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INVESTIGATING OF PRE- SERVICE TEACHERS' PERCEPTION AND READINESS TO DIGITAL MULTIMODAL LITERACY AT LAKIDENDE UNIVERSITY

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Abstract

Students being unable to be part of 21st-century learning is due to the lack of multimodal literacy in teachers (pre-service teachers). The researcher was motivated to research investigating pre-service teachers' perception and readiness to digital multimodal literacy at Lakidende University. This study aims to gain data and information about the perception and readiness of English teachers in 21st multimodal literacy in this era of new types of communication. This study employed a survey method through online survey research among pre-service teachers at Lakidende University. The findings describe the demographic teacher with multimodal literacy which related to the teacher have a positive attitude in using a digital media tools, that indicated that they ready to use digital such as social media, communication tools, and tool online presentation and also offers a new perspective for teachers with the term multimodality in teaching English. It could conclude that teachers may know and use technology in the classroom, but they do not vaguely understand multimodal literacy. The implications of this research give direction and a new perspective in using multimodal literacy for English classrooms. It suggests that it could be better supported by the university environment, stakeholders, and government in developing the quality of English teachers' professional development.

Keywords: Digital in era 21 century, pre-service teacher, digital multimodal, multimodal literacy

Rapid development in terms of science and technology entering the 21st century has become an integral part of the modern era, especially in today's youth. Likewise, the improvement of digital technology has changed in such the way people communicate, collaborate, create works, solve problems, make decisions, and consume information. Technology has also changed the paradigm of learning for students who must learn to harness digital technology to achieve a successful study (Techataweewan & Prasertsin, 2018).

Education is currently experiencing a shift from traditional teaching and learning methods based on printed material to digital formats. Besides, students are now required to master technology-based learning; this can be seen in increasing the number of learning resources on the website; the Internet provides various disciplines and learning opportunities. In order to overcome this problem, students are required to apply digital liters. Digital literacy is a 21st-century skill needed for students because students are required to master not only learning skills but also master competencies based on 21st-century categories such as ways of thinking, ways of working, tools for work, and how students can survive in this world.

Digital literacy includes the ability to find and use information (otherwise known as information literacy) but goes beyond this to include communication, collaboration, and teamwork, social awareness in a digital environment, understanding of electronic security and the creation of new information. Both from the point of digital literacy and information are supported by critical thinking and evaluation. It can be stated that to enable students to communicate; teachers must teach literacy as the key that encourages current literacy education.

One reason behind students being unable to be part of 21st-century learning is due to the lack of multimodal literacy in teachers (pre-service teachers). Multimodal literacy has attracted more attention among literacy educators, researchers, and curriculum authorities (Unsworth & Mills, (2020); Damayanti & Febrianti, (2020); Dallyono & Sukyadi, (2019). Currently, students no longer focus on multimodal literacy traditionally limited to reading and writing printed text, by contrast, students need to be supported in making meaning from multimodal text that ranges from the integration of images and languages (e.g., picture books) to online and virtual settings (e.g., social media, websites, wikis, Therefore, this challenges students to improve their literacy skills in their classroom activities to the real world.

There has been no answer to the multimodal literacy problem, but it has been argued that the affordability of digital media - hypertext, multimodality, and interactivity has a profound effect on the range of resources available to make meaning (Hafner & Ho, 2020). Digital media do offer some different prices, especially the ability to engage with a broad audience through technology. Those who are specifically interested in this complete digital set are called web pages, blogs, wikis, podcasts, various types of videos, video games, infographics, posters, brochures (for some examples from the context of writing L2). Multimodal literacy is about understanding affordability, namely the potential and limitations, the resources for making different meanings, and how they work together to produce coherent and cohesive multimodal texts (Lim, 2018).

The importance of developing multimodal literacy in students is to increase recognition by policymakers and international curriculum planners. Therefore, in terms of the importance of multimodal literacy, researchers would investigate the perceptions and readiness of pre-service teachers in digital multimodal literacy.

This has been proven in several previous studies relating to the topic of multimodal literacy. As reported that multimodal literacy can help teachers to stimulate students' critical thinking about authentic problems, to guide students in managing their learning, to use technology to help their students develop diverse perspectives for factual problems, to facilitate participation in collaboration with technology and to guide in building knowledge representation using technology (Drajati, Tan, Haryati, Rochsantiningsih, & Zainnuri, 2018).

Also, multimodal literacy increases teacher competence in teaching, supported by research (Unsworth & Mills, 2020). He stated that the quality and confidence of teachers' knowledge of semiotic theories that inform their pedagogy and appropriate contextual mediation for students about the knowledge of language and images derived from this through relevant metal languages, can be beneficial for all students. For some students, although evidence of developments in their papers and digital text media may be limited and take longer to emerge, the efficacy of the role of metal language shared between students and teachers can be seen in their knowledge exhibited in their receptive literacy practices, and conversation, they are about the text. It can be said that multimodal literacy is very beneficial for teachers in professional development.

Despite this, multimodal literacy trains teachers to get to technology-rescue. This can be seen from the research conducted by (Hafner, Yee, & Ho, 2020) entitled "Assessing digital multimodal composing (DMC) in second language writing: Towards a process-based model. DMC as a new literacy activity on second language learners' language development. They found that teachers applied the following criteria in assessing multimodal compositions: 1) creativity and

originality, 2) organization, 3) language, 4) delivery, 5) capital interaction, 6) variation, and 7) genre. The teachers look for creative and original work in terms of content, organization, and language so that this documentary educates and entertains. In this case, the teacher judges Digital Multimodal Composing (DMC) using many of the same criteria as a print-based assessment but also goes beyond those criteria to engage more deeply with their students' ideas and with the potential for creativity.

No doubt, many researchers still explain that teachers can encourage students to use multimodal literacy. In a study conducted by (Sembiante, Bengochea, & Gort, 2020) entitled "Want me to show you?": Emergent bilingual preschoolers' multimodal resourcing in show-and-tell activity ". They found that teachers could promote students' transmodal practices to support their learning and involvement in this activity. Teachers can encourage children's transmodal practices in service participation in oracy-focused activities (related to literacy). Although one goal is for students to understand the routine of showing and telling and the purpose, it is vital to recognize and validate the various modalities that children use to practice these features socially. In short, multimodal literacy offers many benefits for teachers and students in teaching and learning.

Some previous research on digital literacy has been carried out by several researchers; there has been no research on multimodal literacy for pre-service English teachers, especially in rural contexts. This study aims to describe the pre-service demographic teachers with multimodal literacy associated with teacher professional development. To clarify exploration, researchers narrow the questions, namely: (1) How is the readiness of teachers in facing 21st-century learning; (2) What is the perception of pre-service English teachers in using multimodal literacy and 21st-century learning; and (3) What types of technology media tools are known by English teachers ?.

METHOD

This study presents an exploratory review of the understanding of English teachers at Lakidende universities on multimodal literacy and teacher readiness in practice in the digital age. This study employed a survey method for gathering data and information from the population. Individually, researchers would examine how teachers apply multimodal literacy in the school environment. The research location is at Lakidende University, Unaaha, Southeast Sulawesi, as all pre-service teachers have been chosen as the population of this study. The researcher is interested in knowing the teachers' perceptions and readiness in facing the era of learning 4.0, as outlined in the application of various digital tools in teaching English.

Furthermore, the selected participants came from English language teachers (FKIP students) as well as teachers who use digital tools in learning in writing subjects. The researcher conducted a participant online survey, including open-ended questions about the background of the teachers. The survey distributed through google form (online survey) then the researcher conducted an open-ended question to gain more detailed information and used in-depth interviews to gain more data. This information helps identify the characteristics of the sample and narrows down the interview questions later. Questionnaire items consisted of gender, teaching experience, educational background, and questions about writing assignments in class—most of the data collected through interviews. In-depth interviews are a useful way to collect more data because they use open-ended questions to explore participants' feelings and perspectives.

RESULTS AND DISCUSSION

In answering the question about how teachers' readiness in facing 21st-century learning, researchers conducted surveys related to it. The survey component in using technology to (1) stimulate students to think critically about authentic problems, (2) can use technology to guide my students in managing their learning, (3) can use technology to help my students develop diverse

perspectives in factual problems technology to help my students engage in reflection, (4) to facilitate students in participating in collaboration with technology and (5) can guide my students in building knowledge representations using technology.

Almost all respondents gave a positive attitude in readiness to use technology for several purposes, which were discussed in every question. In detail, the data shows that using technology, 95.70% of respondents can stimulate critical thinking about authentic problems; 96.80% of respondents can guide students in managing their learning; 96.70% of respondents can help students develop diverse perspectives for authentic problems; 97.80% of respondents can use technology to help students engage in reflection; 98.60% of respondents can facilitate students in participating in collaboration, and 95.70% of respondents can guide students in building knowledge representations.

Furthermore, it relates to the investigation of the types of media technology known by English teachers. English teachers knew about Facebook, Google Classroom, WhatsApp, and all types of media used in teaching and learning classrooms. The survey focuses on investigating the use of social media (e.g., Facebook, Edmodo, Instagram), communication tools (e.g., Messenger, Zoom, Google Hangouts, Webex), web-based collaboration tools (e.g., Google Drive, google classroom), and tools online presentations (e.g., PPT online, Canva, Prezi). This finding shows that the visualization of teachers' understanding of technological media tools proves that most teachers know and can use various media technology tools. The use of social media and web-based collaboration shows the highest percentage (93.50%). It was accustomed to communication tools, such as Messenger, Zoom, Webex, and Google Hangouts, that had been accepted by 92.40% of respondents. Finally, 80.5% of respondents stated that they could use online presentation tools such as Ppt Online, Canva. These results indicate teachers' sensitivity to technology today in line with the ability to use it to achieve their teaching goals.

To answer the question "What are the perceptions of pre-service English teachers in using multimodal literacy and 21st-century learning", in this study, researchers conducted in-depth interviews through Zoom video conferencing, in this case, the study was conducted through accumulated discussion (FGD). The results of the interview show that responses from a multimodal understanding of Make-meaning get mixed responses. Response (83%) is that they do not give a positive response. That means the teacher does not know and is familiar with multimodal literacy. Only 13% of 40 teachers and pre-service teachers know about multimodality in teaching English. Interviews prove several responses. The teacher, at first, did not understand the meaning of multimodal. In the interview, the teacher hears about the word im Multimodality. 'Some teachers give different responses that explain the term in another context. It was related to the affordability of digital media - hypertext, multimodality, and interactivity have a profound effect on the range of resources available to make meaning (Hafner & Ho, 2020). This finding offers a new perspective for teachers with the term multimodality in teaching English.

The results of other interviews are that researchers find teachers more comfortable and interested in using simple technology tools such as PowerPoint presentations and learning videos. They state that using simple technology is more efficient and does not focus on the technology itself. It was related that the study has done by Purnawati & Iskandar (2019) states that one of the ways to develop ICT literacy is the implementation through the process of teaching and learning. This would be homework as well as a task that must be done in earnest, especially for lecturers who prepare pre-service teachers, policymakers, stakeholders, and the teacher development department who must pay attention to these phenomena and loopholes.

This finding is related to Lim (2018) that by having adequate education for pre-service teachers at universities or some workshops for in-office teachers through ongoing lifelong learning and putting knowledge into the classroom, teachers update their concepts and technology tools to

improve their ability to choose, controlling, and assessing information technology in their EFL teaching. Besides, Valtonen, Kukkonen, Kontkanen, Mäkitalo-Siegl, & Sointu (2018) also agree that technology, pedagogy, and knowledge content for English teachers provide insight into the framework of the teaching and learning process.

The application of technology in the learning process is one of the challenges teachers face in professional development. Preparing teachers for quality learning in the 21st century requires understanding teacher skills and handling various tools, information, and jobs integrated into computer-based learning contexts. It would help teachers face the challenge by designing ICT competence-integrated syllabus for courses and assessments, which have been done by Khilda Shopia, & Ifan Iskandar. (2019); Bandan, A. P., & Dewanti, R. (2019); Susantha S., M. G. D., & Sumarni, S. (2019)

However, even though English teachers have sufficient knowledge related to technology, they have difficulty in understanding the term multimodal literacy. Most teachers are not familiar with terms that they should understand a text that consists of more than one communication mode, such as words, pictures, sounds, movements, and movements. They need further explanation about multimodal literacy in applying terms to the context of teaching English in class.

It can be said that teachers' readiness to deal with digital technology falls into the category of being ready to be applied in learning. Multimodal literacy makes it more useful in terms of the learning process where multimodal offers more interesting learning through visuals, sounds, and colors that make it a tool for meaningful education both for teachers and students.

By knowing multimodal literacy, the teacher agrees that there is a strong relationship between the two English teachers in 4C learning in the 21st century. Most teachers use technology to stimulate students to think critically about authentic issues, to direct students in managing their learning, to use technology in terms of helping students develop diverse perspectives on current issues, to facilitate students in participating and collaborating with technology and to guide students in building their knowledge representation using technology. Multimodality literacy offers a new perspective in a variety of students to better learn English through pictures, sounds, and movements to create a better learning environment for them to master language acquisition (Moreno, 2002; Rance-Roney, 2010). Giving various modes in language learning creates life stories in learning. This provides an impact to encourage students to direct, disseminate, and understand how these meanings relate to one another (Mayer, 2003).

Some innovative strategies include integrating learning theory and technology, creative problem solving through technology, using technology to improve teaching and learning methods, visualizing information through technology (with art and design), and adding technology tools for practical applications. These activities require skills for critical thinking, collaboration, and linking between theories and facts that help students in their future lives and prepare them for 21st-century learning (Tan, 2016).

Based on the data above, it can be said that it requires continuing professional development related to the creation of technological tools in classroom learning. This can start when the pre-service teacher is still in the initial lecture. Professional development can be continued to prepare the teacher's experience in terms of discussions between teachers, teachers, and university lecturers, teachers, and government and continued at the center of professional development.

Facts in the field show that the application of using technology in English learning classes still has obstacles. One obstacle is the fear of change from traditional to digital, limited time and facilities that do not support; this is a fact that cannot be denied (Mishra & Koehler, 2009) some problems arise in using technology in the classroom, non- technical and technical. The non-technical problem is that the teacher does not give any improvement in the teaching and learning process because there is no interactive communication. A pedagogical point of view is needed in the

education process. Therefore, teachers need to make collaborative-based learning between students and students, teachers and students, and students with learning situations. The teacher's role in using digital multimodal literacy is to facilitate safe and comfortable situations for students.

At the same time, teachers face a technical problem, namely an internet connection, which is a fundamental obstacle for English teachers. That requires knowledge of how technology enhances language learning that can be used in offline mode, not always in online mode. Regarding language learning, English teachers play an essential role in developing the quality of the teaching-learning process. Digital multimodal literacy is needed to improve teachers' technology, knowledge, and content in supporting one another to improve student achievement. Indirectly can help teachers and students not to lag far behind in 21st century learning. This study has advantages in providing pre-service teacher level descriptions related to literacy, multimodal literacy related to 21st-century learning and media technology tools known by teachers. The implications of this study provide direction and alternative application of various learning modes for the future of English classes; this provides the advantage of developing quality in the professional development of English teachers.

CONCLUSION

The introduction of multimodal literacy is a way to engage educators and students in different ways and use these methods to increase the competence of both teachers and students in making meaning. In tracing this research, it was found that teachers have a new perspective on how they conduct the learning process in the classroom. Teachers may know and use technology in the classroom, but they do not vaguely understand multimodal literacy. It is different from researching which have been found by Kayumova, A & Sadykova, G (2019) state teachers made productive use of the digital resource by utilizing its multimodal presentation of the content, integrating interactive activities mostly in a whole-class format, and creating an engaging and enjoyable learning environment of play. It means that if a teacher used digital multimodal, they understood what multimodal literacy was which indicate different context determine different knowledge of digital multimodal literacy.

Multimodal literacy is a new term, and the teacher feels unfamiliar with the term, it can be assumed to provide a new way for the teacher to quickly learn these terms. It takes some effort to ensure that utilizing technology for language learning using multimodal literacy can provide advantages in developing the quality of professional development of English teachers. Multimodal literacy for English teachers needs to be further developed to build, improve, and innovate both teachers and students to become professional teachers and learners. Such efforts can be better supported by environmental universities, stakeholders, and government.

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