



DEVELOPMENT OF DIGITAL COMPETENCE OF VOCATIONAL HIGH SCHOOL (SMK) ISLAMIC RELIGIOUS EDUCATION TEACHERS WITHIN AN INDEPENDENT CURRICULUM FRAMEWORK

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Abstracts

The use of a variety of new technologies in the learning process is getting stronger. The practice produces two general implications, positive and negative. This paper seeks to reveal the efforts of Islamic religious education teachers at the vocational high school level in increasing their digital competence amid the strengthening use of new technology in learning. This study uses a descriptive qualitative research method. The results of this study indicate that the development of teacher digital competence takes place through two stages. First, the stage of strengthening digital competence by following technical guidance on the management and use of ICT for Vocational High School (SMK) teachers develops it by self-learning through the use of YouTube, makes products in the form of Google Sites, and uses them in the learning process in class. Second, carry out post-guidance guidance programs for teachers and students at the school where the assignment is. The implications of the study are discussed within the framework of an independent curriculum. Practical advice for this study lies in the importance of integrating technical guidance, independent teacher learning, and collaboration between teachers as a basis for developing teacher competence.

Keyword:

Learning.id accounts, Teacher Digital Competency, Merdeka Teaching

Introduction

Education is one of the most important factors in determining the quality of human resources and the progress of a nation. The educational process is able to give birth to creative, innovative ideas in the dynamics of the times. According to Munadar, curriculum development is an instrument to improve the applied curriculum because "the curriculum is the heart of education" which determines the course of education. There is a change in the curriculum due to the occurrence of learning loss (loss of learning) and increasing learning gaps. The efforts made by the government to overcome these problems are by launching the Independent Curriculum, which was previously called the prototype curriculum.

This independent learning curriculum was developed as a curriculum framework that is more flexible while at the same time focused on essential material and developing the character and competencies of students. The purpose of this independent learning program is that schools, teachers and students are given the freedom to innovate and determine actions in the process of teaching and learning activities so that teachers and schools are encouraged to be non-monotonous and to be able to accommodate the diverse characteristics of students as a whole (Idhartono, 2023).

Associated with the current development of digital technology must be seen by teachers as an opportunity and take advantage of it in an effort to increase students' interest in learning. Currently, almost all teachers and students have ICT supporting devices such as smartphones, laptops, or PCs with easy access to the internet. Based on the survey results presented on the websindo.com channel, the number of smartphones in Indonesia is more than the population, namely around 133%, while the use of smartphones to access the internet is 60% and PCs are 22%. This opportunity can be used by teachers to design learning well, access interesting learning resources in the form of text, audio, or videos that can be used during the learning process so that the learning process is not monotonous but becomes more interesting so that students can be more interested in learning. Teachers can also create their teaching materials into interesting animations or videos and share them with students so that students can access the subject matter whenever they want.

With "high teacher creativity to compile and prepare interesting teaching materials, it is hoped that it can increase students' interest in learning. To be able to take advantage of digital technology, teachers need digital literacy skills, namely abilities in terms of knowledge and skills in using digital devices such as smartphones, PCs or laptops and being able to operate supporting applications so that they can assist teachers in designing quality learning. The use of digital technology in education has become an important part of developing teacher competence. Strengthening the use of new technology in education is a form of disruptive change. The use of various new technologies in education is not only a direct impact of the progress and speed of emergence of new technologies. Both are important factors that familiarize all educational actors with the practice of online learning and its various developments such as blended learning, flipped learning/classroom, and the like. Where the main requirement for the continuity of learning is the availability of new technology, computers or devices and internet connections. However, the availability of these main requirements will not have any meaning without the support of teachers' digital literacy skills for teaching (Habibah, 2022).

Therefore, teachers need to develop their digital competencies and integrate them into learning. This is in line with one of the strategies for the digital literacy movement in schools regarding strengthening the capacity of facilitators which emphasizes training of school principals, teachers, supervisors, and education staff regarding digital literacy.

One of these problems is that both teachers and students must be able to adjust the use of technology in the learning process so that the learning process can run conducive and learning objectives are achieved. The dominant response is the constraints faced by teachers and students related to mastery of technology and the different conditions in each region. Several studies reveal that teacher information, communication and technology competencies in Indonesia are not evenly distributed in all fields. In addition, there are still gaps in infrastructure and quality of education in various regions in Indonesia.

This condition is in line with what is experienced by partner teachers who state that the existence of technology that is developing very rapidly is not directly proportional to the teacher's ability to utilize digital technology for learning. Even the digital abilities possessed by teachers are still far behind the digital abilities possessed by students. This can be seen from the ability of students to utilize social media such as Instagram and Facebook to find information about subject matter. The current situation is a reflection and underscores that the

role of the teacher is a role that cannot be easily changed, especially to impart academic knowledge and build student character. However, teachers as subjects of teaching and learning activities are still required to master information and communication technology, especially for the sake of smooth learning process (Kuncoro, 2022).

In this paper, the concept of digital competence is understood as a competency in using information and communication technology (ICT) to find, utilize, create, evaluate, and communicate content or information content with cognitive and technical skills (Compilers, 2017a, p. 4). The principle of its development consists of three levels, namely digital competence, digital use and digital transformation. The indicators and targets of digital literacy in schools cover three aspects, namely class-based, school culture-based, and community-based. Thus, the digital competence referred to in this paper refers to the ability of Islamic Religious Education (PAI) teachers to develop their digital competencies for learning purposes and have alignment with the spirit of an independent curriculum.

Literature Study

1. Definition of Digital literacy

According to UNESCO, literacy is the ability to identify, understand, interpret, create, communicate, calculate and use printed and written materials in relation to achieving various goals in developing their knowledge and potential, and to participate fully in their communities and society (Naufal, 2021). Gilster's opinion seems to simplify digital media which actually consists of various forms of information at once such as sound, writing and images. Therefore, Eshet emphasizes that digital literacy should be more than just the ability to use various digital resources effectively.

Digital literacy is not only interpreted as the ability to use computers but also the ability to understand and define any information that is spread across various digital media. Martin Alan stated that digital literacy is a collaboration of the ability to use technology, computers as well as the ability to access information through technology and media communication.

Livingstone stated that digital literacy is a skill and competency possessed by a person in order to be able to safely use and utilize digital technology so as to avoid all the bad risks caused by it. Further in complex. Devri Suherdi stated that digital literacy is a knowledge and competency in using and utilizing digitalization media, modern communication tools accompanied by internet networks in finding, creating, evaluating, using and utilizing information in a smart, accurate, precise, wise manner and complying with applicable rules in the context of communicate with each other in everyday life (Lestari, 2021).

Based on the description above, in simple terms, digital literacy can be interpreted as a competency possessed by users in understanding and utilizing various information obtained through digital media. This competency is an obligation that must be possessed by society in today's digital era. This is due to the rapid development of technology. If we don't move forward, technology will be farther away. And that of course also has a negative impact in carrying out daily life, especially in the face of a pandemic like today.

2. Aspects of Digital Literacy

Bawden stated that digital literacy involves the following aspects (Naufal, 2021):

- a) Assembling knowledge, namely the ability to construct information from various reliable sources.
- b) The ability to present information including critical thinking in understanding information with awareness of the validity and completeness of sources from the internet.
- c) Ability to read and understand non-sequential and dynamic information material.
- d) Awareness of the importance of conventional media and linking it to networked media (internet).

- e) Awareness of access to a network of people who can be used as a source of referrals and help.
- f) Use of filters on incoming information.
- g) Feel comfortable and have access to communicate and publish information. If you view Bawden's opinion above, digital literacy is more associated with technical skills in accessing, assembling, understanding and disseminating information.

3. Types of Digital Literacy

This type of literacy adapts to the times. However, there are six basic types of literacy (Sari, 2023).

- a) Literacy read write.
This literacy is the ability to understand the contents of written texts, both implied and explicit, this is to develop self-knowledge and potential.
- b) numeracy literacy.
This literacy is the ability to understand numbers and symbols related to basic mathematics to solve practical problems in everyday life.
- c) Science literacy.
This literacy is an ability related to understanding the natural and social environment around it to make scientific decisions.
- d) Financial literacy.
This literacy is the ability to understand concepts, risks, and motivations in finance.
- e) Cultural literacy and citizenship.
This literacy is an ability related to understanding and acting towards the diverse Indonesian culture as a national identity, as well as understanding the rights and obligations as citizens.
- f) Digital literacy.
This literacy is the ability to access digital media ethically and responsibly, to communicate and seek information.

4. Factors Affecting Digital Literacy

- a) Functional Skills (Functional Skills).
Functional skills are the technical abilities and competencies required to operate digital tools proficiently. An important part of developing functional skills is being able to adapt these skills to learn how to use new technologies. The focus is on what can be done with digital tools and what needs to be understood to use them effectively.
- b) Communication And Interaction
Communication and interaction that involves conversation, discussion, and building on one another's ideas to create a shared understanding. The ability to collaborate is to work well with others to create meaning and knowledge together. Supporting digital literacy in young people involves developing their understanding of how to create collaborative uses of digital technology and how digital technology can effectively support collaborative processes in the classroom and the wider world.
- c) Critical thinking
Critical thinking involves transforming, analyzing, or processing given data information or ideas to interpret meaning in developing insights. Like, the fundamental assumptions that support the process of making information acceptable to reason. Then as a digital literacy component it also involves the ability to use reasoning skills to engage with digital media and their content as well as question, analyze and evaluate. Engagement demands to think critically with digital tools (Naufal, 2021).

Methods

This research model belongs to the type of qualitative research, where the objects and research studies are carried out directly in the field in order to analyze learning activities in

SMKs throughout the Mustika Jaya District, especially in Teacher's Understanding of the Independent Curriculum and Digital Literacy.

Steven Dukeshire & Jennifer Thurlow stated that "research is the systematic collection and presentation of information". Research is a systematic way of collecting data and presenting the results. Hillway in a book with the title *Introduction to Research* suggests that research is a study model that is carried out by someone through careful and perfect investigation of a problem so that the right solution is obtained.

Results and Discussion

Findings

This study found two main issues related to the development of digital competency of Islamic religious education (GPAI) teachers in Vocational High Schools (SMK). First, the GPAI digital competency development strategy through active participation in the technical guidance program (bimtek) for the use and processing of ICT for SMK teachers. Second, the teacher follows up on technical guidance by conducting an impact on teachers and students. The authors will discuss the two findings within the framework of an independent curriculum.

1. GPAI Digital Competency Development Strategy

One of the important activities to increase teacher digital competence is to attend training, workshops, focused technical guidance and the like. In this study, researchers found the active participation of PAI teachers in participating in programs that can support their digital competence. The program was packaged in the form of technical guidance for three days. The orientation is to activate the *learning.id* account and learn about the various features that are already available in it, such as G-Meet, G-Form, G-Slide and G-Sites. Bimtek Management and Utilization of ICT in Learning (for Vocational School Teachers). During the Bimtek activity, it was held on October 6, 2022. When the Bimtek Guru PAI studied the technical activation and utilization of the *learning.id* account. It means, In the ICT guidance activities, PAI teachers not only succeeded in activating their accounts but also gained sufficient insight and experience regarding their use in the learning process. The existence of this program is also one of the answers to the problem of activating the *learning.id* account.

Another strategy that has been carried out by PAI teachers to improve their digital competence is to deepen it. The purpose of this study is independent learning. In this case, the PAI teacher explained that "after the technical guidance, the school has a break for fasting during Ramadan. I used the Ramadan holiday to deepen my technical guidance materials because the problem of using the *studi.id* account and other learning platforms required deepening of the material and had to practice or practice frequently. I studied the material independently by using Youtube to look for tutorials as well as practice using it. I also had the opportunity to make a product for student learning purposes. This indicates that there are two important factors in increasing the digital competence of PAI teachers, namely active participation in ICT guidance and following it up with independent study (Untung et al., 2022).

From these two factors, ICT guidance has an impact on upgrading teacher competencies which is in line with developments in the digital era. This fact is in line with the findings of Basalamah et al. that training has a positive effect on teacher competency and performance improvement with a percentage of 79.40 percent. However, training or similar focused activities are not the only guarantee for teacher competency development. The percentage figure indicates the need for other aspects. This other aspect does not only aim to fulfill the percentage to 100 percent, but also to ensure sustainability (Basalamah et al., 2021).

In this study, researchers found that the most important aspect of teacher competency development is independent learning as a reflection of teacher awareness. That awareness can come from two possibilities, namely the external environment or internal perception. Both of them lead to taking an action or maybe it is an action that has become something that is

reflective. With regard to the concept of consciousness, Colás-Bravo et al. emphasized that the concept of awareness is a key competency for sustainable development. According to him, Freire was a key figure who developed the concept of awareness in education which departed from the analysis and interpretation of reality. Freire views education as an awareness process involving three phases, awareness, critical consciousness, and transformative action. The three phases are a continuous process that includes reflection on praxis.

Colás-Bravo calls this theory a reference for studying "sustainable consciousness" from an empirical educational approach and for assessing the role of ICT in training. guarantee for increasing teacher digital competency. Another aspect that needs to be paid attention to so that technical guidance has meaning and is operational is the awareness of the teacher. With this ongoing awareness, teachers will have the opportunity to continue learning to improve their competence in line with developments in the digitalization of information and communication technology and curriculum changes. without it, no matter how many teacher competency improvement programs have the potential to become meaningless routines and lose their relationship with teacher competency development. From continuous awareness, the teacher will have advanced attitudes and behaviors in the form of a desire to develop himself wrapped in his commitment and consistency.

In this context, this type of awareness refers to the teacher's awareness to always improve his quality. Efforts to improve self-quality require learning awareness (Nurhidin & Habibah, 2021). This learning awareness must have a sustainable and adaptive nature with various changes, especially changes in curriculum and developments in technology and information that are increasingly digitized. This means that teacher awareness plays an important role in increasing teacher competence and adaptive abilities to various types of changes. However, whether or not this awareness returns to each teacher (Sopian et al., 2022), because the key to educational progress is educational awareness, not curriculum.

How important the aspect of teacher awareness is, the teacher competency development strategy requires two aspects that are interrelated and sustainable, namely, technical guidance or similar focused training and teacher awareness. These two aspects lead to strengthening teacher capacity as an important part of the learning recovery process which has long experienced a learning crisis. Where the position of teacher awareness is increasingly playing an important role in shifting the cascading model of teacher training to a sustainable model and can be applied in the learning process.

2. Implementation of the Post Guidance Assistance Program

Impression is a form of follow-up activity after following technical guidance (bimtek). As one of the representatives of the Bimtek for the management and use of ICT, the PAI teacher has carried out sweeps in his work unit. The target of stimulation is not only teachers but also students. The targeting activity aims to enable teachers and students alike to be able to activate the studi.id account, know the features available in the studi.id account, and be able to operate it for learning purposes. The practice of swaying activities takes place in two waves to share what the PAI teacher has gained while attending technical guidance on the management and use of ICT. This explanation refers to the results of interviews with PAI teachers that the implementation of the implication is intended for teachers and students on October 12, 2022.

The first scan takes place. The first target of refraction is the teachers and students who are in the PAI teacher work unit. Impression for students in the first engagement focuses on socialization and how to activate a studi.id account by practicing it. Meanwhile, the impact aimed at teachers is more complex, namely not only socializing about how to activate a studi.id account but also about using and exploiting some of its features. On this occasion, the PAI teacher presented the steps for activating thelearning.id account and then guided the teachers to activate their respective accounts. After that, the PAI teacher presented material about some of the features available in the studi.id account. Starting from how to use Google Docs, Google Speedlite, and Google Forms, then how to share them.

The explanation above illustrates that the orientation of the orientation for students and teachers is different. The difference in orientation refers to the conditions and orientation of the Bimtek. The condition in question is the fact that students have a studi.id account that has not been activated. With this stimulation, students get a better understanding not only about the procedure for activation, but also about how it functions and benefits for learning purposes.

The second scan takes place. As a follow-up activity from the first impression. This activity focuses on enriching the understanding of teachers and students about the use of features in thelearning.id account. The incentive for teachers is in the form of continued presentation of material on using Google Slides, Google Meet, and Google Sites. In the presentation, the PAI teacher also gave an example of its use by showing several examples of its own making. Furthermore, the PAI teacher also explained the three features to students. The difference is, PAI teachers only provide their work in the form of Google Sites for students to study. It contains subject matter, learning objectives, and questions as assessment instruments

Thus, post-guidance guidance activities take place simultaneously and thoroughly, involving the participation of teachers and students. As well as being a form of responsibility, the implementation of triggering activities can also be seen as an effort by teachers to share the latest information which is in line with the importance of strengthening digital competence, both for teachers and students. However, PAI teachers admit that there has been no evaluation of the results of the inducement for teachers so they do not know the effectiveness of the inducement. Especially regarding the use of features on thelearning.id account. This is due to the tightness of the school's agenda starting from PPDB preparation, training on implementing the independent curriculum and its follow-ups, and designing the implementation of the independent curriculum in grades 10, 11 and 12. This situation is a sign of the need for more attention so that in the future there will be follow-up regarding optimizing the use of ICT in the learning process, either by optimizing the studi.id account or in other forms. Because the digitalization era requires teacher competency to maximize the use of ICT in the learning process.

Provision of teacher work in the form of Google Sites to students for learning purposes shows that teachers have tried to implement upgrading their digital competencies in the learning process. In this condition, it appears that ICT guidance for teachers has a positive effect. The Google Sites that teachers provide can also be categorized as a type of enrichment teaching material that has the potential to continue to be developed into digital teaching materials. This is in line with the findings of Kuncayono and Kumalasari that assistance in making digital teaching materials can increase teachers' digital literacy (Kuncayono & Kumalasari, 2020). Muftiroh and Atqia found the simplest example by sharing a Youtube link or website link regarding religious material (Muftiroh & Atqia, 2022). Starting from simple forms to complex forms that require special skills, teachers have indirectly tried to educate students to use the internet and other digital resources as learning resources. Therefore, increasing teacher digital competence is becoming increasingly important because it is not only useful for self-development but also as a medium for educating students so they are not easily trapped by digitalization.

Analysis

After research data collection was carried out and analyzed through triangulation, the researcher gave a discussion in accordance with the problems posed, as follows:

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Conclusion

Based on the explanation in the previous section. The researcher concludes that there are two important aspects that contribute reciprocally to improving teacher digital competence.

1. Teacher activity in participating in technical guidance and stimulation activities.
2. Awareness of independent learning to deepen what the teacher has gained during technical guidance and actualize it in the learning process. Based on these two findings, the researchers suggest the need to increase teachers' digital competencies and actualize them in the learning process on an ongoing basis both during the COVID-19 pandemic and afterward because the digitalization era will continue to move forward.

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