alternative leadership model for inclusive schools because this model prioritizes the aspect of equal roles in serving students with special needs. Home visits are a form of service needed by students with special needs and their parents. Additionally, to foster independence in exceptional children, the presence of shadow teachers at the junior high school level may need to be eliminated. Effective communication between the school and families is crucial in the success of inclusive education. Challenges related to continuing education, financing, sustaining the curriculum, and the responses of parents and the community must be addressed by all parties involved. This is essential to ensure that equitable education becomes a reality.

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DEVELOPMENT OF A POCKETBOOK OF PARENTAL ASSISTANCE TO STIMULATE CHILDREN'S SOCIAL-EMOTIONAL DEVELOPMENT IN THE DIGITAL AGE

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Abstract. The rapid development of digital technology causes parents to know how to use this technology to have a positive impact on the social-emotional development of their children. The purpose of this study is to develop a pocket book for parents that contains how to provide assistance to children in optimizing aspects of their social-emotional development in the digital era. The type of research used is research and development using a 4D model (Four-D) from Hiagarajan. The subjects of the study were ECCE teachers. The source of research data is ECCE lecturers with undergraduate education in ECCE to obtain material expert validation data and ECCE teachers to obtain media expert validation data. The methods used are interview and questionnaire methods. The data analysis techniques used in this study are qualitative and quantitative descriptive analysis techniques. The results showed that this pocketbook is worth using after getting input.

Keywords: *Childhood; Pocket Book; Parental Assistance; Social Emotional Development*

A. INTRODUCTION

Early childhood is a child who is in the golden period of development. During this phase, the child grows quickly and goes through a sensitive stage to different stimuli from the surroundings (Nurmalitasari, 2015). Early stimulation may have a variety of effects on a child's development, among them are social emotional development (Iruka et al., 2018). Emotional development takes hold an important role for stability the mentality of the child in the future (Andiya et al., 2023).

The term "social-emotional development" describes a child's capacity to identify and communicate his feelings, as well as to form connections with others and acknowledge his own identity (Vorsah in Saptandari et al., 2022). A child's interactions with their surroundings help to shape their social-emotional abilities (Martani, 2012). The focus of social-emotional development stimulation is on developing skills in self-expression, emotion identification and regulation, self-awareness, and social interaction (Briones et al., 2021). Social emotional development is the process of learning to adjust self to understand circumstances as well as feelings when interacting with people in his environment are either parents, siblings, peers in daily life (Azizah & Busyra, 2021). In order to enhance early childhood development, caregivers can engage in a variety of activities, which is referred to as stimulation (Hartinger et al., 2017). Children can be stimulated by interactions, activities, and instruments that are appropriate for their developmental level (Hartinger et al., 2017).

Parents, especially a mother, have a big role in the formation children's social emotional patterns and children's future education patterns (Khusniyah, 2018). The role that parents can do specifically is to provide stimulation to their children so that their social-emotional development can

develop optimally. Parents provide stimulation to early childhood with the knowledge they have gained (Bening & Ichsan, 2022). However, the phenomenon that exists today is that parents lack knowledge about how to accompany their children in the use of digital technology to stimulate aspects of social-emotional development. There is no book that can add insight or knowledge to parents about mentoring aspects of social-emotional development for early childhood in the digital era like today, so researchers are interested in developing the pocketbook.

B. MATERIAL & METHODS

This research uses a research and development model from Hiagarajan (in Kurniawan & Dewi, 2017) consisting of 4D, sosial emosionalely define, design, develop, and disseminate. An explanation of each of these stages can be found in the table below:

Table 1. Research Development Flow

PHASE	ACTIVITIES	DETAIL
I	Defining	Setting goals: inform parental guidance to optimize early childhood social-emotional development in the digital age. Determine the material: definition of mentoring, benefits of mentoring, characteristics of mentoring, forms of assistance, definition of early childhood social-emotional development, early childhood social-emotional characteristics, early childhood social-emotional stimulation, understanding the digital era, characteristics of the digital era, the positive impact of the digital era on early childhood social-emotional development, the negative impact of the digital era on early childhood social-emotional development, The importance of early childhood social emotional accompaniment and stimulation in the digital age.
II	Design	Determination of the contents of the book Book design Designing the use of pocket books Conducting expert validation for book material (child psychologists and Early Childhood Teacher Education lecturers)
III	Development	Book trials for small groups Revision Book trials for large groups Revision Final book results Accredited national journals (submit)
IV	Distribution	Upload Youtube Handing over books to early childhood education Community Service (PKM) Acquiring Intellectual Property Rights

The stages above, seen in the picture below:

Figure 1. 4D Model Development Stage



The respondents of this study were parents who included their children in early childhood education. This research uses qualitative analysis techniques and quantitative analysis.

The data collection method is a major step in research, with a view to obtaining accurate and accountable data. This study used a method of collecting data with interviews. Interviews were conducted during book trials to find out the extent of the quality of the books developed so that data on the advantages and weaknesses of the book were obtained for later improvement. In addition, questionnaires are also used. This method is used by researchers to obtain data in the form of product validity or feasibility tests in terms of material and media feasibility.

C. RESULT & DISCUSSION

Research Results

The results of the study are divided into four stages. The first stage is the stage of defining what is meant by a pocket book. A pocket book is a small book that can be carried anywhere. The stage of defining the book is continued with the stage of determining the material of the pocket book. The determination of the material was obtained based on the results of interviews with findings in the field to parents who enrolled their children in PAUD. The results of the interview showed that parents felt the need for a guidebook that could increase their insight into the negative and positive impacts of using digital media for their children's social-emotional development. In addition, the defining stage is carried out by conducting theoretical studies from various literature studies.

The next stage after defining is compiling book material. The preparation of book material is carried out by following references to the theory and definition of pocket books, so as to obtain an arrangement of material which is then compiled into pocket books. Researchers use the snowball technique in compiling the material. The snowball technique referred to in compiling material is reading literature which is then traced to other sources contained in it, so as to get new literature or support ideas that are in line with the material compiled, social emotionally material on parental assistance in optimizing early childhood social-emotional development in the digital era.

Book design is the second stage in this development research. Books are designed with writing and pictures appropriate for pocket books. Writing design is done with consideration of ease of reading, sosial emotionally font size and font colour. The use of images used is adjusted to the book and the need for clarity of the contents of the book. The draft list of book contents can be seen in table 2 below:

Table 2. Table of contents of the developed book

Part	Heading	Content
1	Mentoring	Understanding parental assistance, benefits of parental assistance, characteristics of parental assistance, forms of parental assistance
2	Early childhood social-emotional development	<ul style="list-style-type: none"> a. Definition of early childhood social-emotional development b. Characteristics of early childhood social-emotional development c. Stimulation of early childhood social-emotional development
3	Digital age	<ul style="list-style-type: none"> a. Understanding the digital era b. The positive impact of the digital era on children's social-emotional development c. The negative impact of the digital era on children's social-emotional development
4	Parental assistance to optimize aspects of early childhood social-emotional development in the digital era	<ul style="list-style-type: none"> a. The importance of parental assistance for stimulation and optimization of aspects of early childhood social-emotional development in the digital era b. A form of parental assistance for stimulation and optimization of aspects of early childhood social-emotional development in the digital era

The table above illustrates the contents of the pocket book design that will be given to parents as a guide for parental assistance to optimize aspects of early childhood social-emotional development in the digital era. The design of the pocket book to be developed is as follows:

The book that has been designed will then go through the validation test stage by material experts and media experts. Material validation is needed to find out the extent to which the material available in the pocketbook is in accordance with the expectations and needs of the reader. Material expert validators will assess and provide advice regarding the content of pocketbook materials. This is in line with the opinion of Ningrum & Dwijayanti (2021) which states that material expert validators are tasked with correcting, providing suggestions and making assessments related to the content of the material. The material expert validator for this pocketbook was carried out by 2 Masters in Early Childhood Education.

Media validation is carried out to assess whether the pocketbook that has been designed can be used as the right learning medium for parents who have early childhood, in accordance with the opinion of Yenni & Hutabri (2022) which states that media validation is carried out by media expert validators to assess the design of the media made. The media expert validators in this study are 2 ECCE teachers who have had teaching experience for approximately 10 years.

Material validation carried out by 2 material expert validators obtained values of 3.9 and 3.8. Based on the standard validation category with a maximum value of 4, it can be concluded that the material contained in the book is considered very feasible to be included in the draft pocket book that has been made. The results of media validation conducted by 2 media expert validators obtained scores of 3.5 and 3.7. Based on the standard validation category with a maximum value of 4, it can be concluded that the book-shaped media is considered worthy to be given to parents who have early childhood.

However, there were several inputs submitted by material expert validators and media experts. Input provided by material expert validators included the need for additional material regarding how parents can utilize digital technology to improve ways of stimulating aspects of social emotional development in early childhood. The material expert validator suggested providing

additional information regarding a list of websites that parents can visit to answer children's critical questions regarding the development of their social emotional aspects. Meanwhile, input from the media validator is to add pictures that can clarify the material presented so that it does not cause confusion for parents when reading it. These suggestions were accepted by the researchers and used as a guide to improve the next pocket book.

The third stage is to test the use of pocket books in small groups and large groups. This book development test is an activity carried out in small group testing stages and stops at the field testing stage (Muji, 2014). The small group trial involved 10 parents who had children in PAUD. Parents were asked to provide an assessment of the suitability of the material and pocket book media through the interview method. The results of the interview can be seen in table 5 below:

Table 5. Results of Small Group Trials

No.	Percentage	Test Results
1.	90	Parents say pocket books have advantages in terms of the attractive appearance of the book layout
2.	95	Parents say the advantage of the pocket book is that it provides additional information that parents really need about how to accompany their children to optimize aspects of children's social emotional development in the digital era.
3.	95	Parents say that the advantage of pocket books lies in the language used, which is easy to understand
4.	5	Parents say this pocket book has a weakness, sosial emosionalely that it does not contain information regarding stimulation to optimize children's social and emotional development
5.	5	Parents said the weakness of the pocket book lies in the lack of information regarding other reference sources that parents can use to increase their knowledge about social emotional stimulation in children.

The table above illustrates that most parents said that the advantages of pocket books lie in their attractive appearance, use of language that is easy to understand and coverage of material that is as expected. However, there are a small number of parents who say that additional information is needed on how to stimulate social-emotional aspects in children so that they can develop optimally. Apart from that, parents suggest adding references regarding social emotional stimulation in children.

Researchers made improvements to the pocket book based on input from small group trials. The next stage is a trial for a large group. This group consists of 20 PAUD teachers. They were interviewed regarding the material and media contained in the pocket book. With these interviews, researchers hope to obtain input regarding the advantages and disadvantages of pocket books which have been improved after small group trials. The results of interviews with 20 PAUD teachers can be seen in table 6 below:

Table 6. Results of Large Group Trials

No.	Percentage	Test Results
1.	100	The teacher said that the advantage of the pocket book lies in the colorful and attractive cover design
2.	95	Teachers say this pocket book provides parents with additional information that they need
3.	5	The teacher said that this pocket book did not display appropriate images to explain the material presented
4.	5	The teacher said the pocket book did not provide enough information about what games can stimulate social emotions in children that parents can practice at home

Based on the table data above, it can be concluded that the majority of teachers say that pocket books have the advantage of a colourful and attractive cover design and contain information that parents need. A small number of teachers said it was necessary to add appropriate pictures to clarify the material being presented as well as adding a number of game ideas that could stimulate social emotional development in children which parents could practice with their children at home.

The results of this large group trial were used by researchers as a guide in revising the next pocket book. The pocket book which has been revised based on various inputs will be printed and disseminated by submitting it in the form of a research article to be submitted and published in a nationally reputable research journal.

The findings in this research are that parents and teachers are enthusiastic and enthusiastic about the existence of a pocket book regarding parental assistance to optimize aspects of the social emotional development of early childhood in the digital era. This is because so far there has not been a pocket book that can provide additional knowledge and direction to them regarding parental assistance to optimize aspects of the social emotional development of early childhood in the digital era. They stated that this pocket book is very important and much needed for parents and teachers to guide and provide assistance to young children regarding optimizing social emotional development in the digital era.

This research contributes to providing additional knowledge and guidance for parents to optimize social and emotional development aspects of early childhood in the digital era in the form of a pocket book that is attractive in appearance, flexible because it can be taken anywhere with its relatively small size and informative in terms of content. what parents need.

Discussion

This research aims to develop a pocket book for parental assistance to optimize aspects of the social emotional development of early childhood in the digital era.

A pocket book is a book that is small, light, and can be stored in a pocket so it is practical to carry and can be read at any time (Emilia in Awaludin & Rostikawati, 2020). This book contains a mentoring guide for parents in order to optimize the social-emotional development of early childhood in the digital age. This is in line with the opinion of Setyono et al (2013), social emotionally pocket books are defined as books with a small size, lightweight, and can be stored in pockets, so they are practical to carry everywhere, and anytime can be read. When it comes to providing information in a single direction to assist learning activities, pocket books serve as teaching resources (Setiyaningrum & Suratman, 2020).

A pocket book is a compact book with information about a certain topic that may fit in your pocket. The ideal way to arrange a pocket book is to make it easy for parents or instructors to grasp (Farikhah & Saroinsong, 2020). Moreover, the advantages of pocket books are the size is small so it is easy to carry everywhere, the message conveyed is more focus, and can be read at any time (Khoiriyah et al., 2018). So it can be concluded that a pocket book is defined as a book that is small in size, light in weight, so that it is easy to carry anywhere and can be read at any time. The book contains information that makes it easier for parents to understand.

Therefore, the aim of developing this pocket book is that parents who have young children can use this book easily because it is small, light and can be stored in a pocket so it is practical to carry and can benefit from reading it anywhere because it contains the necessary material, so parents can optimize the social emotional development of early childhood. This is in line with the opinion Marlisa (2019) which states that social development is a child's emotional initial growth and because

they grow up in a family setting, parents play a critical influence in their social and emotional development.

Based on research conducted at the initial stage, namely the definition stage, this research has succeeded in identifying a pocket book that is suitable as a companion book for parents to optimize aspects of early childhood social emotional development in the digital era, namely a pocket book that contains the meaning of parental assistance, benefits of parental assistance, characteristics of parental assistance, forms of parental assistance, definition of social emotional development for early childhood, characteristics of social emotional development of early childhood, stimulation of social emotional development of early childhood, definition of the digital era, characteristics of the digital era, positive impact of the digital era on children's social emotional development, negative impact of the digital era on children's social emotional development, the importance of parental assistance to stimulate and optimize aspects of early childhood social emotional development in the digital era, forms of parental assistance for stimulation and optimizing aspects of social emotional development of early childhood in the digital era.

This pocket book contains various information about how to stimulate the social emotional development of early childhood. The information is very important because early childhood socio-emotional development is the process by which young children learn how to connect with others, control their own emotions, and have a positive, healthy effect on those around them (Hurlock in Mahatmaharti & Dinarti, 2023). Children's social emotionality is the ability to build relationships with other people, accustomed to good manners, obeying and implementing rules and internal discipline daily life and can show normal emotional reactions. Social emotional development abilities include development in terms of emotions, personality, and interpersonal relationships (Yustina & Setyowati, 2021).

In line with that, Mulyeni et al (2023) state that early childhood social and emotional development is the process by which young children learn how to behave in social situations and are better equipped to regulate their emotions based on their capacity to recognize and communicate these emotions. Early social and emotional development is essential, especially for children in kindergarten. This is due to the fact that the youngster started forming relationships with others (Nurmalitasari, 2015). Therefore, it can be concluded that children's social emotional development is the process by which young children learn how to connect with others, accustomed to good manners, learn how to behave in social situations and started forming relationships with others.

Parents are the closest environment to children who can stimulate children's social emotional development. Research from Tresna Dewi (2018) states the high level of parental involvement in stimulating aspects of children's social emotional development. The persons closest to a child are their parents. As a result, emotional intelligence originated and was initially developed in families (Sahara et al., 2023). Furthermore, parents have a crucial part in their children's growth, which may eventually affect how emotionally intelligent those youngsters become (Mujiyatun, 2019). That is why parents need assistance in the form of pocket books to stimulate aspects of early childhood social emotional development.

The next stage in this development research is the book design stage. This stage is the planning stage for making the guidebook product that will be developed. The design stage is carried out by determining the material content of the book, creating the layout of the book, preparing the material, designing the writing and images contained in the pocket book, validating the material by the preschool master and validating the media by the preschool teacher.

Making the initial design of the pocket book with the size of the pocket book, namely 9x12 cm, designed using Corel Draw At the pocket book development stage, trials were carried out using the pocket book for small groups and large groups. This stage is the stage for implementing the

product design that has been developed and has been declared suitable for testing on pocket book users. This was done with the aim of finding out whether or not the pocket book that the researchers had developed was appropriate (Viranti & Hastuti, 2022). The subjects involved in small groups are the target readers of this guidebook, namely parents who send their children to PAUD.

There were 10 parents involved in this small group trial. The purpose of testing this guidebook product is to find out the advantages and disadvantages of aspects of the material provided and the appearance of the guidebook. This small group trial was carried out using the interview method. The next stage is to carry out revisions based on input from parents from small group trials. Next, another trial was carried out on a larger group. This trial was carried out through interviews with 20 PAUD teachers. The purpose of testing this guidebook is to find out the advantages and disadvantages of aspects of the material provided and the appearance of the guidebook. After obtaining input from the large group, the pocket book was revised. Based on a number of inputs, the researcher made improvements to the guidebook so that the guidebook produced would be as expected.

D. CONCLUSION

Based on the results of research that has been carried out using the 4D (Four-D) research and development model, it can be concluded that the pocket book accompanying parents to optimize aspects of social emotional development of early childhood in the digital era is suitable for use because it contains material that is useful for people. old and has an attractive, concise appearance accompanied by clear images so that it is easy for parents to understand.

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DEVELOPMENT OF AUGMENTED REALITY (AR) BASED THEMATIC POSTER CULTURAL HERITAGE BANDAR SENAPELAN ON LEARNING HISTORY

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Abstract. This study focuses on the development of an Augmented Reality (AR) based thematic poster on the cultural heritage of Bandar Senapelan for history education. The study aims to investigate the effectiveness of AR technology in promoting learners' interest, engagement, and understanding of the cultural heritage of Bandar Senapelan. The study follows a qualitative descriptive research method with a Research and Development (R&D) approach. This research uses two stages, namely the development stage and the implementation stage. 1) Choosing the research theme 2) Literature study on augmented reality, thematic posters, and history learning 3) Product design in the form of augmented reality based on thematic posters of Bandar Senapelan cultural heritage on history learning 4) Validation by history material experts and technology experts 5) Product testing. The visual appeal and accuracy of information presented in the AR-based poster were found to be significant factors contributing to learners' engagement. Moreover, the pilot test demonstrated that the quality of AR-based poster images and audio narration played an essential role in learners' retention of historical knowledge. The AR technology also offered an immersive and interactive learning experience, providing learners with the opportunity to explore Bandar Senapelan's heritage sites virtually. The results suggest that the AR-based thematic poster could be an effective tool for promoting learners' understanding and appreciation of the cultural heritage of Bandar Senapelan. However, the study identified several limitations related to the accessibility, sustainability, and capacity building for implementing AR-based posters. Based on the findings, the study recommends collaboration with stakeholders, capacity building, continuous evaluation, inclusive design, and long-term preservation strategies to promote sustainable use of AR technology in historical education. The study's findings can inform future research and development of AR-based educational resources for promoting historical learning and cultural heritage preservation.

Keywords: *Innovation, Cultural Sustainability, AR Thematic Poster, Cultural Heritage, Future of Education*

A. INTRODUCTION

History learning is one of the important aspects of education, as it not only provides knowledge about the past, but also builds an understanding of human values, cultural diversity, and heritage that will shape the future. However, history learning is often faced with the challenge of maintaining students' interest and motivation to learn. They tend to find it difficult to visualize past events and sometimes consider history as a boring subject. To overcome these problems, augmented reality (AR) has emerged as an attractive solution in history learning. Augmented reality is a technology that incorporates virtual objects into the real world in real-time or interactively through overlapping displays between the virtual world and the real world. Augmented reality has various uses and potentials in various fields such as education, entertainment, and others. (Milgram and Kishino, 1994); (Azuma, 2001); (Choi and Jerald, 2019); (Burkhardt *et al.*, 2019); (M. H. Adiya *et al.*, 2021); (Suroyo *et al.*, 2023).

The development of augmented reality (AR) technology has affected various aspects of life including in the field of education. In the context of learning, AR can be an innovative and attractive tool to increase students' understanding and interest in lessons. In history learning, the use of AR has great potential to help students understand and experience history in a more interesting and interactive way. One way of applying AR in history learning is through the development of thematic posters based on local cultural heritage. This is important because thematic posters can provide an in-depth visual and contextual overview of various aspects of a region's history, such as culture, customs, and important events.

Previous research that has been conducted there are several studies that examine the development of AR based on thematic posters in learning history. The results showed that the use of AR in schools can increase students' interest in learning, concept understanding, and information retention. (Smith, 2018); (Tsai and Hsiao, 2018); (Li, Li and Huang, 2019); (H. C. Lee, 2020); Research by Brown (2019) also showed positive results regarding the use of AR in history learning. This shows great potential in developing thematic poster-based AR as a history learning tool. The use of AR can increase student participation in learning activities, as well as provide a more enjoyable and in-depth experience in understanding historical material. (Sheng, McBride and Armstrong, 2015); (Theng, Yan and Wei, 2016); (K. J. Lee, 2020).

Pekanbaru, a city located in Riau Province, Indonesia, has many valuable and interesting cultural heritages to learn about. One of the areas in Pekanbaru that is rich in cultural heritage is Bandar Senapelan. Bandar Senapelan was the center of government of the Sultanate of Siak Sri Inderapura in the 20th century. Here there are historical sites such as Tuan Khadi's shelter, the Great Mosque, the Zero Point Monument, the Hinggap Palace, the Tomb of the Marhum, Pasar Bawah, the Old Terminal, the Old Bridge, the Old Village, the Weaving House, the Pelindo Port which are silent witnesses to the development of Pekanbaru City. (Suroyo, Bima Maulana and Bedriati Ibrahim, 2021); (Suroyo, Bima Maulana Putra and Bedriati Ibrahim, 2021; Suroyo, Putra, *et al.*, 2022). (Suroyo, Maulana Putra, *et al.*, 2022); (Suroyo, Bima Maulana and Bedriati Ibrahim, 2021; Al Fiqri, Suroyo and Ibrahim, 2023).

This research is to integrate augmented reality technology with local culture to enrich history learning in Bandar Senapelan. It is expected that with the use of this application, students can easily obtain relevant information about this historical location, view virtual objects and artifacts, and get a detailed and interesting explanation of the historical context in Bandar Senapelan. The development of thematic poster-based AR in history learning in Bandar Senapelan, Pekanbaru, has great potential to improve students' learning experience in understanding and appreciating local cultural heritage. The main objective of this research is to test the effectiveness and usefulness of the AR development in helping students understand local history in an interesting and interactive way.

B. METHODS

This research uses a qualitative descriptive research method with a Research and Development (R&D) approach. (Sugiyono, 2014, 2019). This research uses two stages, namely the development stage and the implementation stage. 1) Choosing the research theme 2) Literature study on augmented reality, thematic posters, and history learning 3) Product design in the form

of augmented reality based on thematic posters of Bandar Senapelan cultural heritage on history learning 4) Validation by history material experts and technology experts 5) Product testing. Meanwhile, the Implementation Stage: 1) Use of augmented reality products based on thematic posters of Bandar Senapelan cultural heritage in history learning 2) Collecting data in the form of student and teacher responses to the use of products in learning history. The population in this study is the XI grade students of SMA Negeri 1 Pekanbaru who take history subjects. The research location is Bandar Senapelan heritage area Pekanbaru. The instruments used in this research are questionnaires given to students and teachers, as well as observations to monitor the implementation of augmented reality products based on thematic posters of Bandar Senapelan cultural heritage. The data development stage was collected by literature study and validation by experts. The implementation stage of the data is collected by questionnaire and observation. The data collected will be analyzed descriptively qualitative. In this study, augmented reality media based on thematic poster cultural heritage Bandar Senapelan is expected to increase students' interest and motivation in learning history and provide a more interesting and interactive learning experience. By using the results of this study, it is expected to improve the quality of history learning at SMA Negeri 1 Pekanbaru and can be applied in the same place or other places.

Data retrieval procedures using dimensional analysis can be done with the following steps: 1) Identify variables that will be used in research, such as the use of AR in history learning, thematic posters of Bandar Senapelan cultural heritage, and so on. 2) Determine the appropriate measurement instrument to obtain data from these variables. For example, you can use a questionnaire to measure how effective the use of AR is in learning history or direct observation to see the existence of thematic posters of Bandar Senapelan cultural heritage. 3) Obtain data from the measurement instruments used by conducting surveys or observations in groups that match the research population. 4) Perform dimensional analysis by organizing the data obtained based on variables and arranging questionnaire items or observations into each variable dimension. For example, the use of AR can be grouped into scales of effectiveness, quality, or visual appeal. Thematic posters can be grouped into artistic, educational, or cultural scales. 5) Calculate the score of each dimension, for example by summing or averaging the scores of the items within each dimension. 6) Interpret the results of the dimensional analysis by looking at the highest or lowest score in each dimension, to determine the tendency or pattern of the data obtained. 7) Draw conclusions from the results of dimensional analysis to provide recommendations for the development and application of augmented reality based on thematic posters of Bandar Senapelan cultural heritage in history learning.

C. RESULT & DISCUSSION

Augmented Reality (AR) is transforming the way people learn and experience information. This technology is used to create an interactive and immersive experience by overlaying digital data over the real-world environment. AR is being increasingly used in educational settings to promote the learning of history and cultural heritage. This paper presents the result and discussion of the development of an AR based thematic poster on the cultural heritage of Bandar Senapelan. Bandar Senapelan is a historical area located in Pekanbaru, Indonesia. This area was once the center of trade and government during the Dutch colonial era. The area has a rich cultural heritage, which includes the Kota Tua Senapelan Monument, the Rumah Singgap Tuan Khadi, and the Tugu Titik Nol. However, despite its historical significance, many young people in Pekanbaru are not familiar with the cultural heritage of Bandar Senapelan.

The AR-based thematic poster was developed using the Unity 3D engine and Vuforia AR SDK. The poster consisted of a 2D image that contained a marker that would trigger the AR experience. The AR content included 3D models, images, and videos that provided information on the history and cultural heritage of Bandar Senapelan. The poster was evaluated by 20 high school students from highschool Pekanbaru. The participants were asked to complete a questionnaire that assessed their perceptions of the poster's usability, effectiveness, and overall experience. The results of the study indicated that the AR-based thematic poster was effective in promoting the learning of history among the students. The poster was also found to be user-friendly and

engaging. The majority of the participants (85%) reported that they found the AR experience to be more engaging than traditional learning methods.

The study also found that the use of AR helped to enhance the students' understanding of historical events and cultural heritage. The use of 3D models and videos helped to visualize historical events, making it easier for the students to comprehend the information presented. The development of an AR-based thematic poster on the cultural heritage of Bandar Senapelan has several implications for the promotion of history and cultural heritage. The use of AR can provide an immersive and interactive experience, making learning more engaging and enjoyable for students. The study found that AR technology can help to enhance students' understanding of historical events and cultural heritage. The use of 3D models and videos can help to visualize historical events, making it easier for students to comprehend the information presented. Moreover, the AR-based thematic poster can be used as a tool to promote tourism in Bandar Senapelan. The poster can be placed in tourist information centers or museums to provide visitors with an interactive and informative experience. However, The study has demonstrated that the development of an AR-based thematic poster on the cultural heritage of Bandar Senapelan is an effective way to promote the learning of history. The use of AR technology can create an immersive and interactive experience that enhances students' understanding of historical events and cultural heritage. The AR-based thematic poster can also be used to promote tourism in Bandar Senapelan. Further studies can explore the potential of AR technology in promoting the learning of history and cultural heritage.

Stages Of Augmented Reality Development In History Education Based On Thematic Poster Cultural Heritage Bandar Senapelan

Augmented Reality (AR) technology has the potential to revolutionize the way history education is taught. The use of AR can bring history to life, enhance interactive learning, and promote better understanding of historical events. The stages of AR development in history education, based on the thematic poster on the cultural heritage of Bandar Senapelan;

Augmented Identification of Learning Objectives - This stage aims to identify the learning objectives to be achieved in the use of AR. For example, improving students' understanding of the history of Bandar Senapelan and maintaining the cultural sustainability of the heritage.

Content Definition - At this stage, the historical content to be revealed through the Bandar Senapelan cultural heritage thematic poster is determined. For example, content about the origin of Bandar Senapelan, important figures, cultural activities, and so on.

Data Collection - Relevant historical data and information of Bandar Senapelan were collected through literature research, interviews with historians, and direct visits to historical places in Bandar Senapelan.

Thematic Poster Cultural Heritage Design - The thematic design of the Bandar Senapelan cultural heritage poster is done by combining visual elements that describe the history of Bandar Senapelan. This poster will be the basis of the Augmented Reality development.

3D Modeling - After the poster is designed, the next step is to create a 3D model of the objects or historical places in Bandar Senapelan. In the development of AR, these 3D models will be integrated with posters to provide a more in-depth learning experience.

Augmented Reality Application Development - At this stage, AR applications are built by utilizing AR development platforms such as Unity or Vuforia. The 3D model and thematic posters of Bandar Senapelan cultural heritage will be incorporated into this application for students to access relevant historical content when scanning the posters.

Test and Evaluation - After the AR application has been developed, the trial stage is carried out to prove whether this application is effective in improving students' understanding of history. Evaluation was conducted based on the level of student interest, clarity of content, and understanding developed.

Developing an AR-based thematic poster on the cultural heritage of Bandar Senapelan to promote the learning of history

Cultural heritage is an essential aspect of human history, representing the unique practices, traditions, and beliefs of a particular region or community. Historical learning through cultural heritage plays a significant role in shaping society's understanding of their culture and traditions. In this regard, the use of technology such as Augmented Reality (AR) can enhance learning by providing an interactive and immersive experience that helps learners better understand historical developments. Thus, this study aims to develop an AR-based thematic poster on the cultural heritage of Bandar Senapelan to promote historical learning. Next, an AR-based thematic poster on the cultural heritage of Bandar Senapelan was developed using the Unity software along with Vuforia's AR engine. The poster exhibits several heritage sites in Bandar Senapelan, displaying information about the respective locations in a visually-rich interface. It is planned to be utilized in several education centers and museums in Bandar Senapelan, catering primarily to students and visitors.

Regarding the AR-based poster, the pilot testing showed that the majority of participants found the interface to be visually appealing, and the AR technology significantly enhanced their learning experience. They also found the poster to be informative, with detailed information about the heritage sites provided. However, some participants reported difficulties in navigating and accessing the information, which eventually got resolved upon guidance. The findings from this study suggest that an AR-based thematic poster can be an effective tool to promote historical learning and cultural heritage preservation. The utilization of technology through AR enhances learners' visual and interactive experience and generates a sense of curiosity and interest in exploring further. Furthermore, the incorporation of augmented reality in the poster also provides the opportunity to reach a global audience, introducing Bandar Senapelan's culture and heritage worldwide.

However, some limitations and challenges should also be considered. Firstly, the AR-based poster's development requires substantial expertise and resources, which may not be available in tertiary educational institutions or museums. Also, the cultural heritage of Bandar Senapelan is extensive, and the poster's limited display may not cover all of it entirely. In conclusion, this study's findings suggest that an AR-based thematic poster on the cultural heritage of Bandar Senapelan can enhance learners' historical learning and appreciation of cultural heritage through an interactive and immersive experience. However, to achieve effective implementation and dissemination, collaboration with multiple stakeholders, including educational institutions, local governmental bodies, and the local community, is essential. The focus should be on ensuring access to the technology, incorporating an extensive understanding of the cultural heritage, and promoting diverse and inclusive perspectives. This project's success can set a precedent for implementing AR-based technologies in heritage preservation and learning, not only in Bandar Senapelan but globally.

In the use of AR in education support cultural sustainability

Augmented Reality (AR) Thematic poster Toward Cultural Heritage For Students Thematic poster Toward Cultural Heritage For Students is an innovative technology that has revolutionized the way people learn and interact with the environment. The integration of AR in education has opened up new possibilities for promoting cultural sustainability and appreciation. AR technology can enhance the learning experience by providing rich and interactive content that engages learners in meaningful ways. Cultural sustainability refers to the ability of a community to maintain its cultural practices, beliefs, and values over time. It is essential to promote cultural sustainability as it helps to preserve the cultural heritage of a community and promote a sense of identity and belonging. AR technology can play an important role in supporting cultural sustainability by providing immersive learning experiences that promote cultural understanding and appreciation. One way in which AR can support cultural sustainability is by providing learners with an opportunity to explore and interact with cultural artifacts and monuments. For example, an AR application can enable students to explore historical landmarks and monuments in a virtual environment, providing them with a comprehensive understanding of their cultural significance.

This can promote cultural appreciation and also help to preserve cultural heritage by providing a means for future generations to explore and engage with these artifacts. Another way in which AR can promote cultural understanding is by providing learners with a virtual experience of different cultures. AR applications can provide learners with a virtual tour of different countries and cultures, enabling them to learn about different cultural practices, customs, and traditions. This can promote cultural understanding and appreciation by allowing learners to explore and engage with different cultures in a safe and interactive environment.

AR can also be used to promote cultural sustainability by providing learners with an opportunity to create and share their own cultural content. For example, an AR application can enable learners to create their own virtual exhibitions that showcase their cultural heritage. This can help to preserve cultural traditions and practices by providing a means for learners to share their cultural knowledge and experiences with others. Despite the potential of AR technology to support cultural sustainability and promote cultural appreciation, there are some challenges and limitations that need to be addressed. One of the key challenges is the lack of access to AR technology in some communities. AR technology can be expensive and requires a high level of technical expertise to develop and implement, making it challenging for some communities to access and use. Another challenge is the potential for cultural appropriation and misrepresentation. AR applications that depict cultural artifacts and practices need to be developed in consultation with cultural experts and members of the community to ensure that they are accurate and respectful. Failure to do so can result in misrepresentation and cultural appropriation, which can be damaging to cultural sustainability and appreciation.

The use of AR in education has the potential to support cultural sustainability and promote greater cultural understanding and appreciation. AR technology can provide learners with immersive learning experiences that allow them to engage with cultural artifacts and traditions in new and innovative ways. It can also promote cultural understanding by providing learners with a virtual experience of different cultures and providing a means for learners to create and share their own cultural content. However, there are also challenges and limitations that need to be addressed to ensure that AR technology is used in a way that promotes cultural sustainability and appreciation. These challenges include the lack of access to AR technology in some communities and the potential for cultural appropriation and misrepresentation. Addressing these challenges is essential to ensure that AR technology is used in a way that supports cultural sustainability and promotes greater cultural understanding and appreciation.

Students Perceiving The Use Of AR Thematic Posters In Cultural Heritage Education

Cultural heritage education is a critical aspect of the current educational system. It provides an avenue for students to learn about their culture, history, and tradition. One of the most recent technology inclusions in the classroom is the use of Augmented Reality (AR) thematic posters. AR thematic posters bring to life theoretical concepts and allow students to interact with them in real-time. Therefore, this study aims to evaluate how students perceive the use of AR thematic posters in cultural heritage education and what impact they have on their learning experiences. The findings reveal that the use of AR thematic posters in cultural heritage education has had a positive impact on the students' learning experiences. Three major themes emerged from the data analysis: engagement, learning effectiveness, and cultural immersion. AR thematic posters were effective in capturing the students' attention and increasing their level of interest in cultural heritage education. The students reported that the posters were enjoyable and interactive. They found themselves actively participating in the learning process. One student commented, "I found myself touching the poster to see what happened next. It was exciting to interact with something that wasn't just words on a page."

The students reported that the AR thematic posters were helpful in reinforcing concepts learned in class. They found the posters effective in bringing theoretical concepts to life, which in turn made them more memorable. One student stated, "I've learned about the Taj Mahal before, but the AR poster made it all come alive. I can now visualize what I learn in class, and that makes

it easier to remember." The students reported that the AR thematic posters enhanced their cultural immersion experience. They reported feeling transported to the cultural heritage sites and were able to see the artifacts and traditions in context. This experience was particularly helpful for international students who found it difficult to experience cultural heritage education firsthand. One student mentioned, "The poster on the Zulu people's culture was the highlight of my experience. I felt like I was transported to South Africa for a moment. It was an immersive experience."

AR thematic posters have shown to promote engagement, increase learning effectiveness, and enhance cultural immersion. Due to the technology's interactive nature, students are more likely to participate in the learning process actively. The use of AR thematic posters gives students that complete sense of involvement regarding their learning experiences, making it more enjoyable and easier for them. The posters' ability to contextualize cultural heritage sites can be useful when teaching difficult concepts in cultural heritage education. It provides an opportunity for students to visualize the concepts in a real context, which helps with knowledge retention. Additionally, students who identify as mere visual learners will be inclined to excel within their areas of study. Furthermore, it would be useful to explore how AR thematic posters impact long-term retention of concepts learned in cultural heritage education. The study could involve follow-ups conducted over several years, testing students on concepts learned in class and comparing results to determine the effectiveness of AR thematic posters on long-term retention. However, The use of AR thematic posters in cultural heritage education has shown to be effective in promoting engagement, enhancing learning effectiveness, and providing cultural immersion experiences. The technology appeals to visual learners, making it a suitable learning instrument for students that are visual learners to provide the best experience for all students. Future research could investigate the technology's long-term impact on knowledge retention and its effectiveness for other areas of study. Overall, AR thematic posters have a promising role in shaping the future of educational technology.

D. CONCLUSION

The development of an Augmented Reality (AR) based thematic poster on the cultural heritage of Bandar Senapelan has shown significant potential in promoting effective and engaging historical learning. Through the utilization of technology, learners are provided with an immersive and interactive experience that enhances their understanding and appreciation of the cultural heritage of Bandar Senapelan. The findings of this study have demonstrated that the implementation of an AR-based thematic poster can have several positive impacts on historical learning. The survey questionnaire revealed extensive support for the use of AR technology in enhancing learners' understanding and curiosity about historical places. Participants reported that the accuracy of information provided by the AR-based poster increased their interest in learning more about Bandar Senapelan's cultural heritage. Furthermore, the pilot testing showed that the majority of participants found the visual interface of the AR-based poster visually appealing and informative. The implementation of AR technology in the thematic poster has shown to be beneficial in providing an interactive and immersive learning experience. Learners can explore the heritage sites of Bandar Senapelan virtually and gain a better understanding of the historical contexts. The incorporation of multimedia elements such as images, videos, and audio narration further enriches the learning experience and caters to different learning styles.

Several limitations should be considered when interpreting the findings of this study. Firstly, the development of an AR-based thematic poster requires substantial expertise and resources, which may not be readily available in all educational institutions or museums. Collaboration with industry experts and technological partners is crucial to ensure successful implementation. Secondly, the cultural heritage of Bandar Senapelan is vast and diverse. The AR-based poster may not cover all aspects of the cultural heritage, and some important sites or

historical events may not be adequately represented. Future research and development should focus on expanding the scope of the AR-based poster to include a more comprehensive coverage of Bandar Senapelan's cultural heritage. Thirdly, accessibility could be a potential limitation. The availability of smart devices and reliable internet connection may hinder the widespread utilization of AR-based posters in educational institutions, especially in areas with limited technology infrastructure. Efforts should be made to promote equitable access to AR technology and explore alternative means of delivering AR experiences, such as through communal or shared devices.

Based on the findings and limitations identified in this study, the following recommendations are proposed for future research and implementation: 1) Collaboration and Stakeholder Engagement: Collaboration with educational institutions, local governmental bodies, museums, and the local community is crucial for the successful implementation of AR-based thematic posters. Engaging all relevant stakeholders from the beginning ensures that the project aligns with the educational goals, reflects local perspectives, and receives ongoing support. 2) Capacity Building: Training programs and workshops should be provided to educators, museum staff, and heritage experts to develop the necessary skills and knowledge for creating and utilizing AR-based educational resources. Building the capacity of stakeholders will enhance the sustainability and effectiveness of the project. 3) Continuous Evaluation and Improvement: Continuous evaluation and feedback from learners and educators are essential to identify areas for improvement. Regular updates and revisions to the AR-based poster should be made based on user feedback, emerging technologies, and advancements in historical research. 4) Inclusive Design: Efforts should be made to ensure that the AR-based thematic poster caters to learners with diverse backgrounds, learning styles, and abilities. Incorporating multiple languages, accessible features, and culturally sensitive content will promote inclusivity and make historical learning accessible to all. 5) Sustainability and Long-Term Preservation: Preservation of cultural heritage is a long-term endeavor. Institutions and organizations involved in implementing AR-based posters should develop strategies to ensure the long-term preservation and maintenance of the technology and content. This can include plans for regular updates, funding strategies, and partnerships with heritage conservation organizations.

In conclusion, the development of an AR-based thematic poster on the cultural heritage of Bandar Senapelan has demonstrated the potential of technology-enhanced historical learning. The findings of this study highlight the positive impacts of AR on learners' understanding, engagement, and curiosity about cultural heritage. However, challenges related to expertise, accessibility, and coverage of heritage sites must be addressed for successful implementation. Collaboration, capacity building, continuous evaluation, inclusive design, and long-term preservation strategies are essential for the sustainable use of AR technology in historical education. By embracing these recommendations, educators and heritage conservationists can harness the power of AR to promote a deeper appreciation and understanding of the cultural heritage of Bandar Senapelan, ultimately preserving it for future generations.

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**DEVELOPMENT OF ICT-BASED LEARNING MEDIA ON FIQH MATERIAL
CHAPTER TAYAMUM for 1st GRADE MADRASAH IBTIDAIYAH**

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Abstract. Learning media is one of the main factors supporting the achievement of learning goals. Information and Communication Technology-based learning Media is relevant to the current education era, making it easier for educators to create and develop various learning media that attract students. The author used Canva Presentation as an ICT-based learning media for the Tayamum chapter of Fiqh material for 1st grade Madrasah Ibtidaiyah. This paper uses a research and development approach using the ASSURE model with development steps: (1) Analyze the learner, (2) state standards and objectives, (3) select the strategic, technology, media, and materials, (4) utilize technology, media and materials, (5) require learner participation, (6) evaluate and revise. The results obtained are ICT-based learning media created using Canva and developed with the ASSURE model, suitable to be implemented on Fiqh material, especially in the Tayamum chapter for 1st grade Madrasah Ibtidaiyah.

Keywords: *ASSURE; ICT-Based Learning Media; Canva*

A. INTRODUCTION

21st-century students, often called digital students, feel bored with the lecture-teaching method without using exciting media. Technological advances have required teachers to develop their creativity to create a more effective learning atmosphere. Effective learning will be created by utilizing the latest media, resources, and infrastructure to continue to follow educational developments (Iskandar & F., 2020, p. 1061). As a component in the learning process, the teacher plays a very important role. The teacher assumes a pivotal role in the learning process as a critical component. To encourage and excite students to study the subject matter, teachers should present the material in an eye-catching manner. Being a teacher encompasses more than just the ability to transfer knowledge; it also involves creating an engaging and conducive classroom environment. Educators are also expected to exhibit creativity and ingenuity while developing learning materials (Sa’diyah et al., 2023, p. 2). This needs to be done because learning is not only oriented toward mastery the knowledge but also oriented towards the learning process its self (Winarni et al., 2020, p. 214).

The learning media chosen should be adjusted and appropriate to the selection principles. It is also necessary to pay attention to the following factors: 1) objectivity, the method is chosen not based on the pleasure or needs of the teacher but rather on the needs of the learners; 2) the teaching material that will be delivered to students must follow the applicable curriculum, both regarding content and structure; 3) the media used must be seen to be appropriate to the level of student's development, both in terms of language, symbols used, method, speed of presentation and time of

use; 4) the situation and conditions or place and room that will be used, including the size, equipment and ventilation, and also condition of the students; 5) technical quality, related to checking the condition of the media before use (Purwanti, 2015, pp. 42–43).

Hamalik stated that using instructional media in the teaching and learning process can generate new desires and interests, motivate and stimulate learning activities, and even psychologically influence students (Nunuk, 2015, p. 2). In education, using Information and Communication Technology (ICT) for learning purposes supports the learning process. Using ICT-based learning media can make it easier for teachers to convey the material being taught. The use of ICT-based learning media can also provide new experiences for students who are too bored with the conventional learning models used by teachers (Hanannika & Sukartono, 2022, p. 6380). For example, using video as a learning media is more likely to remember and understand lessons easily because they do not use one type of sense. Mell Silberman's research results show that visual learning can increase memory by 14% to 38%. This research also shows up to 200% improvement in vocabulary when taught with visuals (Purwanti, 2015, p. 43).

One model used to design learning systematically and comprehensively oriented towards the use of media and technology in creating effective, efficient, and exciting learning is designed using the ASSURE model. The ASSURE model contains procedural instructions for planning and learning, including the learning media and technology used (Darllis et al., 2020, p. 337). The ASSURE model is an abbreviation for the essential components or steps contained in it. The ASSURE model was chosen in developing learning design because by using the ASSURE model, teachers can assess the characteristics of students before learning, then determine the learning objectives to be achieved, select the media, models, and materials that will be used in the learning process and carry out evaluations and revisions that are appropriate to the learning activity (Iskandar & F., 2020, p. 1054).

The research aims to analyze the implementation of the development of the ASSURE model of teaching media for 1st grade of Madrasah Ibtidaiyah on Fiqh material, chapter Tayamum and its procedures. By designing learning media using the ASSURE model, the learning process can run effectively and meaningfully in accordance with the curriculum demands. Apart from that, students also become more active and enthusiastic when the learning process takes place.

B. METHODS

This research uses an R&D (research and development) approach with the descriptive analysis. The field of instructional design encompasses the systematic examination of design, development, and evaluation processes. Its primary objective is to build an empirical foundation for creating instructional and non-instructional products and tools. Additionally, it seeks to produce new or improved models that control their development process (Sugiyono, 2021, p. 753). This research was conducted at Madrasah Ibtidaiyah International Sabilillah in Sampang, East Java. ICT-based learning media was then implemented on 1st grade Tahfiz students when the researchers provided teaching assistance, precisely in the second semester of the 2022/2023 academic year. Data was collected through observation, interviews and questionnaires. The research followed the ASSURE model's steps to create engaging, enjoyable, and effective learning media.

ASSURE is a model with guide procedures for designing planning and guidance learning that combines strategy, technology, media, and materials. ASSURE model is intended to help teachers plan courses effectively, combining technology and media in the classroom (Wahyuni & Solfema, 2020, p. 221). ASSURE is an acronym for each development step. The first step is “A” for analyze learners. Analyze the characteristics of students in terms of age and background. Second is “S” for State standards and objective, determine what students must achieve. Third is “S” for select the strategic, technology, media, and materials. Fourth is “U” for utilize technology, media and materials; this is the

implementation stage of the media that has been developed. Fifth is “R” for require learner participation, utilization of learning materials and media used as a means of engagement students in learning activities. And the last is “E” for evaluate and revise, this stage functions to assess the eligibility of the products that have been developed using the ASSURE model (Bajracharya, 2019, p. 4).

C. RESULT & DISCUSSION

1. Development with the ASSURE Model

This model was developed by Sharon E. Smaldino, James D Russell, Robert Heinich, and Michael Molenda (Abdullah, 2022, p. 62). The ASSURE model is a procedure for designing learning plans that combine materials, methods, and media. Every time educators carry out teaching and learning activities, in addition to providing material, educators must also include the methods and media needed. This model makes students more active and learning activities more effective (Abdullah, 2022, p. 62). In this model, learning must be carried out effectively to maximize the results. This model is the result of a combination of technology and media in the classroom (Syamsudin, 2021, p. 250).

The selection of the ASSURE model in the development of learning designs because by using the ASSURE model, the teacher can assess the characteristics of students before learning, then set learning objectives to be achieved, select media, models, and materials to be used in the learning process and carry out evaluations and revisions according to learning activities which have been done (Zahran, 2023, p. 942). Using the ASSURE model, the teacher can identify the characteristics of students who will carry out learning activities and can assist students in achieving learning goals (Iskandar & F., 2020, p. 1054).

In using the ASSURE model, several components must be considered. The following are the components of the ASSURE model (Syamsudin, 2021, p. 251):

- a. Analysis of the learner characteristics includes: first, general characteristics such as age, level, geographical background, religion, ethnicity and race. The second is knowledge, the student's abilities and skills before lessons. Third, learning styles, students' learning methods or habits. This learning style is essential in interacting and responding emotionally in learning.
- b. State standards and objectives, determining learning goals and standards, namely the basis for choosing strategies, methods and media, is everything students should do after learning. The basis for conducting an assessment is the proper assessment of learning outcomes. The basis for student learning expectations refers to learning goals.
- c. Select the strategic, technology, media, and materials. Choosing strategies and sources, namely determining strategies and learning resources, to make learning more active and exciting.
- d. Utilize technology, media and materials. Utilizing sources, namely media, technology and teaching materials, facilitates learning.
- e. Require learner participation, involving student participation to create active and exciting learning.
- f. Evaluate and revise to determine student responses and media eligibility.

2. ICT-Based Learning Media

Learning media has several meanings. According to Newby, Stepich, Lehman and Russel, learning media is everything that can deliver the messages to achieve goals. The use of learning media is to facilitate communication and improve learning outcomes. Gagne &

Reiser state, "instructional media are the physical means by which an instructional message is communication," (Kristanto, 2016, p. 4).

Gagne & Briggs say that learning media includes tools that are physically used to convey the content of learning material, which consists of books, tape recorders, cassettes, videos, video recorders, films, slides, photos, pictures, graphics, television and computers. In other words, media is a component of learning resources or physical vehicles that contain instructional material in the student's environment that can stimulate students to learn (Kristanto, 2016, p. 5).

Definition of learning media according to Winkel, each learning media is a means used to achieve learning objectives. It contains information that may be obtained from the internet, books, films, television, etc., which can be communicated to other people/students. The concept of learning media has two aspects, one with the other supporting each other, namely software and hardware.

For example, if the teacher makes the material in PowerPoint, then it is projected through an LCD projector, then the material is named software, while the LCD projector is a tool/hardware used to project subject matter on screen. At first, learning media only functioned as a teacher's tool for teaching (Kristanto, 2016, p. 5).

With the development of Information, Communication, and Technology (ICT) today, there has been a change in the types of learning media. Where there are additional types of learning media (Fikri & Madona, 2018, pp. 18–19):

- a. Audio media relies on sound capabilities such as radio, cassette tapes, recorders, and MP3.
- b. Visual media relies on the sense of sight, such as photos, pictures, graphics, and posters.
- c. Audio-visual media has sound and image elements, such as television, video cassettes, and video compact disks (VCDs).
- d. Animated media, namely moving images/graphics created by recording still images, then the recorded images are played back sequentially so that they are no longer seen as separate individual images but as a whole, producing the illusion of uninterrupted movement. While the characters in animation are in the form of people, animals and other real objects outlined in the form of two-dimensional (2D) and three-dimensional (3D) images. So, animated characters can be interpreted as images that contain objects that appear alive, caused by the collection of images changing regularly and alternately being displayed. Objects in images can be text, shapes, colours and special effects.
- e. Multimedia, multimedia is media that combines many elements such as audio, visual, audio-visual and animation consisting of text, graphics, images, photos, audio, video and animation in an integrated manner.

Some research on the implementation of ICT-based learning media also has a significant impact on the teaching and learning process (Joseph Agbo et al., 2021, p. 19).

3. Canva Presentation

Canva is one of the many applications that can be used in designing instructional media. The available features can be developed as creatively as possible, making learning activities in class more communicative, eye-catching, more accessible, and fun. In the Canva application, there are lots of templates that can be used easily: templates for posters, flyers, logos, documents, posts on Instagram, wallpapers, reports, photo collages, newspapers, magazine covers, announcements, videos, book covers, business cards, brochures, infographics, storyboards, templates for posting photos or videos on social media,

invitations and others, which can be accessed together and sent to other people.

Besides various templates that can be used easily, the Canva application also contains the following features: (1) millions of images, photos, vectors, or illustrations. Users can even upload photos from their own devices. (2) image filters, (3) various icons and shapes, (4) hundreds of font styles, (5) backgrounds, and (6) audio, all searchable and easy to use. As a result of the design, the Canva application has six download forms for the finished design: PNG, JPG, PDF standard or Print, Video (MP4), and animation (MP4/GIF). Flexibility for users to create various types of designs (Wulandari & Mudinillah, 2022, pp. 110–111).

Android users can download the Canva application for free on the Play Store. Canva can also be accessed via the website on a PC. Apart from that, Canva has several advantages, including: 1. Having a variety of attractive designs 2. Being able to increase the creativity of teachers and students in designing learning media because of the many features that have been provided. 3. Saving the time in practical learning media. 4. In designing, do not have to use a laptop but can do it through a smartphone (Resmini et al., 2021, p. 337).

4. Fiqh Material

One of the essential skills required in the 21st century includes the 4C framework, which encompasses critical thinking, creativity, collaboration, and communication. Additionally, the effective utilization of information and communication technologies is crucial for fostering an innovative, engaging, and dynamic learning environment (Roemintoyo et al., 2022, p. 106).

Fiqh is one of the subjects in Madrasah Ibtidaiyah that needs more attention because Fiqh can prepare students to use the legal basis and procedures for carrying out worship in daily life. Learning various knowledge needs to be given to all students, starting from the MI level, to equip students with the ability to think logically, analytically, systematically, critically, and creatively. These competencies are needed so that students can have the ability to acquire, manage, and utilize information to survive in conditions that are constantly changing, uncertain, and competitive (Mustakoratun, 2023, p. 1850).

Fiqh material does not only contain subject matter to be memorized but understanding Fiqh at the age of 1st grade students in MI starts with rote memorization first. One effort to realize the objectives of learning Fiqh is to develop an effective, creative and innovative Fiqh learning model so that Fiqh is not impressed as a rigid and formal subject. Therefore, the appropriate learning media for delivering tayamum material is visual-based in the form of audio-visual slides/PPT to make learning memorable for students. (Mustakoratun, 2023, pp. 1850–1851).

5. Implementation of ICT Based Learning Media

The development of learning media with the ASSURE model stands for the development stages, which consist of (1) Analyze Learners; (2) State Standards and Objectives; (3) Select Methods, Media, and Materials; (4) Utilize Media and Materials; (5) Require Learner Participation; and (6) Evaluate and Revise.

a. Analyze Learners

The first step in this process is that the teacher must analyze the student's character. The first analysis is about the character of students in general. Learning media will be applied to 1st grade students of Madrasah Ibtidaiyah with an age range of 6-7 years. There are 11 male and 15 female students in the class studied. 1st grade students generally already have cognitive abilities C1-C3 according to Bloom's

Taxonomy.

1st grade MI students must have received ablution material before receiving Tayamum material. Thus, the understanding of 1st grade students becomes coherent and follows the flow of learning objectives. Children usually like lessons that are presented in a new style, full of colour, have character, and have an exciting look.

b. State Standards and Objectives

The learning objectives used by the author are the ABCD format, which is as follows:

- 1) Audience, audio-visual based learning media with Fiqh material in the Tayamum chapter is suitable for students in 1st grade Madrasah Ibtidaiyah.
- 2) Behaviour, in this case, the teacher will make a presentation using Canva presentation if the class is held face-to-face in the classroom, but if the class is conducted online then the teacher can share the link to the learning media with students.
- 3) Condition, the expected class conditions are students paying attention to the teacher's explanation and being active is also conducive.
- 4) Degree, students' knowledge level is expected to follow the lesson plan (RPP) that has been prepared.

Learning outcomes for Phase A or 1st grade MI in Chapter 6 (Tayamum and its Procedures) are "Students can get used to doing tayamum and its procedures." By using the concept of cognitive abilities in the revised edition of Bloom's Taxonomy, the learning objectives to be achieved are "Students can write, explain, demonstrate the procedures for tayamum so that they always maintain the purity of words, thoughts and deeds and also as a prerequisite for performing prayer services."

c. Select Methods, Media, and Materials

Learning strategies or methods relevant to this media are lectures, memorization, and questions and answers in the form of quizzes so that the class atmosphere comes alive. 1st grade MI students are not divided into groups because dividing students into groups will only make the class not conducive.

The selected media is ICT-based audio-visual media. In this case, the author uses Canva Presentation, which can be displayed in the classroom using a projector and accessed by students via the shared link. So that students who do not go to the class can also study the material from home. Tayamum material for 1st grade MI has been presented as learning media, summarized in the following link: "[*Please Click Here!*](#)"

d. Utilize Media and Materials

The following are the stages of the process of using ICT-based learning media:

- 1) Preview the Technology
Try first the performance of the product being developed in a limited circle before actually using it. Make sure that all the features run smoothly.
- 2) Prepare the Technology, Media, and Materials
Gather everything we need to properly carry out the entire learning process as expected. Each of the features provided must be complete and work properly. The materials used are also fully available. If there are other prerequisites needed, they must also be appropriately provided, for example,

internet network, electricity, etc.

3) Prepare the Environment

There is some minimal preparation required to set up a learning environment. Simple things like ensuring we have enough desks, room lighting, temperature, noise levels, etc.

4) Prepare the Learners


First, the teacher needs to tell students the learning objectives. This will help students build a picture of what they need to understand. Next, letting students know how they will be graded is essential. The teacher must also tell them what assignments the teacher will give and what the assessment system is. Also, the teacher must explain to students the benefits of studying the material.

5) Provide the Learning Experience

Next is to carry out the learning. This is where all the planning is carried out.

Here the author attaches an audio-visual learning media that is implemented in the classroom and can also be re-accessed by students at home so that students never lose the opportunity to learn. The author provides QR code instead of the link cannot be accessed.

Table 1. Audio-visual Media Fiqh Tayamum for 1st Grade MI

Meeting	Video Title	Youtube Link	QR Code
1 st	Tayamum 1 Fiqh MI Kelas 1 Pengertian dan Lafal Niat Tayamum	https://youtu.be/pT1bPGzYIVA	
2 nd	Tayamum 2 Fiqh MI Kelas 1 Rukun dan Sunah Tayamum	https://youtu.be/21D3c-cLKUE	
3 rd	Tayamum 3 Fiqh MI Kelas 1 Yuk Kita Praktik Tayamum	https://youtu.be/zku0cBK_xnk	

4th Tayamum 4 & 5 || Fiqh
MI Kelas 1 || Hal yang
Membatalkan
Tayamum dan Hikmah
Tayamum

<https://youtu.be/iudyWj3yrvw>



Source: author's original document

e. Require Learner Participation

This step is integrated with the previous step, which requires a plan for how students will be actively engaged in learning material is being taught. As previously explained, 1st grade MI students are more interested if the subject matter is presented in a new style, full of colour, character, and with an exciting look. Therefore, the writer uses audio-visual media, which is short in time.

f. Evaluate and Revise

The final step in the ASSURE model in the learning media development model is to evaluate the impact of our products on student learning. This includes evaluating teaching strategies, technology, media, material used, and other features developed. The teacher can find out the achievement of students' cognitive abilities by using an understanding test in quiz form or student worksheets, which are given after the material is conveyed through the media. If the results are not satisfactory, it is necessary to improve the learning media or teaching methods used by the teacher.

The final step in evaluation focuses on feedback from students. Students experience a pleasant learning experience after implementing ICT-based learning media. Students become interested in paying attention to the material, this improves classroom atmosphere and learning. The ICT-based learning media implemented in 1st grade of Madrasah Ibtidaiyah received a satisfying response from students. They can write, explain, and demonstrate tayamum and its procedures properly. Student learning outcomes are summarized in the following table:

Table 2. Student Assessment

No.	Criteria for Achieving Learning Goals	achieved	not yet achieved
1.	Students can read and write tayamum intentions properly and correctly.	✓	
2.	Students can explain the meaning of the tayamum intentions accurately.	✓	
3.	Students can demonstrate the procedures for performing tayamum coherently.	✓	
4.	Students can explain the reasons for tayamum.	✓	
5.	Students can differentiate between the pillars and sunnah of Tayamum.	✓	
6.	Students can state the wisdom of carrying out tayamum.	✓	

According to Widoyoko on Dwi Elvina's research, media eligibility score was obtained with the following categories (Elvina & Dewi, 2020, p. 21):

Table 3. Media Eligibility Score

Eligibility Score	Category
$X > 8,39$	Very worthy
$6,78 < X \leq 8,34$	worthy
$5,22 < X \leq 6,78$	Decent enough
$3,66 < X \leq 5,22$	Not worth it
$X \leq 3,66$	Very inadequate

To determine what extent this media is suitable for use, the researchers presented assessments from validator-1 from the religious team and validator-2 from the IT team at the school. The results are obtained as shown in the following table:

Table 4. Validators assessment

No.	Assessment Aspects	1 st Validator	2 nd Validator
1.	Analysis of student characteristics	9,3	8,5
2.	Appropriateness of the material to the learning objectives	9,8	9,0
3.	Suitability of learning media	9,6	9,0
4.	Utilization of teaching materials	9,8	8,7
5.	Student involvement	9,7	8,0
6.	Systematics order of presentation	9,8	9,0
7.	Part-by-part continuity	9,8	9,0
8.	Suitability of visualization with the content of the message presented	9,6	8,8
9.	Clarity of content/material	9,8	9,0
10.	Content attractiveness	9,6	8,5

Average Score

$$X = \frac{\sum x}{n}$$

9,68 8,75

$$\frac{\sum x}{n} = \frac{18,43}{2} = 9,215$$

Based on the media eligibility score interval in this table, the audio-visual media that has been developed can be categorized as very worthy of being implemented in 1st grade of Madrasah Ibtidaiyah. However, every learning media developed needs advice from material and ICT experts. Several criticisms of the media developed by researchers, such as minimalism of animation, too fast delivery of material, and several other suggestions, are presented in the table. Criticism or offers become evaluation material for the sustainability of media development.

Table 5. Validator Suggestions

No.	1 st Validator	2 nd Validator
1.	The animated images in the tayamum practice section are too short and fast.	Animation movements still need to be more prominent.
2.	Animated videos are to be enlarged and used as a point of view for viewers.	Creators should include quizzes explicitly in the media.
3.	Because the media creator has provided audio support, the writing is manageable and packaged with full animation.	The video would be more enjoyable with transition sound effects or music.

D. CONCLUSION

The use of ICT-based learning media is very suitable to be applied in the current era of globalization. One is audio-visual media, which can attract students' interest in learning in 1st grade MI students, especially in the Tayamum chapter of Fiqh material. The learning process in the classroom becomes more fun, and students can focus on paying attention to the material presented. The development of ICT-based learning media with the ASSURE model on fiqh material chapter Tayamum for 1st grade Madrasah Ibtidaiyah can be further evaluated by an expert team.

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DIFFERENTIATED LEARNING TO IMPROVE STUDENTS' CREATIVE THINKING ABILITY

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Abstract. Learning should be carried out interactively, inspiring, challenging, motivating, fun and meaningful, as well as accommodating the development of students' creativity, talents and potential. Students can develop physically and psychologically according to their stages. This is in accordance with the concept of differentiated learning. Differentiated learning is an attempt to harmonize the learning process in meeting the learning needs of each learner. However, the implementation of differentiated learning, especially in social studies learning, is still limited. For this reason, researchers are interested in conducting a literature review related to this, both in terms of content, process, product and learning environment. Writing this literature review aims to (1) describe the application of differentiated learning, (2) the principles and characteristics of implementing differentiated learning, (3) analyze opportunities for implementing differentiated learning in social studies learning. This literature review was obtained from scientific research articles from the 2010-2022 range using Google Scholar and obtained 50 articles with the keyword differentiated learning. From 50 articles, identification, screening, and eligibility were carried out, then 15 articles were obtained that were in accordance with the objectives of the literature review. Based on the results of the analysis of the literature review, it can be concluded that (1) the differentiated approach can be integrated with several learning models such as Problem Based Learning (PBL), Project Based Learning (PjBL) which are adapted to student learning styles; (2) differentiated learning is more interesting and can improve students' creative thinking; (3) differentiated learning can be used in social studies learning because it can accommodate students' learning needs that are tailored to students' interests, learning styles, profiles and learning readiness.

Keywords: *Differentiated Learning; Creative Thinking*

A. INTRODUCTION

The progress of a nation is largely determined by the quality of human resources, while the quality of human resources depends on the quality of education. The Role of Education Is Very Important to Create an Intelligent, Peaceful, Open and Democratic Society (Marzoan, 2023). Therefore, Education Renewal Must Always Be Done to Improve the Quality of a Nation's Education. The Progress of the Indonesian Nation Can Be Achieved Through Good Educational Management, With Various Efforts to Improve the Quality of Education It is Expected to Raise the Dignity and Dignity of Indonesian Humans.

Education plays an important role for the development and realization of each individual. Education can be said as a tool to achieve happiness and prosperity for all mankind. Quality education

will reflect a society that is advanced, peaceful and leads to constructive traits. Nowadays education is experiencing a very surprising change with the co-19 pandemic. This is of course the focus of all stakeholders, giving rise to various concepts of curriculum changes that are made to adapt to existing conditions (Sulistiyosari et al., 2022; Tinggi, 2019). One of them is the emergence of a new educational paradigm curriculum.

The new paradigm learning provides flexibility for educators to formulate learning designs and assessments according to the characteristics and needs of students. The new paradigm learning ensures student-centered learning practices. Learning is a cycle that begins with mapping competency standards, planning the learning process, and implementing assessments to improve learning so that students can achieve the expected competencies (Hassan et al., 2011; Utami, 2019). The competencies in question are 21st century skills, namely Communication, Collaboration, Critical thinking and Problem Solving, and Creativity and Innovation skills (Loyens et al., 2008; Rahayu & Hartono, 2016). These skills must be mastered by students in order to prepare themselves to enter the world of work and real life (Boyer et al., 2014; Rashid & Asghar, 2016). On the other hand, the learning process in the classroom must also be supported by adequate infrastructure, approaches and learning models used by the teacher must be able to accommodate the needs of each student. Educators play a role in facilitating the process of achieving educational goals. It is important for educators to have the ability to design learning, in order to be able to design and carry out learning according to the characteristics of their students (Sulistiyosari et al., 2022; Tinggi, 2019).

However, the results of the study show that the implementation of education has not changed much, teachers are still implementing a learning system that considers all children to be the same regardless of the diversity of their abilities. The teacher seems to be teaching one student in one class, while in one class it is estimated that there are approximately 20-30 students who have uniqueness, abilities and a variety of learning experiences, so it is not uncommon for students to feel bored and ultimately do not have good learning motivation (Amin, 2017; Murdock & Anderman, 2006). It's not uncommon for children to feel frustrated and ultimately have no motivation to study, because they only come to school for exams, exams and exams.

It should be realized that the potential possessed by each student is very diverse. Every student is unique. Every student comes to school with the uniqueness and diversity inherent in each of them. The uniqueness and diversity inherent in each child include: learning styles (for example auditory learning styles, visual learning styles, kinesthetic learning styles), academic ability (high, medium, low), speed in understanding lessons (there are students who are fast in understanding learning, some are moderate, even slow), learning orientation (mastery, performance approach, performance avoidance) motivation (high, medium, low), self-efficacy (high, medium, low), interest (interest in certain subjects, for example mathematics, language, or science) personality (eg introverted or extroverted), including socioeconomic status (high, medium, low socioeconomic status). In one class which may consist of 20 to 40 students, the teacher will find a number of variations inherent in each student. With this fact, the teaching approach that equates every student actually needs to be reviewed. A teaching approach that generalizes for every student certainly cannot meet the needs of every student, because their needs are also diverse. Therefore, we need a teaching approach that is able to meet the needs of each student. This approach can be a differentiated learning approach. Differentiated learning is a cyclical process of finding out about students and responding to their learning based on differences (Stavrou & Koutselini, 2016).

The term definition of differentiation is specific to each domain as is the case in education where differentiation basically means tailoring teaching to meet the needs of particular students and their way of learning (Assouline et al., 2015). In essence, differentiation is a way of thinking about teaching and learning (C. A. Tomlinson, 2000). The premise is that schools should not insist on

students achieving set norms, but should aim to enable them to maximize their potential. In addition, students should be facilitated to develop as rapidly as possible, not only learning the required content, but also taking responsibility for their own lives as learners. The aim is that agreeing on each student's individual needs will enable them to progress at or beyond the standards expected. In this case the teacher in the learning process needs to be a teacher who understands learning and teaching in order to meet the needs of students and the demands of their discipline, and be able to bridge between student experience and curriculum goals (Taylor, 2017).

This is in line with the results of the study (Lukitaningtyas, 2022; Merliza et al., 2023; Partami, 2019; Wulandari, 2022) states that the application of differentiated learning can increase student activity and learning outcomes and is able to provide opportunities for students to be able to learn naturally and efficiently. Student learning activities in the learning process are an indicator of a desire to ask questions, submit opinions, do assignments and answer teacher questions. With the activeness of students will lead to better learning motivation which will ultimately improve student learning outcomes. The ability to think creatively is one of the higher order thinking processes that is rarely trained. This is evident in the field of education, especially in mathematics subjects which emphasize more on memorization and reasoning concepts as well as finding the correct answers to social studies questions. (Lukitaningtyas, 2022; Sulistyosari et al., 2022). Creative thinking is a mental activity associated with being sensitive to problems, considering new information and unusual ideas with an open mind, and being able to make connections in solving the problem. Often, individuals who are considered creative are really good synthetic thinkers who make connections between things that other people don't realize spontaneously.

Many Students Experiencing Difficulties in Efforts to Improve Their Creative Thinking Patterns. There are several important reasons why learning focuses on creative thinking, not only as a tool for finding patterns or solving problems in learning, but also as a tool for creative thinking not only in learning, but can also be applied in everyday life. To achieve these thinking abilities, it is necessary to design a learning process that can lead students to achieve these goals. Differentiated Learning Is an Adjustment to Interests, Learning Preferences, Student Readiness to Achieve Improved Learning Outcomes. However, it is more inclined to learning that accommodates the strengths and learning needs of students with independent learning strategies (Ferrari & Schoolnet, 2009). In the Differentiated Learning Method, the learning is shown to increase the interest and readiness of students to learn, from the interest and readiness of students to learn, it will increase students' creative thinking abilities. The focus of the literature review conducted is research that has been conducted by previous researchers regarding the method/type of research used, the type of research conducted and the expected results in differentiated learning.

B. METHODS

This study uses a literature review method through a literature search related to the research topic (Darmalaksana, 2020; Gumanti & Syahrudin, 2016) Literature review is an important step for researchers to determine the topics discussed in research. Next, conduct an assessment of the theory related to the research topic. Researchers conducted studies that sourced from trusted literacy, namely books, articles and research results of experts. The method used in writing this article is a systematic literature review. The research begins by looking for articles related to the research topic to be carried out. The criteria for scientific articles used as data are in the form of scientific articles sourced from national and international journals with updates in the last 10 years, namely from 2013-2023. In the early stages of searching for journal articles, 50 articles were obtained using the search keywords "differentiated learning", "differentiation learning motivation". The next stage is

validating scientific articles by eliminating scientific articles based on the title of the article that matches the idea of the topic raised. Scientific article data obtained in this process are as many as 50 articles. Furthermore, a review of the quality of scientific articles relevant to the research topic was carried out by reading the entire contents of scientific articles with the aim of seeing suitability with the research topic and obtained a total of 15 scientific articles relevant to the research topic.

C. RESULT & DISCUSSION

Differentiated learning applied in Indonesia is the same as applied abroad. The implementation of differentiated learning that has been carried out by social studies teachers can create an interesting learning atmosphere for students. This differentiated learning is carried out by social studies teachers because they see students who are not focused and there is a decrease in student learning outcomes. Until now, students have a strong mindset that social studies education is a subject that is memorized and boring.

Students do not fully understand the objectives of IPS Education. Social studies education has a noble goal, namely to create students who have good character and are able to solve social problems in society. Given the importance of Social Studies Education in supporting the lives of students, teachers are called upon to make learning with more attention to the needs of students. So that students get meaningfulness from learning in class and achieve the expected social studies educational goals.

The existence of PIPS has an important role in realizing students who have noble personalities and care about the problems that exist in the community. This is formulated in the purpose of PIPS is to prepare students to become good citizens, have the ability to solve personal problems or social problems that exist in society, and have the ability to make decisions and participate in various community activities (Jumiarti & Kurniawati, 2023)

The current development of IPS as a subject in schools plays a role in helping solve individual and group problems. According to (Nurazijah et al., 2023). Social science is useful for providing knowledge so that humans can deal with problems in society. It is undeniable that problems in social life are increasingly complex and developing. So, it is very necessary for students to be provided with provisions so that they are sensitive to existing problems and are able to solve them. In order to explain the meaning of the IPS idea, it is not easy to just explain theory, but teachers need the right strategy so that the material provided can be accepted and internalized in students.

According to (C. A. Tomlinson, 2000) Differentiated learning is learning that accommodates, serves, and recognizes the diversity of students in learning according to students' learning needs and preferences. Differentiated learning is not a new learning approach, but has long been applied in the United States. According to (Martiana, 2023) The focus of attention in this differentiated learning lies in the way the teacher pays attention to the strengths and needs of students. Differentiated learning is very suitable to be applied in social studies subjects, because social studies subjects have various learning sources so that teachers can develop social studies material according to students' interests and learning profiles. According to (Ferrari & Schoolnet, 2009) Differentiation can be a solution to solving problems regarding the diversity of students' abilities when studying in one class, namely a fun learning atmosphere, speaking practice, collaborative learning and selection of material and learning processes. The differentiation learning process has several stages in applying it.

According to (Din, 2017) differentiated learning includes 1) content differentiation; 2) process differentiation; 3) product differentiation. This content differentiation includes learning readiness, student interests, and student learning profiles. Mapping learning readiness there are several perspectives that can be used as indicators (Firat & Bozkurt, 2020). introduces equalizer buttons that can determine the level of readiness of students. Based on the type of equalizer that is

offered, researchers focus on the concrete-abstract and slow-paced perspectives. The researcher took these two key perspectives on the basis that in social studies learning it is necessary to apply the contextual method, meaning that the teacher can explain the material by connecting it to concrete conditions in society. Likewise, the choice of perspective is slow-fast, because it cannot be denied that in a class there must be students who have the ability to think fast, there are those who need time to understand an instruction.

The teacher has an important role in exploring the interests of students, so that they can support the achievement of a meaningful learning. (Stavrou & Koutselini, 2016; Taylor, 2017) explained that teachers should be able to explore motivation within students and maximize it so that students have the desire and enthusiasm to learn well. According to (Mertoğlu, 2023) in differentiated learning, the teacher must have innovation in choosing learning methods, models and strategies so that students are more motivated in participating in the learning process, so that the teacher's role is very important in determining success in learning. The teacher makes a mapping of learning needs based on learning profile indicators which can provide opportunities for students to convey the desired method of learning. In this mapping the teacher obtains student learning profile data through place of residence, culture, and learning style. In this study the teacher made a questionnaire which contained a choice of students' learning styles including auditory, visual and kinesthetic. Auditory learning style is able to process information well by listening. In contrast to the visual learning style, students more easily receive information through illustrated pictures, diagrams, videos, posters, animations, colors, symbols and graphics. Meanwhile, kinesthetic learning styles tend to be easier to receive information through direct practice, using the five senses to understand information. These diverse learning styles really need to be accommodated through differentiated learning. According to the student's learning profile, it is the approach preferred by students for learning that is influenced by learning styles. Intelligence and culture. This learning profile becomes important for the teacher to cover, so that in creating learning it can be adjusted to the needs of students.

To prevent students from getting discouraged and feeling like they have failed in their educational endeavors, differentiated learning is a learning process where students can learn content based on their talents, what they like, and their special needs. (Beck & Beasley, 2021; C. A. Tomlinson et al., 2003). Teachers must realize that there are various approaches to studying a subject when distinction is made. The content, process, and product parts of differentiation learning are three things that must be implemented by the teacher. In differentiation learning the teacher must use various methods when studying a lesson. The teacher plans and arranges materials, activities, assignments to be done at school or at home and the final evaluation is adjusted to students' readiness, interests and preferences (Jauhar, 2018). Differentiated learning views students differently and dynamically, where the teacher sees learning from various perspectives. Differentiated learning does not mean individualized learning. However, it is more directed at learning that accommodates student needs through independent learning and maximizing student learning opportunities (Beck & Beasley, 2021; Erickson, 2006; Taylor, 2017; C. Tomlinson, 2001; C. A. Tomlinson, 2000) states the importance of differentiation learning, namely as follows: 1) Differentiation learning challenges students to learn more deeply. 2) Provide opportunities for students to become peer tutors. 3) Teachers must recognize that a one-size-fits-all approach to teaching does not meet the needs of all, or even most, students, just as the sizes of clothes sold in stores do not necessarily match consumers' sizes.

The principles of Differentiated Learning are: (1) Learning Environment Learning environment is a physical environment such as a classroom where student's study. The teacher must arrange the class arrangement so that students are comfortable learning, such as arranging chairs

and all the elements in the class neatly and orderly. The learning climate seeks mutual respect and respect for one another and the teacher provides equal opportunities for all students. (2) Quality curriculum. A good curriculum must have specific learning objectives that the teacher can use as a roadmap to help students achieve their academic goals. In addition, the main goal of a teacher when teaching is to understand his students, not to make them memorize facts. The ability to understand students' problems and apply that knowledge in their daily lives is of the utmost importance. (3) Continuous Assessment Before the subject matter is delivered, the teacher conducts an evaluation as the first step in the learning process. The initial assessment measures student preparation and closeness to learning objectives as well as students' depth of understanding of the subject to be studied. Therefore, instead of being influenced by intellectual intelligence, students' prior knowledge determines how much they want to learn. The second assessment, namely the formative assessment, is to assess whether there is unclear material that is difficult for students to understand. the teacher observes how each student learns, who needs help with a particular task, and whether any instructions in the assignment need clarification. The teacher re-evaluates learning outcomes at the end of the lesson. Teachers do not rely solely on repetition as is usually the case, but teachers have access to a variety of methods for assessing student learning outcomes. (4) Responsive teaching Final assessment in each lesson allows teachers to find deficiencies in guiding their students to understand the content of the lesson. Consequently, based on the findings of the final evaluation that was carried out previously, the teacher can adjust the lesson plan made to the conditions and situation in the field at that time. (4) Leadership and routine in the classroom A good teacher can manage the class effectively. Here, leadership is referred to as a technique for teachers to guide their students so that they comply with the lessons and norms that have been set. While the ability of teachers to properly direct instruction through the daily practices and routines they follow to ensure effective and efficient learning is referred to as teaching routines. The following is an analysis of 8 articles that explain the practice of implementing differentiated learning shown in Table 1.

Table 1. Articles that explain the practice of implementing differentiated learning

No	Research & Year	Research Title	Research methods	School level	Measured variable	Research result
1	(Haelermans, 2022)	<i>The Effects of Group differentiation by students' learning strategies</i>	Eksperimen	Secondary school	Diferentiation Motivated strategies for learning	Student performance was higher in classes where the distinction was made
2	(Sulistiyosari et al., 2022b)	<i>Application of Differentiated Social Studies Learning in the Independent Learning curriculum</i>	Qualitative	Secondary school	IPS Learning; Differentiation Strategy	Through differentiated learning in the independent curriculum gives students autonomy to be able to express their learning abilities based on their potential and interests
3	(Evans & Waring, 2011)	<i>How can an understanding of cognitive style enable</i>	Quantitative	University	Differentiation, Cognitive style,	Differentiation, learning concepts and

		<i>trainee teachers to have a better understanding of differentiation in the classroom?</i>			Personal learning styles pedagogy, Initial teacher education	learning preferences.
4	(Shedly, 2014)	<i>The use of Project-Based Learning as a Viable Differentiation Technique to Enhance Gifted and nonGifted Students' Creative Writing Skills</i>	Mixed (Quantitative & Qualitative)	Secondary school	Creativity Using PBL	all students showed improvement in their creative writing
5	(Erotocritou, 2020)	<i>The Impact of Using Effective Differentiation Strategies on Students' Learning: A case study of an Elementary School in Dubai</i>	Metode Campuran	Elementary school	Performance and learning outcomes	Using differentiation is an effective strategy and has a positive impact on student performance and their learning outcomes
6	(Menekse et al., 2013)	<i>Differentiated Overt Learning Activities for Effective Instruction in Engineering Classrooms</i>	Experiment	University	Concept Knowledge and Understanding	Classifying learning activities can help researchers, instructional designers, and instructors determine which activities are appropriate for their intended research or instruction.
7	(Brungel et al., 2020)	<i>Project-Based Learning in a Machine Learning Course with Differentiated Industrial Projects for Various Computer Science Master Programs</i>	Experiment	University	Practical and social skills	Differentiated project-based learning has a positive effect on student perception, encouraging self-identification with so far disliked coursework.
8	(Demir, 2021a)	<i>Effects of learning style based differentiated activities on</i>	Quantitative/Experimental Pre-test and posttest	Elementary school	creativity	Positive effect on disclosure and development of creative thinking

<i>gifted students' creativity</i>	experiment control group quasi-experimental	skills in gifted children.
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Characteristics of Differentiated Learning, the Association for Supervision and Curriculum Development (ASCD) explains the characteristics of differentiated learning from Tomlinson's adaptation described in Table 2:

Table 2. Characteristics of Differentiated Learning

No	Characteristic features	Explanation
1	Be proactive	From the start, teachers proactively anticipate lessons to be taught by scheduling lessons for different students. So instead of adapting their learning to students in response to an evaluation of previous learning failures.
2	Putting focus on quality over quantity	The quality of homework is more in line with the demands of students in different learning. Smart kids don't necessarily get the same additional task after completing the first task; instead, he will receive assignments that will help him develop his skills.
3	Rooted in assessment	Teachers always evaluate students in different ways to find out their conditions in each lesson.
4	Provide content, process, product and learning climate approaches	There are four learning components that can be adjusted according to the level of readiness, aptitude, interests, and learning preferences of each student.
5	Learning	Homework is given based on the level of students' prior knowledge of the subject to be taught, which allows the teacher to adapt learning to the level of student needs.
6	Combining individual and traditional learning	Teachers offer students the opportunity to study regional traditional music together or individually.
7	Is alive	Teachers work continuously with students, including to develop class and individual goals for students. Teachers monitor how lessons adapt to students and how changes are implemented.

C. Tomlinson, 2001, 2015; C. A. Tomlinson (2014) explains the diversity of students based on 3 different aspects, namely: 1) Readiness The extent to which students' knowledge and skills are able to achieve learning objectives is what is meant by being ready in this context. For students to be successful in their studies, teachers must find out what they need. The teacher's mentality that every student has the potential to grow physically, psychologically, and intellectually must be closely related to student preparation. Teachers can then investigate the interests of their students. 2) Interest To motivate students to learn, interest is very important. Teachers can ask students about their hobbies, interests or favorite subjects at school. Naturally, students work diligently to study topics that interest them. 3) Study Profile The technique or method that students prefer to

understand the lesson as a whole is called the student learning profile. Elements that Differentiate Content, process, product, and learning environment or climate in the classroom are four different aspects of learning that can be mastered or controlled by the teacher. The following describes the four aspects.

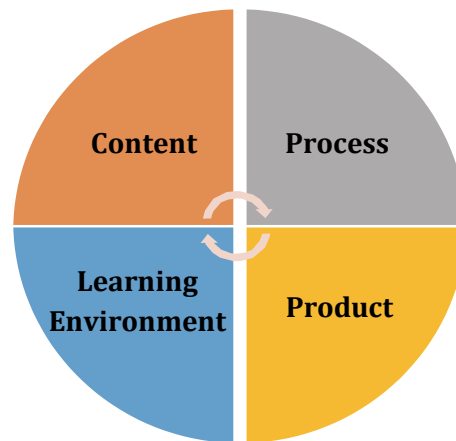


Figure 1. Aspects of Differentiated Learning Source: (Merliza et al., 2023)

Aspects of Differentiated Learning which include content, process, Product, Resource Environment: (Tomlinson, Carol Ann 2014) are as follows: 1) Content Content is learning material delivered by the teacher. Strategies that teachers can apply to differentiate content that students learn include: a) presenting various materials; b) use of learning contracts; c) offer mini-learning; d) present material with different learning modalities; and e) providing various support systems. 2) Process Student class activities are discussed in this section. These student efforts were not evaluated quantitatively in terms of numbers but qualitatively in terms of feedback records regarding attitudes, knowledge, and skills that had not been achieved and needed improvement. 3) Product Usually, this product is the culmination of instruction to show students' knowledge, ability, and understanding after completing one learning unit or even after debating a subject for one semester. The summative results require evaluation. Product creation requires more time and deeper understanding from students. Products can be produced individually or in teams. 4) Learning environment, the learning environment includes lessons on personal, social, and physical development. In order for students to be motivated to learn, the learning environment must also be adapted to their learning preferences, interests, and willingness to learn.

Based on the explanation above it is clear that the role of the teacher determines the creation of the expected learning in the independent curriculum, especially in social studies learning. The teacher in implementing differentiated learning must begin with the teacher's understanding of the concept of differentiated learning. Socialization related to the implementation of this curriculum needs to be increased, especially for schools in the regions. Teachers need to be assisted directly in implementing it. After understanding, the new teacher can apply it independently in learning. This process continues to be carried out continuously, evaluated and improved until the teacher is skilled at practicing it. In addition, the support and guidance of all relevant parties, such as school principals, supervisors, education offices and the government, also determines the achievement of this curriculum development goal.

The purpose of learning is to develop critical thinking skills, analytical, logical, communication skills and problem-solving skills. The strategy that is usually used in learning is to provide opportunities for students to participate actively, ask questions, express opinions. Utilization

of various types of models, learning strategies and methods, media, adapted to the material, needs, learning styles, and student characteristics. In the independent curriculum, one of the models that can be used is a problem- and project-based learning model which will later produce a Pancasila student profile.

D. CONCLUSION

Based on the literature review that has been done, it can be concluded (1) differentiated learning can be integrated with several learning models such as Problem Based Learning (PBL), Project Based Learning (PjBL) and other models that are adapted to student learning styles; (2) the application of a differentiated approach can improve student learning outcomes; (3) a differentiated approach can be applied in social studies learning because it is able to accommodate students' learning needs by taking into account students' interests, profiles, learning styles and learning readiness.

Differentiated learning is learning that gives students the freedom to increase their potential according to their learning readiness, interests, and learning profile. Three strategies in differentiation learning are content differentiation, process differentiation, and product differentiation. In its implementation, we can choose one strategy or use all three. As teachers we must carry out learning by paying attention to the learning needs of students, so that learning objectives can be achieved effectively and efficiently.

As for the suggestions that the author can convey, namely: (1) looking at the data from the literature study which shows that there is still limited research on a differentiated approach in Indonesia, it is deemed necessary to carry out further research on the effect of a differentiated approach on creativity, critical thinking, collaboration or problem solving abilities specifically in social studies learning at other educational levels; (2) teachers need to carry out a diagnostic assessment first to find out students' interests, profiles, learning styles, and learning readiness before implementing differentiated learning.

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