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## **Implementation of Digital-Based Media in PAIBP Subjects in Improving Student Literacy at SMKF YPIB Kedawung Cirebon**

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### **Abstrak**

Literacy is a crucial aspect of education, particularly in the digital era. This research is motivated by the current challenges faced in Indonesian schools, namely the low level of students' critical thinking skills. Along with the rapid development of digital technology, the challenges related to literacy are becoming increasingly significant. The purpose of this study is to explore the innovation of implementing digital-based media to enhance literacy at SMK Farmasi YPIB, Kedawung District, Cirebon Regency. Specifically, it aims to investigate the process of planning, implementation, evaluation, as well as the strengths and obstacles encountered during the implementation process. This research employs a qualitative method with a naturalistic descriptive approach, by describing the data in accordance with the activities occurring in the field. In interpreting this naturalistic research, the researcher conducted an in-depth and comprehensive investigation of various activities taking place during the learning process. The findings reveal that the implementation process was highly structured, as evidenced by careful planning, which included preparing lesson plans (RPP), uploading materials prior to classroom sessions, and designing innovative teaching media. The learning implementation became more interactive, encouraging students to engage in critical thinking when analyzing relevant information through assigned analytical tasks. In conclusion, the implementation of digital-based media in PAIB subjects for grade XI students at SMK Farmasi YPIB, Kedawung District, Cirebon, proved effective in improving students' literacy. This was demonstrated by students' active participation in learning. However, literacy levels remain relatively limited due to several factors that require greater emphasis and optimization, particularly in fostering consistent habits of utilizing digital media.

**Keywords:** *Digital Based Media; Literacy; PAIBP*

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## INTRODUCTION

Education in Indonesia for now is still relatively low compared to other countries in terms of the education system, there are several causes of this, one of which is the lack of literacy. (Anisa et al., 2021) said that one of the problems that is being faced in the world of education in Indonesian schools is the low level of students' ability to think critically in learning reading activities in schools. In this explanation that the critical thinking ability of students to understand information or material is caused by a lack of literacy, therefore in this study we will examine how in a process of increasing student literacy accompanied by changes in the development of the times in the all-digital era.

Islamic Religious Education and Ethics (PAIBP) is one of the subjects that has a very important role in the character and moral education of students (Hazli et al., 2025). However, the challenges in achieving the goals of the PAIBP subject are increasing along with the development of technology, and changes in learning dynamics, one of the challenges faced is the lack of student involvement in the learning process.

In this all-digital era, of course, there are a lot of differences in the use of teaching media, one of which is the teaching media used by teachers, in this all-digital era, of course, there is a need for understanding in the use of teaching media as a form of motivation and innovation for teachers in learning, but these adjustments are not so easy. As said by Mr. Nadiem Anwar Makarim, B.A., M.B.A. and Ir. Suharti, M.A., Ph.D as the father of the Indonesian Ministry of Education and Culture said that "There are still many teachers who stutter technology (gaptek) in Indonesia." Then Jumeri at the Launch of ICT-Based Learning BIMTEK explained that of the total number of teachers in Indonesia, there are 60% of teachers who are not literate in information and communication technology (Sari, 2023).

From these two opinions, it proves that the use of technology in learning is still low so this can be used as motivation by teachers regarding innovations in the use of technology in learning, and not only learning but in the current digital era it is also expected that students can improve literacy, regarding literacy in this digital era is of course very important, Not only using digital media, but students must be wise in using digital, analyzing, and understanding information from various digital media.

SMK Pharmacy YPIB Kedawung Regency Cirebon is one of the schools that implements an electronic system, or e-Learning, electronic here is not online or online learning but a system that uses electronic management in the form of an e-School application as management in the service process, but as time goes by this e-School develops into management in learning and even as a supporting tool in learning, In the application, students can access lesson plans, materials, upload assignments and other information related to learning, and as a learning support in the classroom of SMKF YPIB Kedawung implements digital media-based media learning, one of which is as applied by PAIBP (Islamic Religious Education and Ethics) teachers in their learning who apply digital media, this is applied as an effort to improve literacy by using digital-based media.

The application of digital-based learning in improving literacy is of course very important as explained by the results of previous research with the title of the research "The Role of Digital Literacy in Improving Islamic Religious Education Learning in Class XI IIS 01 SMAI Al Maarif Singosari Malang", which was written by Ilham Maulana Amin at SMAI Al Maarif Singosari Malang that digital literacy has a very important role in achieving learning goals and being able to improve Learning motivation, digital literacy is able to enrich students' digital insights because it encourages students to look for information through various reference

sources, but in looking for reference sources, students must be under the supervision of teachers to avoid misunderstandings and the occurrence of destructive indications such as *copy and paste files*".

In the results of the previous research, it can be known that digital literacy can increase students' interest and motivation to learn and enrich students' insights because students seek information through various references provided by the digital. As for the novelty of the research that will be discussed in the latest research that the researcher will conduct is not only to find out the role of digital literacy in improving learning in PAI subjects but also to find out the role of digital literacy in improving learning in PAI subjects but also to find out the role of digital literacy in improving learning in PAI subjects but also to find out the role of digital literacy in improving learning in PAI subjects but also to find out the role of digital literacy in improving learning in PAI subjects but also to find out the role of digital literacy in improving learning in PAI subjects but also to understand the role of digital literacy in improving learning in PAI subjects but also to understand the role of digital literacy in improving learning in PAI subjects but also the role of digital literacy in improving learning in PAI subjects but also the role of digital literacy in improving learning in PAI subjects but also the role about how digital-based media in improving literacy in PAIBP subjects is not only digital literacy but about how the process of implementing digital-based media can increase student literacy, so digital is not only a leap in literacy but digital here is used as a teaching medium in improving student literacy, and this research is not only planning, implementation, to excellence and obstacles this research will also discuss the evaluation carried out by the school or PAIBP teachers, and this research will be carried out at SMK YPIB precisely in class XI Pharmacy which is more oriented towards health techniques, and with the policies that are applied and the title of this journal proves that there is something quite interesting because it prioritizes Islamic religious education in the learning process by using digital-based media to improve student literacy, while the previous research was conducted at SMAI Al-Maarif Singosari Malang which is one of the boarding schools in Malang, which of course this is very natural if Islamic religious education is prioritized.

The purpose of this study is to describe how the process of planning, implementing, evaluating excellence and obstacles, this is done so that this research can explain how the process of implementing digital-based media in improving literacy in detail and can be used as a learning innovation for educators.

## RESEARCH METHODOLOGY

This study uses a qualitative research method with a naturalistic descriptive approach, namely by describing data according to the activities that occur in the field, in interpreting naturalistic research the researcher conducts research as deeply and as far as possible when looking at various activities that occur in the field, according to Sugiyono qualitative with a descriptive approach is research that studies phenomena in a natural context (*natural setting*) with researchers as key instruments (S. Sugiyono, 2019). This approach was chosen because the main focus of research is to describe and analyze the activities that occur in the field naturalistically or according to the situation in the field. According to (Sugiyono, 2019) that the qualitative research method is called a new method, because its popularity has not been long in

coming, and this qualitative research is called the post-positivism method because it is based on the philosophy of postpositivism.

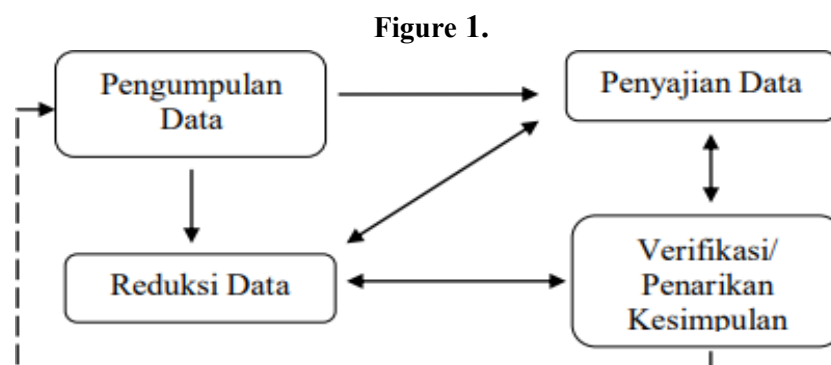
This research is located at SMK YPIB Kedawung Regency Cirebon, As for the population, this study involves data sourced from primary data and secondary data, as for the primary data, the researcher involved the principal Dewi Pranita Motik, ME with the initials DP, PAI teacher Adi Miskadi, M.Pd and grade XI A students of Pharmacy SMK YPIB Kedawung Regency Cirebon which amounted to 30 and the sample of interview data amounted to two people Rafa Aulia with the initials RA and Naufa with the initials NF, while for secondary data, the researcher uses various scientific articles, journals, books and lesson plans as indirect data from the source.

The focus of this research problem is related to how the implementation of digital-based media in the subject of Islamic religious education and ethics is further regarding literacy, the focus of literacy in this study is digital-based media literacy, regarding the focus of this problem the researcher will analyze and describe in a naturalistic manner how the implementation of digital-based media in the subject of Islamic religious education and ethics in improving literacy based on digital-based media.

The data collection technique in this study is taken from two data sources, namely primary data and secondary data, regarding the primary data, the researcher conducts interviews, observations and documentation or triangulation of data as said by (Sugiyono, 2019) that this research is a method used to get a broader and deeper understanding of the social situation being researched, Therefore, data collection is triangulated, that is, using combined or simultaneous data collection techniques. The data collection techniques used by the researcher include semi-structured interviews with the main instrument guides, but are open to exploration outside the instrument if needed, observations are used to match the statements of sources in the field, while documentation includes recording the interview process and observations. Meanwhile, secondary data is obtained from articles, journals, and digital sources, RPPs which are strengthened to support and strengthen research findings.

Data analysis was carried out systematically before, during, and after research in the field. Data is collected through interviews, observations and documentation, then collected, categorized and broken down into information units, the researcher analyzes the important parts and presents the data according to the focus of the research. The goal is to produce a clear, easy-to-understand conclusion (Sugiyono, 2019).

The researcher analyzed the data from the research using the Miles and Huberman interactive model, according to the type of research mentioned above. Qualitative data analysis is carried out interactively and continuously until it is complete. The interactive models in question are as follows:



## RESULTS AND DISCUSSION

### A. Planning the Implementation of Digital-Based Media in Improving Students' Digital Literacy

Regarding the results of this study, the researcher observed the planning carried out by the school in preparing learning the use of digital-based media in improving student literacy carried out by the school SMK YPIB Kedawung Regency Cirebon in improving the literacy of grade XI students of Pharmacy SMK YPIB Kedawung. At the interview stage, the researcher conducted an interview with the principal with the initials DP regarding the implementation of digital-based media in improving the literacy of grade XI Pharmacy students, the researcher asked about how the planning carried out by the school or teachers in preparing learning using digital-based media in increasing the literacy of the students? DP says:

"The stages that teachers take in implementing a digital media-based learning system are first, uploading lesson plans or lesson plans for each semester, then discussing the materials that will be discussed in the learning. Second, upload the teaching material one week before the material is taught. Third, teachers are instructed to create interesting and innovative teaching media, Fourth, teachers are asked to make assignments that help students in critical thinking such as analysis or projects. The teaching materials are uploaded on the e-School application and also in WhatsApp groups, so that students can understand the lesson plan well."

In the results of the interview, it can be seen that in the planning carried out in preparing learning using digital-based media in improving student literacy, starting from compiling lesson plans, uploading lesson plans before learning starts, uploading materials a week before being explained, preparing interesting teaching media and preparing analysis tasks.

To find out the truth of the data, the researcher conducted a direct interview with the PAIBP teacher with the initials AM The researcher asked what is the planning carried out by the school and teachers in preparing learning using digital-based media in improving literacy? AM who is a teacher of PAIBP SMK YPIB Kec.

"The stages that I do as a PAI teacher or teacher, namely, uploading lesson plans or lesson plans, discussing sub-subjects or materials that we discuss during learning, and we as teachers try to upload the material to before it is explained in class at least a week before so that the material can be understood by students before learning in class and make assignments that allow students to think critically and prepare digital devices to be used, for the upload, it can be via WhatsApp and e-School".

In the results of the interview, it was explained that the first thing that was done was the uploading of the lesson plan, which was done before the learning started or the KBM activity started, this was done so that students could read and understand the sub-chapters to be learned, so that with that students could think critically by reading and understanding the lesson plan and then students could also better prepare themselves in learning as said According to Halpen (in Oktariani & Ekadiansyah, 2020), critical thinking is empowering cognitive skills or strategies in determining goals.

The second planning stage is that the teacher prepares the material a week before the material is explained in the class the material is uploaded into an application called e-School, the application is used by the school SMK YPIB Kedawung Regency Cirebon as a

management system such as uploading materials, lesson plans, collecting assignments and others as related to the school management system as AM said that:

"And we as teachers try so that the material can be uploaded to the e-school application before being explained in class at least a week before so that the material can be understood by students before learning in class for uploading it can be via WhatsApp and e-School".

Uploading material before being taught to students is intended so that students can read and understand before it is explained in class, the material uploaded is in the form of pdf or ebook so that it is easier for students to access the material to support more effective learning, this is done so that students can understand and read the material to be taught so that when the material is taught students will be more active in two-way interaction with teachers or communicative communication between students and teachers, so that by treating a system like this can indirectly improve student literacy and critical thinking of students, even though the material is in the form of pdf which is a digital medium, this is applied so that students are literate in digital literacy and also to know that knowledge is not only in the form of paper or books as said (Oktariani & Ekadiansyah, 2020) that literacy is not just the ability to read and write, but literacy can mean being technologically literate, political, critical thinking, and sensitive to the surrounding environment.

The third stage in supporting an active and relevant learning process to technological developments, teachers need to prepare tasks in the form of AM analysis tasks saying that:

"Make assignments that allow students to think critically and prepare digital devices to be used".

In the Observation session, the researcher obtained data on the use of digital devices used, namely in focus, laptop and mobile phone, this will be used during the learning process such as in focus and laptop to display material in the form of Power Point and Video, so that students not only understand in the form of books or ebooks but students will be easier by understanding the material using Power Point because the material delivered is shorter and Detailed as well as using videos not only in the form of writing but also in the form of audiovisual and animation, with which it will encourage students' critical thinking and attract students' interest in learning.

Preparing an analysis task is one of the plans carried out by teachers of PAIBP SMK YPIB Kedawung Regency Cirebon in improving student literacy because by preparing the analysis task, students will be given directions to use mobile phones in finding information that is appropriate or relevant to the material being taught, then a group analysis is carried out and a presentation is made in conveying the results of their analysis, so that with that, student literacy will increase because students analyze, think critically about what they get in the form of writing, pictures, videos, audio-visuals and convey the results of their analysis as said by Musthafa (in Nurdini, 2019) explaining that literacy that develops in children is not only in the ability to read and write, but can be translated into various or various meanings, It is often referred to as multi-literacy.

## **B. Implementation of Digital-Based Media Implementation in Improving Students' Digital Literacy**

At this stage of implementation, the researcher obtained some data contained in the implementation process, one of the data obtained by the researcher was the results of an interview conducted by the researcher with the DP who is the principal at SMK YPIB Kedawung, the researcher asked how the school's policy is in adopting technology in learning, especially learning media in involving digital-based in improving literacy. DP students say:

"School policies in adopting technology, especially the use of digital-based teaching media, are carried out in stages and structured by paying attention to the readiness of teachers, students, and available supporting facilities".

At this stage of implementation, it is carried out in a structured manner, starting from the use of e-books in learning, the use of digital tools such as laptops, mobile phones, in focus, using power point media, and using social media as a support in learning, as said by AM who is a PAIBP teacher:

"In the learning process of digital-based media platforms that we use such as ebooks, YouTube, google, TikTok, WhatsApp, Instagram, websites, using laptops, in focus and mobile phones as supporting digital tools and many others, we use it to find information relevant to life related to the material we teach and to make it easier to explain the material".

As for the first stage, what is done in the implementation process is by using materials in the form of ebooks, articles, and journals as references in delivering materials, as said by PAIBP AM teachers:

"The initial stage will be done by using materials in the form of ebooks, journals and articles so that the material can be easier to understand, easy to access and journals to be used to get references to the material".

This use is applied so that students are easier to access the material, easy to understand because the teacher will upload the material a week before the material is explained in class, with this upload, then students will have easier access to the material and the teacher will instruct students to read the material, so that with this system it will make learning more interactive and increase student interest in learning because students already know and understand what will be discussed in the material, this is proven that during the learning process students are quite active and enthusiastic during the learning process, as said by (Rimah Dani et al., 2023).

Figure 2.



The use of media is a certain tool used in the learning process so that the process of communication and interaction between the two becomes more interesting. The use of digital-based media in the form of ebooks, journals and articles will be more flexible both in accessing and reading them because the files can be opened anytime and anywhere either at home or at



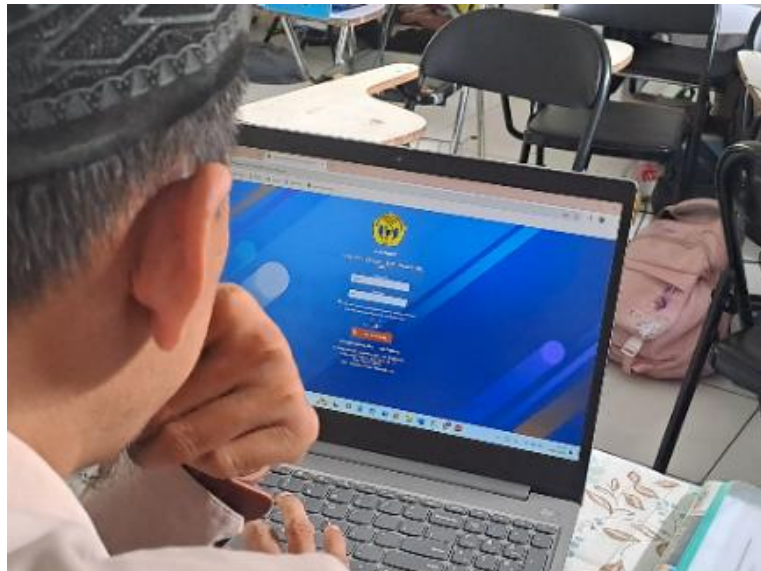
school, and with the use of this system will form interactive learning because students have read, understood and analyzed the material and it is included in improving student literacy. As stated According to Warschauer, technology helps develop digital literacy by providing access to global information and supporting collaboration between individuals (Sunandi et al., 2023).

The second stage is the use of digital support tools in focus, mobile phones and laptops in learning. AM says:

"Now as a supporting tool used in the classroom, teachers use laptops, in focus and mobile phones as the use of digital support tools in focus laptops and in focus are used as a medium to display material and mobile phones are used while doing assignments,".

Laptops, in focus and mobile phones aim to make the teaching and learning process more effective and efficient, introduce digital tools in the teaching and learning process and how important digital tools are in the teaching and learning process.

**Figure 3.**



In the results of direct observation, the implementation of in focus is used by the teacher to display the material, and with in focus it is easier for students to focus and understand the material directly, this is proven by what happened in the classroom when students in grade XI SMK F YPIB Kec. books, however, in each sub-chapter that is explained, several pictures and videos are embedded so that learning will be more interesting and students' understanding will increase, this is according to what is said.

Hamalik stated that learning media is everything that can be used to convey messages (learning materials) so that it can stimulate students' attention, interests, thoughts, and feelings in learning activities to achieve certain learning goals (Ginting, 2025).

During learning, laptops are used by the brain in the course of learning. Laptops are used as the main source in displaying material and operating in focus, and mobile phones are used by students to do tasks given by teachers in the form of information analysis tasks relevant to the material, and mobile phones are also used as a tool to access materials in the form of digital books, either pdf, video, ppt or other forms, and of course with that it increases digital literacy with a variety of abundant digital information.



The third stage, namely using PowerPoint as a teaching medium, AM said that:

"Power Point helps me in explaining PAI material so that it is more interesting and easy for students to understand, this media also increases interest in learning because of its interactive visualization, in addition to using Ppt will also encourage students' digital literacy".

PPT (Power Point) is part of a digital-based teaching media, this PPT was designed by teachers of PAIBP SMK YPIB Kedawung to present learning materials visually and interactively as explained by Arsyad media are all types of intermediaries used by humans to convey or disseminate ideas, ideas, or opinions so that they reach the person in question (Khulsum et al., 2018). PPT This explanation is intended to make it easier for teachers to convey the material taught to students, this is done to attract students' interest in learning, in addition to remembering that students can also read, analyze and understand material from various forms, such as videos, audio, and images. The use of this PPT is intended by teachers of PAIBP SMK YPIB writing, and understanding information in various formats (Seknun et al., 2023).

**Figure 4.**



If related to this theory, PPT is included in the ability to understand information about the material explained by the teacher in the PPT (Power Point). Each slide contained in the power point is carefully arranged to convey material information clearly and in a structured manner, the use of these visual elements such as pictures, Qur'anic verses, graphs and diagrams helps clarify complex concepts so that learning will be more interesting. In addition, the animations and transitions contained in Power Point are designed to attract students' attention and increase student involvement in the learning process.

This Power Point is also equipped with important points resulting from the summary of the material that makes it easier for students to understand the key information from the material, and this PPT (Power Point) is uploaded to the e-School application, this is done so that students can do independent learning both before and after the material is explained in class, this is proven by students who are interactive in the classroom, The occurrence of positive communication from two directions between teachers and students and students are also more critical in understanding the material because there are some students who have read and

understood the material, although it is not optimal because there are still students who do not actively participate in the class, with the occurrence of interactive learning, students' critical thinking in the ability to understand the material can be used as an increase in student literacy as explained by (Sumiati and Wijonarko, 2020:1) 1. Insight increases when conducting activities to search and understand information; 2. Forming or cultivating a person's proficiency in thinking and understanding information critically; 3. An individual's oral communication ability is increasing; 4. Improve concentration and improve individual focus; 5. The ability to read and write information is increasing (Khoyyinuiddin et al., 2024).

The fourth stage of implementation, namely improving the literacy of students in grade XI of SMK YPIB Kedawung, Kedawung District's PAI SMK YPIB Kedawung Teacher by providing tasks in the form of analysis on PAIBP subjects, teachers design analysis tasks that utilize various digital platforms such as YouTube, Facebook, Instagram, TikTok, Google and other website information sites such as WordPress, Instagram and so on. AM says that:

"Analytical tasks will certainly be able to improve students' digital literacy, and we as teachers will also involve several digital forms to support the running of these tasks".

This assignment is designed by the teacher so that students are more critical in understanding information and evaluating the information they get in the digital media, in analyzing the information of course it has a relationship with the material taught by the teacher.

At the observation stage, the researcher found that this analysis task was carried out in a group form, students were directed to work together in exploring and analyzing the tasks that had been given by the teacher during the learning with various topics related to religious values and ethics explained in the previous material.

Each group of students is given the freedom to use various digital resources, one of which is a mobile phone which has previously been explained that SMK YPIB Kedawung allows the use of mobile phones during learning in addition to that it is also allowed to access various digital and conventional resources such as YouTube, TikTok, google, journals, articles and so on, so that they can develop critical and analytical thinking skills as explained by (Safitri & Sukma, 2020), that literacy is a person's understanding of understanding digital content. This explains that through these discussions and collaborations, students not only deepen their understanding of the subject matter, but also hone their communication and teamwork skills.

Through digital media analysis in the form of writing such as WordPress, google, articles and journals, students can conduct in-depth research on topics related to PAIBP, understand the information critically, and convey it into a writing, for TikTok and YouTube itself provide various video content that can be analyzed to understand how the material taught relates to the information they get on TikTok and YouTube. In addition, students are also invited to explore various websites that offer different perspectives on religious and ethical issues related to the material described.

Through this approach, students can improve their digital literacy, as well as deepen their understanding of religious teachings and ethics, this is evident with students who participate heavily in doing these tasks in the form of reading, analyzing and understanding information in the form of images, videos, and audio visuals, and this is in line with what war Schauer said that Technology helps develop digital literacy by providing access to information and support collaboration between individuals (Sunandi et al., 2023).

The fifth stage, in the implementation process, is to provide students with the opportunity to present the analysis task, in this study the researcher noted that the teacher gave the opportunity to students to present the results of the group analysis task. This approach is designed to improve students' communication skills and literacy in the subject of Islamic Religious Education and Ethics (PAIBP). Each group, after completing the analysis task, students are given time to craft an effective and engaging presentation, which is then delivered to classmates and teachers. (Sumiati and Wijonarko, 2020: 1) said that there are 5 benefits of literacy, namely 1. Insight increases when conducting activities to search and understand information; 2. Forming or cultivating a person's proficiency in thinking and understanding information critically; 3. An individual's oral communication ability is increasing; 4. Improve concentration and improve individual focus; 5. The ability to read and write information is increasing (Khoyyinuddin et al., 2024).

In the part of presenting this assignment, if it is related to the theory, we can understand that presenting an analysis task is included in the benefits of literacy within the scope of individual oral communication skills, because students will learn about how to communicate in front of the class with teachers and other students and improve communication in front of the class discussing the discussion of the task, and with that of course can increase the literacy of the students who are marked with increased communication in front of the class.

The sixth stage, namely the researcher, notes that at the end of each learning session, the teacher systematically concludes the results of the explanation of the material that has been delivered. This process not only serves to summarize the important points of the Islamic Religious Education and Ethics (PAIBP) material, but also involves active interaction between teachers and students.

After delivering the conclusion, the teacher gives students the opportunity to do questions and answers, which allows them to clarify understanding and discuss aspects that may not be clear. This interaction creates a dynamic and collaborative learning atmosphere, where students feel valued and given the opportunity to participate.

In this way, students can not only strengthen their understanding of the material, but also develop critical thinking skills and communication skills as said (Rohman, 2022) Literacy and critical thinking are very important for students, especially in the era of disruption which is experiencing very rapid development of science and technology. This question and answer activity is an important means to evaluate students' understanding and provide constructive feedback, thereby improving the overall quality of learning. Through this approach, it is hoped that students can be better prepared to face academic challenges and apply the values learned in daily life.

### **C. Implementation of Digital-Based Media Evaluation in Improving Students' Digital Literacy**

The implementation of the evaluation to determine the increase in student literacy, at this stage the evaluation is not dedicated to finding out the extent of the increase in literacy, DP said that:

"Regarding the evaluation given by teachers to students to find out the increase in student literacy, there is actually nothing really dedicated to finding out the increase in student literacy does not exist yet, but teachers often interact with students after the learning is over or when learning takes place. Then teachers can also find out the increase in student literacy, namely during the final exam of the

semester and from the results of the exam scores and also one of them is to assess whether there is an increase in student literacy or not."

During direct observation, the researcher found two assessments used by teachers to determine the increase in student literacy, namely Formative and Summative. Assessment is formative, where this assessment provides feedback to students with words or writing in the form of descriptions of learning outcomes given by their teachers to increase their enthusiasm for learning.

As explained (Djali, 2006), formative research is an assessment carried out during the KBM process which aims to get student feedback on teachers in improving the quality of learning in the classroom context. Summative assessments, quantitative assessments either online or offline. Quantitative Assessment is a delay by giving scores or grades to students on the achievement of learning outcomes or assignments given by teachers by looking at daily assignments collected online or in person, looking at the results of PTS or PAS.

#### **D. Advantages and Obstacles to the Implementation of Digital-Based Media in Improving Students' Digital Literacy**

In this sub-chapter, we will examine the advantages and obstacles faced in the application of digital-based media in PAIBP subjects at SMK YPIB Kedawung, especially in grade XI students, RA said that:

"Learning using digital media is quite helpful for us in understanding the material, especially because it can be accessed anywhere and anytime. In the results of the sample interview data, the use of digital media in the learning process is very helpful, especially in terms of understanding the material being taught, and the use of digital media makes it easier for students to access the material and improve their digital literacy".

As the Navy said that:

"Learning with e-Learning media helps us, especially in providing material, that can be re-studied at home and we read it again."

In the observation process, the researcher found that the excellence in the use of digital-based media in the learning process, namely the researcher found that students were very interested in the use of the media, it was seen that students were very interactive, making it easier for students to access the material, understanding the material with PPT (Power Point) which made it easier for students to understand and students were very enthusiastic about the learning as evidenced when the teacher gave the analysis task to the students.

Regarding the obstacles of NA who is a grade XI student of Pharmacy SMK YPIB Kec.

"First, we sometimes find it difficult to log in because of the password that sometimes we forget and our internet connection is slow, secondly we also sometimes complain about a large enough connection to be used during learning because during learning we have to play videos and with that we spend a lot of quota".

The FA says that:

"Maybe because school facilities are still lacking for the internet, because schools can also be counted as still new in using e-learning media as a teaching medium, especially about e-School which sometimes still makes us difficult".

In the results of the interview data, the first is about engineering, difficulties when logging in to the e-School so that it will hinder the continuity of learning, the second is about digital

media that consumes a considerable quota, third is about school facilities that are not ready to prepare Wi-Fi in facilitating students in learning using digital media.

In the results of the observation, the researcher found that the first obstacle was the obstacle in the use of laptop and in-focus digital media tools which the researcher saw that during learning before starting the teacher had to prepare digital tools such as in focus and laptop, at that time students were confused to install the tool in focus and made learning hampered for a few minutes. Both students still have difficulty in finding information directed by the teacher, for example, the teacher instructs them to look for information that is relevant to the material and it is proven that there are still students who have difficulties. Secondly, from the internet sector and their understanding of the material, there are even students who do not bring digital tools such as mobile phones. Third, there are still students who look silent and do not participate during the learning because they do not read or download the material being studied so that students sometimes cannot interact with the teacher.

From the many to the superior and these obstacles, of course, the use of digital media in improving literacy is not perfect, because there are still quite obstacles in supporting digital learning such as wifi facilities that are still limited and with that of course it is very effective and efficient learning barriers, but in the learning process using digital-based media in improving student literacy is very objective and effective. It is proven by students who are interactive in the classroom although, there are some students who lack understanding of the material and the use of digital media as explained by Cunningham and Stanovich (1998) that in their view, literacy is the ability to read, write, and understand information in various formats (Seknun et al., 2023).

## CONCLUSION

In the conclusion of this study, the researcher found various data regarding the data contained in this study, the researcher concluded that in the process of implementing digital-based media in improving the literacy of students in grade XI SMK YPIB Kedawung Regency Cirebon, it is very structured such as Planning, Implementation, Evaluation as well as to excellence and obstacles, this is evidenced by the implementation process which begins with designing, uploading the lesson plan before KBM learning starts and uploading the material a week before it is explained in class, this is done so that students can read, understand the lesson plan and materials and prepare innovative teaching media such as using digital media to support the learning process.

At the implementation stage, teachers apply interactive learning in order to attract students in learning, and teachers give tasks in the form of analysis tasks to improve students' literacy and critical understanding, in this study the researcher also found obstacles, namely in the technical and students' ability to use digital support tools and for evaluation, the researcher found evaluations in the form of Formative and Summative which both evaluations play a very important role in To know the improvement of student learning and the improvement of student literacy and provide feedback to students. From all these discussions, it can be seen that the use of digital-based media in improving student literacy in PAIBP subjects in improving student literacy is very effective, it is proven by students who are interactive in learning, but student literacy is still relatively minimal because there are several things that must be more suppressed and optimized, namely habituation in terms of using digital media and digital support tools in finding information.

In understanding and analyzing information that is relevant to the material and there are still students who are less active in learning, this is proof that the increase in literacy is not only supported by teaching media but literacy will also increase along with applying the habit of literacy to students, one of which is the use of digital media in literacy objects.

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