ENGLISH TEACHERS’ PEDAGOGIC COMPETENCE IN DIGITAL LITERACY IN SENIOR HIGH SCHOOL SETTING

Kiki Nur Ais; Eline Rozaliya Winarto; Susilawati
Universitas Muhammadiyah Cirebon
kikinurais44@gmail.com; eline.rozalia@umc.ac.id; susilawati.asmoro@gmail.com

Abstract: This study aimed to identify the pedagogic competence of teachers from different school context in employing digital literacy. To achieve this goal, qualitative research by involving observation and interview as the data collection technique. The result revealed that both teachers met six of the seven measures of teacher pedagogical ability. This study, afterward, used qualitative design. After conducted the research, the researchers drew conclusion that teachers’ upgrading in digital literacy is very important. Both private and state schools that have been observed, all teachers are equipped enough in digital literacy. Both English teachers employed digital literacy in all section of pedagogic competence including to master the characteristics of student, learn theory and principle, develop curriculum, carry out lesson plans, develop the potential students, communicate effectively with students, evaluates the process and learning outcomes of student.

Keywords: digital literacy, English teacher, pedagogic competence, senior high school, teacher’s competence

INTRODUCTION

The world of education encounters issues in determining how to design learning through the use of digital media with the goal of boosting teacher competences, particularly in pedagogy. Digital media literacy is important for education because it helps teachers’ present materials. Teacher competency should comprise professional knowledge and abilities relevant to the implementation of effective teaching. It is believed that instructors' competency pertains to the teacher's personality traits, comprehensive knowledge, teaching skills, and teaching attitude in various instructional contexts. It is believed that teachers' competence relates to a type of professional knowledge, professional abilities, and professional values associated to successful teacher education (Zhao & Zhang, 2016). Hakim (2015) argues that the competencies that teachers are expected to have consist of four components, including: 1). Personality competence comprises being solid, noble, smart and judicious, dignified, stable, mature, and honest,
and becoming role models for pupils and the community. It also includes being able to objectively analyze their own performance and improve themselves autonomously and sustainably. Based on the explanation, the writer concludes personality competence, namely a teacher's actions must be in accordance with the values of the norms, and have a code of ethics for the teaching profession by displaying a good personality, dignified, and noble. 2) Teachers must be socially competent in order to communicate and engage effectively with students, fellow educators, educational staff, students' parents/guardians, and the surrounding community. This competency implies that teachers must be able to communicate vocally, in writing, and through gestures with pupils, other teachers, and the surrounding community. 3) Professional Competence is the comprehensive and in-depth knowledge of learning material required of instructors, which includes mastery of curricular subject matter in schools and scientific substances that cover the topic, as well as mastery of scientific structure and technique. Professional competency is the ability to deal with adjustment duties, and the competence of lecturers is very significant because it directly connects to the performance displayed. According to the explanation, the researcher finds that teachers are supposed to be able to design and master learning content. 4) The level of learners' comprehension, instructional design, and implementation of learning, as well as the diagnosis, evaluation, and growth of learners, are the main focuses of pedagogic competence. Professional pedagogical teaching has significantly aided in these areas.

In order to access, manage, integrate, evaluate, synthesize, and integrate digital resources and produce new information, people must have a certain level of awareness, attitude, and aptitude with regard to using digital tools and facilities. Digital literacy requires the presence of three components in the human. Digital proficiency, digital use, and digital transformation include these components (Sivrikaya, 2020). The first step in educating students to reach this goal is for teachers to become aware of digital literacy. Lecturers have a significant impact on their students' lives as professors or educators in higher education. Unfortunately, lecturers still lack the motivation to take part in programs for teacher professional development. Their professional progress is actually aided by their participation in the program. The purpose of this study is to ascertain the ways in which teachers' familiarity with digital literacy enhances their use of three higher education teaching principles (Utami et al. 2020). Teachers nowadays must more fully integrate themselves into the digital world, whether they are ready or not. Because the use of information technology was previously restricted to online research and socializing via social media, the digital world has now really taken over as the primary teaching tool (Julita, 2021).

The actual interaction between teachers and students occurs across digital channels, including email, the Internet, laptops, and other devices, as well as through face-to-face interactions. To take advantage of digital technology, instructors need to have digital literacy abilities, including knowledge and competency with digital devices. However, not all teachers possess these skills. Whether they are ready, teachers today must immerse themselves more thoroughly in the digital world. The digital world has been taken over as the principal teaching instrument, while earlier, it was only used for online research and socializing via social media. The Internet of Things, specifically the speed governed by the 4.0. Strengthening digital literacy, which includes improving basic literacy, information background knowledge, technological skills, attitudes, and technology ethics, is the answer to all issues caused by digital literacy technology (Zilka, 2017).
In light of the aforementioned situation, researcher focused on analyzing pedagogical knowledge and understanding of digital literacy. Teachers' pedagogic competence in digital literacy plays a crucial role in promoting the success of learning. This study examines teachers’ pedagogic competence and digital literacy in different schools.

LITERATURE REVIEW

To increase teacher competences, particularly in pedagogy, the current educational system must figure out how to design instruction utilizing digital media. Because technology makes it easier for teachers to convey materials, digital media literacy is crucial for education. The quick development of information technology necessitates that teachers be innovative, capable of successful learning, and skilled in the use of technology and information media in the classroom.

Teacher Competence

The professional knowledge and abilities necessary to implement effective teaching should be part of a teacher’s competence (Mukhtar & MD, 2020). It has given that the learning process would not function well without the teacher’s role, it is hoped that teachers will be able to meet the expected competency standards in the world of education as a learning agent. It has been proposed that teachers' competence refers to the teacher’s personality traits, comprehensive knowledge, teaching skills, and teaching attitude (Hakim, 2015). Competencies expected to have consisted of four components including:

Personality Competence

Being a role model for pupils and the community, being able to evaluate their own performance objectively, and being able to grow autonomously and sustainably are all examples of personality competence (Hakim, 2015). The explanation leads the researcher to the conclusion that personality competency, or the ability to act in a way that is consistent with norms and values, is necessary for teachers to be effective. This requires them to have decent personalities that are dignified and noble.

Based on these competencies, a teacher must fulfill the following requirements: a) Act consistently in conformity with Indonesian national cultural norms, laws, and customs.; b) present himself as a steady, stable, mature, wise, and authoritative person; c) present himself as a person of noble character and a role model for students and society; d) have pride in being a teacher, work independently, have a work ethic, confidence, and high responsibility; and e) behave honestly and be respected.

Social Competence

Teachers need to be socially competent in order to interact and communicate well with students, other educators, the educational staff, parents/guardians of kids, and the community at large. It can be concluded from this competency, teachers are required to have the ability to communicate both orally, in writing and in gestures with students, other teachers and with the surrounding community (Hakim, 2015).

Social competence is the capacity of a teacher to: (a) be able to communicate effectively, empathetically, and politely with students. (b) be able to communicate effectively, empathetically, and politely with fellow educators and education personnel and (d) be cooperative, act objectively, and not discriminate on the basis of gender, religion, race, or physical condition.
According to the students' talents, interests, and physical and psychological development, the learning process with the system is expected to inspire students to actively participate, maintain discipline, and provide space that can foster initiatives, creativity, and independence (Marina et al., 2019).

**Professional Competence**

The definition of professional competence is "mastery of learning material in a broad and in-depth manner that is required of teachers," which includes "mastery of curriculum subject matter in schools, scientific materials that cover the material, as well as mastery of scientific structure and methodology." Professional competency is the capacity for addressing adjustment duties, and the competence of lecturers is crucial because it is directly related to the performance displayed. According to the explanation, the researcher concludes Teachers must have the concept of lesson planning which will be given to students and teachers are expected to be able to develop and master learning material.

Professional teachers must meet competency standards in accordance with the performance demands of their position, be certified and licensed as a sign of their authority to carry out their duties as teachers, have a teacher code of ethics that regulates their behavior, and have certain education, expertise, and skills to carry out their duties as well as possible through in-service education and training organized in an integrated manner.

According to Ma’rifatullah et al., (2019), the development of a teacher's professional abilities and attitudes is not simple, and it is not always the case that a teacher's development of their professional abilities results in the development of their professional attitude. Despite having received education in the subject of education, teachers may not always develop these attitudes and professional skills. Professional teachers are those who have a strong commitment to growing their areas of expertise, are capable of being change pioneers in their communities, and teach in those areas. The majority of instructors today lack professionalism since, particularly for English subject teachers, most do not fit within their respective fields of study. There are many issues with teaching in a classroom, such as the use of non-English languages, the limited focus on the manual, and the provision of materials without an explanation of their intended use.

**Pedagogic Competence**

The degree of learners' comprehension, instructional design, and implementation of learning, as well as the diagnosis, evaluation, and development of learners, are the main focuses of pedagogical competence. This development has received substantial support in the shape of professional pedagogical teaching. Other elements that influence the learning results in science include motivation, interest, early exposure to science among pupils, environment, and parental influence (Suarmika, 2018; Irmawati, 2017; Rijal, 2020).

It directly affects how teachers manage the teaching and learning process that aims to aid students in learning the target in achieving the learning objectives, pedagogical competence has emerged as one of the most important aspects to be examined among the competencies that EFL teachers must possess. English teachers' proficiency in teaching English as a foreign language in their classroom includes their capacity for developing lesson plans, assembling instructional materials and media, putting instructional strategies into practice to promote student learning, assessing student learning, and engaging in teaching reflection. A pedagogical competency is the term used to describe
this skill. Sudargini & Purwanto (2020) revealed that the teacher's evaluation of the students' learning process and outcomes, mastery of their characteristics, knowledge of learning theory and principles, creation of curriculum, execution of lesson plans, growth of students' potential, and proficiency in communication with students are all examples of teacher pedagogical competence indicators.

According to Ada & Azisah (2016), in order to update, enhance, and investigate teaching methods, teachers must broaden their knowledge and abilities. In studies of teacher competences, the teaching role of instructors in the classroom is occasionally given greater weight than the competencies of teachers themselves. Teachers are more informed about research on educational reform, the evolution of teacher education, the findings of educational science, and other related themes.

Rijal & Idris (2020) explain that as information technology develops, the method that students are taught in classrooms is beginning to shift. As a result, perspectives in education are changed and modified. Even learning that begins solely verbally or through lectures gradually becomes more interesting and entertaining. The Industrial Revolution 4.0, which is now upon us, is distinguished by the increasing significance of cyber technology in modern life.

**Mastering the Characteristics of Students**

In this situation, the instructor must be able to observe, document, and use data on student characteristics to support the learning process. Physical, emotional, social, moral, and sociocultural traits are among these characteristics. The teacher must pay attention to students who have physical weaknesses so they can participate in learning activities and don't feel left out. For example, the teacher must understand the learning characteristics of his students. The teacher must ensure that all students in the class participate actively in learning.

**Learning Theory and Principle**

In this section, the teacher is expected to be able to select various approaches, strategies, methods, and learning techniques creatively and in accordance with the characteristics of the students, such as: the teacher uses a variety of learning techniques to motivate students' willingness to learn, paying attention to the responses of students who do not understand or do not understand the learning material to improve the next lesson plan.

**Developing Curriculum**

The teacher can create a syllabus that is in line with the curriculum objectives and the goals in the lesson plan, but she must adhere to the learning sequence and select lessons that are in line with the goals of learning, are practicable in the classroom, and are appropriate for the context of daily life. To create effective learning designs, teachers must be able to master the curriculum. Every lesson in the classroom is guided by the curriculum, so teachers must be able to adjust to it if they want the learning process to go smoothly.

**Carrying Out Lesson Plans**

Teachers are capable of creating and carrying out educational learning plans, carrying out learning in accordance with students' needs, compiling and using a variety
of learning resources in accordance with students' characteristics, and utilizing information and communication technology for the purpose of learning.

**Developing the Potential Students**

Through learning programs that encourage students to develop their academic potential, personalities, and creativity, teachers can assess each learner's capacity for learning. Developing students' potential entails assisting them in their pursuit of knowledge, personal development, and societal achievement. Recognizing students' strengths, enhancing their knowledge and abilities, integrating learning into their lives, getting to know their preferences, creating a common goal, and fostering their growth are all part of developing their potential. Helping students learn, develop, and become contributing members of society is essential.

**Communicate effectively with students**

To be a successful teacher, one must be able to interact with kids politely, empathetically, and enthusiastically. For instance, teachers should pay close attention to all students' inquiries and responses and present learning activities that encourage strong student cooperation. Teachers can interact with students with various learning styles in productive ways and make sure that every student is interested in and learning.

**Evaluates the process and learning outcomes of student**

To create remedial and enrichment programs, teachers must take out activities to evaluate the learning processes and outcomes of their students, sometimes known as evaluations. For example, the instructor creates an assessment instrument that is in line with the lesson plan's learning objectives, uses student feedback to enhance subsequent learning, and uses the assessment's outcomes as the basis for creating future learning plans.

Pedagogic competence encompasses many different aspects of any attempt to raise the standard of learning in the classroom in addition to the planning, implementation, and evaluation of learning. Efforts to raise the standard of instruction in the classroom are also inextricably linked to teachers’ educational backgrounds. Teachers’ educational backgrounds should also be appropriate for their field of specialization (Asari et al., 2018).

**Digital Literacy**

In order to increase teachers' professional competence and encourage the development of digital competencies, digital literacy is a crucial issue (Utami et al., 2020; Anggraeni et al, 2019). According to the explanation, to be able to recognize, comprehend, produce, communicate, and compute using printed and written resources connected to varied settings is the definition of literacy and long-lasting to aid individuals in realizing their potential, advancing knowledge, and achieving their goals.

A person's awareness, attitude, and capacity to use digital tools and resources effectively to access, manage, integrate, assess, synthesize, and evaluate digital materials is known as their level of digital literacy. In order to encourage positive social action, it is important to communicate with, and influence, the media and others in the context of particular living circumstances. Three components must all be present in a person for there to be digital literacy. These elements are: digital competence, digital use, digital transformation (Sivrikaya, 2020). The ability to effectively use digital tools and resources is referred to as having digital literacy, according to the explanation. To be digitally literate, a person must concurrently possess three elements.
Digital literacy is the capacity to comprehend and apply information presented through computers in a variety of formats and from a variety of sources. Some examples of digital literacy tools include Zoom, a computer or other device, Google Docs, PowerPoint, YouTube, and Microsoft Team.

The inefficient use of digital literacy was also revealed to be a significant barrier, since teachers typically lack the time to research technological advances. This is due to the fact that these tasks typically demand more energy in addition to requiring more effort due to workload and administrative duties as a result of the difficulty of the relevant subjects (Irmawati et al., 2017).

The twenty-first century has seen a remarkable advancement in technology. Human lives have been significantly impacted by technological innovation. Digital literacy has various advantages for people, including making it simpler to work from home and access information from anywhere, as well as assisting teachers and students in online teaching and learning activities (Yulianti et al., 2021).

The system of effective and convenient information and communication services, as well as digital tools for the learning process, is known as the educational system's "digital learning environment." This environment is controlled and dynamically updated while taking into account current trends in the modernization of education. Computers, other ICT equipment, communication channels, and other digital educational resources make up the training center of the educational institution. Learning in a modern educational environment is supported by a system of contemporary pedagogical technologies that offers (Bulturbayevich et al., 2021; Zilka, 2017).

According to Fauzi & Khusuma (2020), teachers are crucial to the effectiveness of education because they have direct contact with students when instructing. They are necessary for the efficient operation of the learning process and are part of the instructor's obligations and professionalism as a teacher. However, it is challenging to carry out teaching and learning activities in such an environment.

METHOD

This research applied a descriptive qualitative research. This research, moreover, conducted with 2 English teachers from different schools as the research data. This research accordingly has pedagogic competence in digital literacy as the object of the research. The research subjects, furthermore, are two English teachers from different schools, SMA Negeri 1 Dukupuntang and SMA Muhammadiyah Kedawung. The research used interview and observation as an instrument. The teacher interview provided primary data, which were then used to describe the interview's findings. According to Monday (2020), the interviewer should increase the receptiveness of the respondent by making him believe that his opinions are very useful to the research and are going to be a pleasure rather than an ordeal. The next step is to conduct observations to confirm whether the interview's findings are consistent with what is actually happening in the classroom (Setiawan et al., 2020). An observation technique is a method of gathering data that involves looking at objects directly. This method enables measurement and evaluation of social attitudes in daily life. There are several steps used to collect the data including (1) Planning and Preparation Stage (2) Implementation Stage (3) Research Proving Result Stage (Monday, 2020). Getting all the data, the researchers analyze the data afterward. The final step is the validate the data and draw conclusion.
FINDINGS AND DISCUSSION

This session is to determine the pedagogic competence of teachers in digital literacy at SMAN 1 Dukupuntang and SMA Muhammadiyah Kedawung. Observations were made directly in the classroom during learning with non-participant methods to prove the data in the interview. Researchers used observation sheets that had been adjusted to the indicators in the study as follow.

Table 1. Teachers' pedagogic competence

<table>
<thead>
<tr>
<th>No</th>
<th>Statement</th>
<th>SMAN 1 Dukupuntang</th>
<th>SMA Muhammadiyah</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>The teacher use digital media to present material clearly according to student characteristics</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>2</td>
<td>Teachers use digital tools to find materials online for lesson plans.</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>3</td>
<td>In the learning process, the teacher uses digital literacy to share information or collect assignments with students, for example, using YouTube, WhatsApp, Google Drive, email, and other social networks.</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>4</td>
<td>Carrying out learning evaluations after learning activities are completed</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>5</td>
<td>Developing students' potential in digital</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>6</td>
<td>Digital tools to help the teachers diversity in the classroom</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>7</td>
<td>Educational, creative, and innovative product resulting from the use of technology</td>
<td>Yes</td>
<td>No</td>
</tr>
</tbody>
</table>

The table 1 shows that in pedagogical competence in digital literacy applied by English teachers at SMA N Dukupuntang, there are 7 indicators implemented properly and 1 indicator was not implemented. In the learning process the teacher uses digital media to present the material according to the characteristics of the students, teacher use digital literacy tools to find materials online for lesson plans were implemented properly, in the learning process the teacher uses digital literacy to share information and provide assignments with students were implemented properly, teacher carrying out learning activities were completed were implemented properly, digital tools to help the teacher diversity in the classroom were implemented properly and teacher use technology for educational, creative and innovative.

Then based on the observation table above at SMA Muhammadiyah Kedawung, it can be seen that English teachers master understanding related to pedagogical competence in digital literacy well, such as, teachers have implemented the use of digital media to present material clearly according to student characteristics, in learning activities teachers have applied digital literacy as a medium for sharing information or giving assignments to students, teachers do not apply learning evaluation after teaching activities are completed, on increasing digital potential to students during learning teachers apply it, teachers apply the use of digital tools to help teachers during learning, by applying the use of technology teachers produce creative and innovative learning activities so that students look excited about learning.
According to the researcher conclusions and with reference to the outcomes of the data analysis that has been conducted, the results of the data analysis will be thoroughly explained in following section.

The Pedagogic Competence of Teachers in Digital literacy

Mastering the characteristics of student

Based on the results of interviews and observations that have been stated, such as: based on the informants interview and observation, the researcher concluded that, understanding and mastering the characteristics of students is essential for effective teaching and creating learning environments, each student has different strengths, weaknesses and learning interests by understanding the characteristics of students, of course the teacher can treat students equally, the teacher is able to adapt learning methods and strategies that suit the learning style of students by linking digital literacy media.

Learning Theory and Principle

Based on the results of interviews and observations that have been stated, such as: We can conclude that by collaborating with other teachers, teachers can improve their pedagogical competence by exchanging opinions, ideas, and experiences in using technology in learning, attending online seminars to gain new knowledge about digital literacy, and seeking information independently through digital media.

Developing curriculum

Based on the results of interviews and observations that have been stated, the results of interviews with two English teachers from different schools, namely SMAN 1 Dukupuntang and SMA Muhammadiyah Kedawung, the researchers can conclude that teachers know and understand their pedagogical competence in digital literacy. Teachers' pedagogical competence in digital literacy is the ability and understanding of teachers in using and utilizing technology during learning.

Carrying Out Lesson Plans

Based on the results of interviews and observations that have been stated, such as: the researcher can conclude that the digital media used during learning are laptops, computers, smart boards, smartphones, LCD projectors as a tool to display learning materials such as digital reading, learning videos, and PowerPoint slides.

Developing the Potential Students

Based on the results of interviews and observations that have been stated, the researchers concluded that these 2 schools are adequate in infrastructure and learning facilities at school in the form of laptops, computers, and LCD projectors.

Communicate Effectively with Students

Based on the results of interviews and observations that have been stated, the researchers concluded that from the 2 schools using digital media, it is used as learning such as making lesson plans, making materials, finding the latest information about learning and making it a tool to convey learning to students.

Evaluates the Process and Learning Outcomes of Student

Based on the results of interviews and observations that have been stated, the researchers concluded the challenges that implementing digital literacy in pedagogical
Ais, K. N., Winarto, E. R., & Susilawati. English Teachers' Pedagogic Competence in Digital Literacy in Senior High School Setting

competence. Teachers are required to be versatile, such as being able to understand technology and how to use learning media that will be used by students. The researchers, furthermore, concluded advantages that implementing digital literacy in pedagogical competence, among other things, makes it easier for teachers to teach, especially because it is more effective, and makes it easier for teachers to find and get more information related to learning materials, methods, and new learning strategies. Teachers can also easily teach learning media to students.

According to research conducted in two schools, SMAN 1 Dukupuntang and SMA Muhammadiyah Kedawung, both teachers met six of the seven measures of teacher pedagogical ability (Hakim, 2015). Teachers must have seven indicators, including how the teacher evaluates the process and learning outcomes of students, master the characteristics of students, learning theory and principles, develop curriculum, carry out lesson plans, develop students' potential, and be able to communicate effectively with students. Teachers understand students more fully, and teachers implement learning designs such as applying learning theories, knowing educational foundations, and other indications that have been met. Teachers design and evaluate the process and learning outcomes of students on an ongoing basis using methods and use the results of the assessment to improve the learning program. They plan learning strategies based on the characteristics of each student according to the material and competencies taught and compile lesson plans following the curriculum by learning objectives.

CONCLUSION

Teachers are the main role in education. Being a teacher should learn their whole life. Teachers should have a long life education including teacher competence in digital literacy. Digital literacy is a knowledge that all teachers should be upgraded nowadays. Some schools, both private and state school, should employ digital literacy. After conducted the research, the researchers drew conclusion that teachers’ upgrading in digital literacy is very important. Both private and state schools that have been observed, all teachers are equipped enough in digital literacy. Both English teachers employed digital literacy in all section of pedagogic competence including to master the characteristics of student, learn theory and principle, develop curriculum, carry out lesson plans, develop the potential students, communicate effectively with students, evaluates the process and learning outcomes of student.

REFERENCES


Sivrikaya, M. H. (2020). An analysis on digital literacy level of faculty of sports science
English Teachers' Pedagogic Competence in Digital Literacy in Senior High School Setting


Suarmika, P. E. (2018). Teacher pedagogic competency and national examination result at elementary school. SHS Web of Conferences, 42, 00030. https://doi.org/10.1051/shsconf/20184200030


Ais, K. N., Winarto, E. R., & Susilawati. English Teachers' Pedagogic Competence in Digital Literacy in Senior High School Setting

of Technology Enhanced Learning, 9(1), 80–98.
https://doi.org/10.1504/IJTEL.2017.084074