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SMART SOCIETY 5.0: THE DIGITAL LITERACY READINESS OF THE ENGLISH TEACHERS

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Abstract: With the rapid advancement of technology in English language teaching, it is crucial for English teachers to be digitally literate. Being digitally literate requires English teachers to possess both technical and pedagogical skills, enabling them to effectively incorporate digital technology into the teaching and learning process. This study aims to assess the level of digital literacy readiness among English teachers, explore potential differences between male and female teachers in their digital literacy readiness, and investigate the factors that influence their digital literacy readiness. The participants in this study consist of 33 English teachers from both public and private high schools in Denpasar, Bali. A mixed-method design was employed, utilizing an online questionnaire, virtual interview sessions, and virtual focus group discussions. Descriptive statistical analysis was used to analyze the quantitative data, while qualitative analysis involved data collection, reduction, presentation, and conclusion drawing. The findings reveal that the digital literacy readiness level among English teachers is deemed adequate. Furthermore, there were differences observed between male and female English teachers regarding their readiness. Additionally, two major factors influencing their digital literacy readiness were identified.
Keywords: *digital literacy, gender, readiness.*

INTRODUCTION

In the modern era of the 21st century, individuals are expected to possess a diverse range of skills that enable them to thrive in various contexts. These skills include critical and creative thinking, adaptability, a mindset of innovation, competitiveness, and problem-solving abilities.

In order to meet the challenges of the 5.0 era, it is crucial to not only acknowledge but also master these aforementioned skills. Society 5.0, a term popularized by the Japanese, refers to a period aimed at creating a society centered around people. Its objective is to address societal issues, stimulate economic growth, and ensure that individuals can live comfortably and actively (Fukuyama, 2018).

In 2022, statistics indicate that 62.5% of the global population are internet users, 92.1% use mobile phones to access the internet, and 58.4% are active social media users (We Are Social, 2022). Considering these data, it is inevitable to ignore the impact of transformations and technological advancements. Yaraş and Öztürk (2022) emphasize the importance of analyzing the effects of shifting social structures within Society 5.0 and preparing for transformation processes in various fields.

In today's world, individuals need to develop a range of skills to thrive in the 5.0 era. Society 5.0 aims to establish a people-centered society and address societal issues while embracing technological advancements. It is crucial to

understand the impact of these transformations and be prepared for the changes that lie ahead.

One of the areas to concern is educational field. Digital technology directly affects education which reshapes the educational approaches and educational institutions (Yaraş & Öztürk, 2022). It also has a an indispensable importance in education (Özcan, 2022). Therefore, to be equipped with these changes, teachers as the crucial roles in education must be digitally literate. Being teachers in this 21st century is dissimilar with being teachers in the 20s in which teachers are required to be capable in innovating and creating innovate the infusion of digital technology as the conventional system of learning is no longer compatible for nowadays students (Milawati & Sholeh, 2020).

Communication and connection in the 21st century necessitate digital literacy. Digital literacy is to locate, organize, analyze, interpret, evaluate, transmit, read and create digital texts as part of the process in creating information (Akkoyunlu & Soylu, 2010). A person who is digitally literate is one who is imaginative, creative, and capable of cooperating, communicating, thinking critically, solving problems, having decision-making skills, understanding technological concepts and using them in this context, and who can carry out their duties as a digital citizen (Ocak & Karakuş, 2018).

Teachers must own digital literacy. Digital literacy skills enable them to utilize technology safely and effectively into the teaching learning process. These skills include basic computer tasks like starting and shutting down a computer, opening and using programs, typing, making changes to files, and saving them. They also involve sending and receiving emails and using web browsers. Another ability is to make and keep friends online through websites like Facebook. Another skill is to find and use information from library websites and databases effectively (Edeh *et al.*, 2022).

Digital literacy, according to Pangrazio (2016), can give students new ways of thinking, talking, and working that have an impact on their academic progress regardless of location or time constraints. If students know how to use digital tools, they can use those skills to do well in school, learn new things about themselves, and make useful things. Furthermore, according to Aslan (2021) digital literacy calls for the ability to apply technology to encourage the teaching learning processes as well as to access, produce, and share accurate information. It also calls for the proper use of various technologies.

In incorporating ICT to the teaching practices, teachers must obtain the technological and pedagogical knowledge and abilities required. To put it another way, based on Almerich *et al.* (2016), if teachers are not technologically and pedagogically proficient with these tools, they will not be able to integrate them into their regular teaching practices. There are several things that can help with attempts to democratize education in a nation, especially digital literacy, like focusing on the caliber of teachers and evaluating the educational attainment of pupils in each generation (Bahri *et al.*, 2022).

The majority of teachers worldwide lacked sufficient digital proficiency and experience with using technology and conducting online teaching and learning. Furthermore, students and teachers still lack proficiency in using multimedia tools like power points and projectors in addition to internet connection. As a result, instruction is still traditional and usually one-way. This current investigation sought to characterize the teachers' readiness in utilizing digital technology after a survey revealed that they were underprepared.

Specifically in Indonesia, the citizens' digital literacy was investigated by Katadata Insight Center (2021). The survey engaged 10,000 respondents from 34 provinces. It was found that the digital literacy index showed a figure of 3.49 which categorized at the medium level. Furthermore, the survey included four pillars as the aspects in estimating the digital literacy index. Digital culture got the highest score represented by a figure of 3.90, followed by digital ethics represented by a figure of 3.55, digital skill represented by a figure of 3.44, and the lowest, digital safety represented by a figure of 3.10. These survey results indicate that Indonesian citizens need to develop their digital literacy to survive in life.

There are sundry factors why digital literacy of the Indonesian citizens is far from adequacy. The ability to read, write, analyze, process, and distribute textual messages will affect how digital technology is used. A lack of early exposure to critical thinking education is also another factor contributing to people's poor levels of digital literacy. In this case, Indonesian generations must be trained how to master digital literacy since their early age with the helps and efforts of teachers. To make it possible, the teachers themselves must be firstly digitally literate.

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In accordance with Al-Awidi & Aldhafeeri (2016), teachers' digital literacy readiness could be broken down into two sorts: pedagogical readiness and technical readiness. Pedagogical readiness is concerned with teachers' knowledge, skills, attitudes, and habits in order to effectively incorporate technology into learning. Technical readiness means being ready and able to use technology for learning which includes teachers knowing how to explore and utilize digital tools. To be successful in their jobs, teachers need to be technologically literate in teaching and managing digital learning environments in schools (Fuchs *et al*., 2022).

In fact, digital literacy ownership is advocated for all instructors, regardless of gender. Many researches produced enticing findings regarding gender differences in digital literacy. Rizal *et al.* (2021) figured out that the male teachers had a higher digital literacy than female teachers. Further, they argued that gender has gender exhibits different trends in terms of technological motivation and usage habits. Then, Fernández-Batanero et al. (2022) inspected that the male teachers were less knowledgeable than female teachers in regard to their competence levels of teachers which varied by gender.

It is crucial that English teachers are prepared to learn digital literacy because English teachers in today's schools are expected to encourage students to learn independently and to bloom their digital skills. In order to do this, they need to learn and use these skills first. English teachers need to use digital technologies when they teach English. The merits of using digital technologies in English classrooms such as to create effective learning through social network applications and to raise students' motivation for learning (Liza & Andriyanti, 2020). Thus, the aims of this research were to figure out the English teachers' level of their digital literacy readiness, to figure out the divergences between male and female English teacher groups' digital literacy readiness as well as to investigate the factors which affect the English teachers' digital literacy readiness.

METHOD

This research was designed and conducted to be mixed-method research in the attempt to meet and fulfill the research objectives. Additionally, this research leaned heavily on the quantitative analysis. The quantitative data were gathered using an online questionnaire that addresses the respondents' level of digital literacy readiness, and the disparities in the digital literacy readiness level of male and female group. Furthermore, focus group discussion and interview were conducted to obtain the qualitative data about the factors affecting the digital literacy readiness of the respondents.

A total of 33 English teachers were engaged as the participants of the current research. All of them work and teach in Denpasar area especially in both public and private senior high schools. They were government employees and non-government employees. From 33 participants, they could be broken down into 2 cohorts; 21 female and 12 male English teachers. A summary of the respondents' demographic information is visualized by the following table.

Table 1. *Demographics of the respondents*

Aspects		Total
Gender	Female	21
	Male	12
Status	Non-government employee	21
	Government employee	12
Teaching experience duration	Under 5 years	10
	From 5-10 years	15
	Above 10 and under 15 years	8

The research data had been categorized as quantitative data and qualitative data. To obtain the quantitative data, Teacher's Readiness questionnaire was administered. This instrument was adapted and developed based on Al-Awidi & Aldhafeeri (2016); Situmorang *et al.* (2020). It consisted of 24 items where 23 items had been constructed in accordance with 2 dimensions; technical readiness and pedagogical readiness, and 1 item was about to dig the respondents' points of views of the factors which influence the digital literacy readiness of the English teachers in teaching learning process synchronously and asynchronously. The 23 items have a 5-point Likert scale type from "strongly agree or SA" (scored 5) and "strongly disagree or SD" (scored 1). Furthermore, the items were not scored reversed. The questionnaire was afterwards administered online through Google form to the respondents.

Furthermore, to gather the qualitative data, interview protocols and focus group discussion topic were prepared. These instruments were administered which aimed at obtaining deep understanding of the respondents about their digital literacy readiness. Priorly, there were 8

respondents chosen and agreed to join the virtual interview and focus group discussion sessions. They were as the representatives of 4 Denpasar districts (West, East, North and South Denpasar). In one district, 2 English teachers representing public and private senior high schools were invited. One representative, however, was unable to participate since it was difficult to get in touch with the teacher and to schedule a time that worked for the data gathering sessions using virtual meeting. Eventually, the researchers were able to involve only 7 respondents. During the virtual activities of interview session and focus group discussion, the respondents were encouraged to elaborate on their answers and provide details about how ready they were for digital literacy.

The research instruments were evaluated in terms of their validity and reliability which judged by two experts. The expert judges graduated their doctorate degree and their specialist is in English language teaching and educational technology. They evaluated the instruments based on the relevancy of the items to the theories referred in the research. Additionally, the appropriates of the items to the objectives was also highlighted followed by feedback on the items' readability.

First of all, the respondents completed the questionnaires which were delivered using the Google Form. The results of administering the online questionnaire were first categorized and examined by means of the formula of descriptive statistic. The results of the analysis were available in the forms of mean scores, standard deviation and percentages. The interview was done after the participants fulfilled the questionnaire, and they agreed to be involved in the online interview session. The researchers and the participants made an appointment especially dealing with the time dan date of interview. Last, the focus group discussion was done online by engaging several representatives of the respondents at one time through Zoom meeting.

As mixed-method research design was employed, the obtained data were both analyzed quantitatively and qualitatively in the attempt to examine the obtained data. The quantitative analysis includes the computation of descriptive statistics (means, standard deviation, and percentage) to figure out the digital literacy readiness level and to examine the digital literacy readiness variances between male and female groups. In fact, the online questionnaire was administered to collect this information.

Furthermore, to delve deeper into the factors affect the respondents' digital literacy readiness, the data were collected through interview and focus group discussion. Thematic content was extracted from the transcripts of the interview as well as focus group discussion. Then, the attained data were independently evaluated by the researchers to reduce biases and enhance the credibility and quality and of the research findings. To find the themes, the data were required to join the process of transcribing, coding, categorizing, and evaluating.

RESULTS AND DISCUSSION

After administering the questionnaire which could be retrieved online and conducting the interview session and focus group discussion virtually, a plentiful set of research data were acquired. The research findings encompassed the digital literacy readiness level, the different digital literacy readiness between male and female English teachers and factors which affect their digital literacy readiness.

The English teachers' digital literacy readiness level

In this section, the existing level of the English teachers' digital literacy was presented through a table.

Table 1. *The English teachers' digital literacy readiness level*

No	Aspects		
A	Technical Readiness	Means	SD
1.	I know what internet-connected mobile devices I can take with me wherever I go.	4.24	0.66
2.	I am competent in working with e-mail.	4.24	0.50
3.	I understand the features in operating the software.	4.03	0.81
4.	I understand how to download and upload files by using technological tools.	4.33	0.54
5.	I understand how to use software like PowerPoint.	4.42	0.50
6.	I understand how	4.36	0.60

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	to use social media (WhatsApp or Instagram) to communicate with the students both synchronously and asynchronously.		
7.	I understand how to convert the activities in the curriculum into digital form.	4.18	0.64
8.	I understand how to create online quizzes and apply them in teaching my class both synchronously and asynchronously.	4.18	0.68
9.	I understand the way to implement online discussions in my class.	4.18	0.53
10.	I understand how to publish my lessons and class activities on the web.	3.91	0.68
11.	I understand how to use an LMS (Learning Management System) to complement my teaching.	3.97	0.81
12.	I understand how to develop e-learning activities that encourage my students to become critical thinkers.	4.00	0.61
B	Pedagogical Readiness	Means	SD
13.	I am capable to use information technology to support my teaching method.	4.24	0.50
14.	I can integrate information technology into learning.	4.15	0.76
15.	I strive to create high-quality learning experiences as a result of either face-to-face or non-face-to-face interaction with students.	4.12	0.65
16.	I support student-to-student interaction and collaborative activities as a means of digital teaching and learning.	4.24	0.44
17.	I acknowledge that community building is a vital component of digital learning.	4.24	0.61
18.	I incite the students to carry out life experiences into the classroom which properly used in creating activities.	4.09	0.63
19.	I feel comfortable communicating online and feel able to convey my written messages.	3.94	0.66
20.	I can manage my time well in information technology enriched classes.	4.12	0.55
21.	I am flexible in dealing with students' issues including assignment due dates or absences.	4.00	0.66
22.	I am organized and like to plan ahead in information technology-based teaching.	4.15	0.57
23.	I am able handle and monitor students studying in information technology-enriched classrooms.	4.09	0.58

The means of the items under the dimension of Technical Readiness (12 items) ranged from 3.91 (SD=0.68) to 4.42 (SD=0.50). The means of the items under the dimension of Pedagogical Readiness (11 items) ranged from 3.94 (SD=0.66) to 4.24 (SD=0.61). From the aforementioned findings, it can be obviously interpreted that the English teachers regard themselves be ready in digital literacy.

This finding was supported by the research conducted by a research done by Fuchs *et al.* (2022) figured out that the preservice teachers perceived themselves ready digitally in teaching and learning process. This study supported by another study which figured out that the digital literacy readiness of the research respondents were estimable (Öngören, 2021). Furthermore, Milawati & Sholeh (2020) investigated the readiness of the teachers in facing digital literacy era. The technical readiness of the respondents in using digital technology is rated as inadequate. Although it is rated as inadequate, the revolutionary progress of digital technology has unavoidably come to an end.

Another research done by Özcan (2022) which was accomplished by engaging 443 prospective teachers from the education faculty. The prospective teachers were majoring in 10 different fields and studying at the first, second, third, and fourth grade levels. Based on the research findings, the positive and substantial association were identified between potential teachers' levels of digital literacy and attitudes toward mobile learning, which are both at a moderate level. Additionally, 35% of prospective teachers' opinions toward mobile learning can be attributed to the respondents' digital literacy level. The gender, grade level, and department variables all significantly affect prospective teachers' levels of digital literacy, and the department variable significantly affects their attitudes toward mobile learning.

Moreover, a study by Liza & Andriyanti (2020) investigated that the level of readiness among English teachers for integrating digital technologies into English classrooms—representing the four aspects of attitude, knowledge, perception, and ability—was strong. Besides, 78% respondents of the study enunciated that they were prepared to infuse and inject digital technology into English classrooms.

The differences between male and female English teachers' digital literacy readiness

In this section, the differences the gender-based English teacher groups' digital literacy readiness were presented through a table below. The table shows the differences in relation to percentages of each Likert scale.

Table 2. *The differences between male and female English teachers' digital literacy readiness*

No	Aspects	Percentages	
		Male	Female
1	Technical Readiness		
	SA	35%	31%
	A	60%	65%
	N	5%	4%
	D	0%	0%
	SD	0%	0%
	Total	100%	100%
2	Pedagogical Readiness		
	SA	35%	25%
	A	56%	67%
	N	8%	6%
	D	1%	1%
	SD	0%	0%
	Total	100%	100%

Table 2 presents that the male English teachers outperformed the female English teachers in technical readiness and pedagogical readiness aspects of digital literacy readiness on strongly agree scale. Conversely, the female English teachers were superior on agree scale in 2 aspects of digital literacy readiness. The familiarity with digital technologies and the frequency of internet use among English teachers were two key indicators of their readiness for digital literacy.

A similar study done by Aslan (2021) figured out that the two gender-based pre-service teacher groups had different levels of confidence in using digital technology. The findings of this current research is also consistent with the findings of Markauskaite (2005) figured out that male and female teachers were different. Even though, the respondents had a substantial experience of ICT use, males were more confidence about their capabilities in planning, finding information and selecting ICT tools than females. Additionally, males were also more confidence in autonomously mastering new applications.

Moreover, a study done by Çam & Kiyici (2017) acknowledged that in terms of visual literacy, male prospective teachers outperformed female ones. Likewise, the male prospective teachers significantly had more computer literacy than the female prospective teachers. A study by Ata & Yıldırım (2019) revealed that a significant genre distinction was observed in favor of males' perceptions regarding digital literacy who showed a stronger digital propensity; meanwhile, the female teachers had seen technology-related issues were more challenging. Similarly, both parties both had highly favorable opinions of their digital literacy competency, indicating a greater level of confidence using their digital literacy skills.

Factors which affect their digital literacy readiness

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In determining the factors that modify the digital literacy readiness of the English teachers in teaching learning process synchronously and asynchronously, virtual interview session and focus group discussion were conducted to obtain the data. The findings can be broken down into two cohorts; external factors and internal factors of the English teachers.

External factors

In relation to external factors which affect the English teachers' digital literacy readiness, they reported 5 primary factors coming from the outside such as the outstanding technology development, e-rapport demand, the inadequacy of the facilities supporting digital technology and information into the classroom, the cost of infusing the digital technology into the class, and the students' capabilities in utilizing the digital technology and information.

First of all, the English teachers concurred that strengthening the English subject through the use of digital technology is effective. They also view technology as a useful instrument that can be utilized to provide materials as well as an open source of information. The rapid development of advanced technology definitely must be followed by the readiness of the English teachers in utilizing the advanced technology into class.

Even, the demand of nowadays education in which the recap of the students' semester evaluation must be done through e-rapport influence the teachers in being equipped within digital literacy. However, even though, in education, the expenditure of technology-based application is demanded, it is weakened by the inadequate facilities to support and fulfil the demands. The English teachers argued that the facilities such as internet connection, computers, or LCD projectors were available, but they did not optimally support their teaching learning process.

Additionally, they disclosed that it was expensive to prepare suitable facilities, both in terms of number and quality, to support the teaching and learning process. They also often prepared the facilities independently in case the facilities provided by the schools where they work did not work properly or inadequate in their performances or numbers.

Lastly, another crucial external factor which is also taken into consideration is the students' capabilities in using the digital technology and information to get immersed in classroom. According to Mega (2022), digital literacy is prominent for students to conquer which is functioned to direct student-centered learning. It means that the success of teaching learning process infused by technology also be dependable on how good and literate the students know operating the technology. Thus, students must therefore acquire specialized abilities for using both online and offline programs in conjunction with integrating digital media into their English learning (Mudra, 2020).

Internal factors

The factors coming from the inside of the English teachers that affect their digital literacy readiness were reported into two points. The English teachers mainly said that the factors were firstly related to their willingness to learn and master the digital technology and information and secondly related to their capabilities in utilizing the digital technology and information to be useful.

The willingness to learn is significantly different which affected by in what generation that the English teachers belong to. Teachers must now master and utilize technology in order to align with their students because of the rapid development of technology. This skill level should be gained slowly and consistently, by learning on their own and getting trained by ICT professionals (Sulasmi, 2022). In this current study, the English teachers in their 20s and 30s mostly stated that they tend to willingly learn and experiment new things in their class by using technological tools. They believed they were able to properly use the tools if they digitally literate. In contrast, the English teachers in their 40s and 50s argued that they hardly followed the development of technology.

These findings are supported by Suryana (2013) that the majority of senior teachers over the age of 53 who lacked ICT literacy found it difficult to adjust to this new technology and continued to educate in the conventional manners. It was in line with Alanoglu *et al.* (2022) that the teachers' digital literacy level was affected by the traditional educational philosophies they gained in their pas school time. They were uninterested in learning ICT media for teaching and learning. Furthermore, it is obviously dissimilar with the young generation teacher who were always interested in learning new things about information technology and who followed the evolution of ICT. Saripudin *et al.* (2021) discovered that younger teachers exhibited upper digital literacy level than the more experienced ones, likely as a result of their greater exposure to digital technology.

Additionally, according to Hidayat (2019), digital literacy can help students learn how to communicate safely both inside and outside of the classroom. It can also help them be creative and think about important issues happening in the world. Digital literacy can also improve their problem-solving capabilities and teach them how to manage lots of information online. These benefits drive teachers to incorporate digital literacy into the English language classroom.

It is due to the requirement that students be literate and capable of performing in ways that are relevant to others, instead of merely being able to use digital media.

Next, the English teachers' capabilities to utilize the digital technology and information as the internal factor is in accordance with the findings of Jara *et al*. (2015) that high performance of the teachers on digital skills is manly correlated to the access to computer at home. In other words, it is related to times they spent in using such technology. The results of the previous study also suggested that early exposure to technology could have a big positive impact on how well the respondents learn to use the digital tools.

CONCLUSION

The English teachers were in the level of a sufficient in relation to their digital literacy readiness. They should be technically and pedagogically equipped to use technology and eager to incorporate it into the teaching learning process. There were external and internal factors that influenced the English teachers' digital literacy readiness, which they must maintain with the intention to optimally create meaningful teaching and learning processes to accomplish the twenty-first century demands and prepare the students to be members of smart society 5.0.

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REFERENCES

Akkoyunlu, B., & Soylu, M. Y. (2010). Öğretmenlerin sayısal yetkinlikleri uzerine bir calışma. *Türk Kütüphaneciliği*, *24*(4), 748–768.

Al-Awidi, H., & Aldhafeeri, F. (2016). Teachers' readiness to implement digital curriculum in Kuwaiti schools. *Journal of Information Technology Education: Research*, *16*, 105–126.

Alanoglu, M., Aslan, S., & Karabatak, S. (2022). Do teachers' educational philosophies affect their digital literacy? The mediating effect of resistance to change. *Education and Information Technologies*, *27*(3), 3447–3466. https://doi.org/10.1007/s10639-021-10753-3

Almerich, G., Orellana, N., Suárez-Rodríguez, J., & Díaz-García, I. (2016). Teachers' information and communication technology competences: A structural approach. *Computers and Education*, *100*, 110–125. https://doi.org/10.1016/j.compedu.2016.05.002

Aslan, S. (2021). Analysis of digital literacy self-efficacy levels of pre-service teachers. *International Journal of Technology in Education*, *4*(1), 57-67. https://doi.org/10.46328/ijte.47

Ata, R., & Yıldırım, K. (2019). Exploring turkish pre-service teachers' perceptions and views of digital literacy. *Education Sciences*, *9*(1), 1-16. https://doi.org/10.3390/educsci9010040

Bahri, A., Jamaluddin, A. Bin, Arifin, A. N., & Saparuddin. (2022). Students' and teachers' digital literacy skill: A comparative study between schools, classes, and genders in urban and rural areas. *International Journal of Science and Research*, *11*(2), 184–191. https://doi.org/10.21275/SR22130101519

Çam, E., & Kiyici, M. (2017). Perceptions of prospective teachers on digital literacy. *Malaysian Online Journal of Educational Technology*, *5*(4), 29-44.

Edeh, N. C., Amedu, A. N., & Eseadi, C. (2022). Assessing gender differences in teachers' digital literacy skills for assisting students with functional diversity. *International Journal of Early Childhood Special Education*, *14*(5), 7952–7958. https://doi.org/10.9756/INTJECSE/V14I5.1021

Fernández-Batanero, J. M., Cabero-Almenara, J., Román-Graván, P., & Palacios-Rodríguez, A. (2022). Knowledge of university teachers on the use of digital resources to assist people with disabilities. The case of Spain. *Education and Information Technologies*, *27*, 9015–9029.

Fuchs, K., Pösse, L., Bedenlier, S., Gläser-Zikuda, M., Kammerl, R., Kopp, B., Händel, M. (2022). Preservice teachers' online self-regulated learning: does digital readiness matter? *Education Sciences*, *12*(4), 1–14. https://doi.org/10.3390/educsci12040272

Fukuyama, M. (2018). Society 5.0: Aiming for a new

human-centered society. *Hitachi Review*, *66*(6), 558–559.

Hidayat, M. T. (2019). The analysis of teacher's belief on digital literacy in foreign language teaching. *English Education and Applied Linguistics Journal*, *2*(1), 36–41.

Jara, I., Claro, M., Hinostroza, J. E., San Martín, E., Rodríguez, P., Cabello, T., Labbé, C. (2015). Understanding factors related to Chilean students' digital skills: A mixed methods analysis. *Computers and Education*, *88*, 387–398. https://doi.org/10.1016/j.compedu.2015.07.016

Katadata Insight Center. (2021). *Status literasi digital di Indonesia 2021*. Jakarta.

Liza, K., & Andriyanti, E. (2020). Digital literacy scale of English pre-service teachers and their perceived readiness toward the application of digital technologies. *Journal of Education and Learning (EduLearn)*, *14*(1), 74–79. https://doi.org/10.11591/edulearn.v14i1.13925

Markauskaite, L. (2005). Exploring differences in trainee teachers' ICT literacy: Does gender matter? *ASCILITE 2005 - The Australasian Society for Computers in Learning in Tertiary Education*, 445–455.

Mega, I. R. (2022). Learners' digital literacy in the online learing during Covid-19. *English Review: Journal of English Education*, *10*(2), 699–706.

Milawati, & Sholeh, M. (2020). Teacher's readiness in using digital technology for learning in Samarinda city high school. *Advances in Social Science, Education and Humanities Research*, *398*(ICoSSCE 2019), 321–324. https://doi.org/10.2991/assehr.k.200130.064

Mudra, H. (2020). Digital literacy among young learners: How do EFL teachers and learners view its benefits and barriers? *Teaching English with Technology*, *20*(3), 3–24.

Ocak, G., & Karakuş, G. (2018). Pre-service teachers' digital literacy self-efficacy scale development. *Kastamonu Eğitim Dergisi*, *26*(5), 1427–1436. https://doi.org/10.24106/kefdergi.1931

Öngören, S. (2021). Investigation of prospective preschool teachers' digital literacy and teacher readiness levels. *International Journal of Modern Education Studies*, *5*(1), 181–204. https://doi.org/10.51383/ijonmes.2021.90

Özcan, M. (2022). Evaluation of prospective teachers' digital literacy levels and mobile learning attitudes. *Journal of Adolescent & Adult Literacy Educational Technology and Online Learning*, *5*(2), 367–378. https://doi.org/10.31681/jetol.1020586

Pangrazio, L. (2016). Reconceptualising critical digital literacy. *Discourse: Studies in the Cultural Politics of Education*, *37*(2), 163–174. https://doi.org/10.1080/01596306.2014.942836

Rizal, R., Rusdiana, D., Setiawan, W., Siahaan, P., & Ridwan, I. M. (2021). Gender differences in digital literacy among prospective physics teachers. *Journal of Physics: Conference Series*, *1806*, 1–6. https://doi.org/10.1088/1742-6596/1806/1/012004

Saripudin, S., Budiyanto, I. B., Listiana, R., & Ana, A. (2021). Digital literacy skills of vocational school teachers. *Journal of Engineering Science and Technology*, *2*(1), 41–56.

Situmorang, K., Nugroho, D. Y., & Pramusita, S. M. (2020). English teachers' preparedness in technology enhanced language learning during Covid-19 pandemic – Students' voice. *Jo-ELT (Journal of English Language Teaching) Fakultas Pendidikan Bahasa & Seni Prodi Pendidikan Bahasa Inggris IKIP*, *7*(2), 57-67. https://doi.org/10.33394/jo-elt.v7i2.2973

Sulasmi, E. (2022). Primary school teachers' digital literacy: An analysis on teachers' skills In using technological devices. *Journal of Innovation in Educational and Cultural Research*, *3*(2), 140–145. https://doi.org/10.46843/jiecr.v3i2.81

Suryana, Y. (2013). Teachers' perception on ICT-based English teaching. *English Review: Journal of English Education*, *2*(1), 17–24.

We Are Social. (2022). Digital 2022: Global overview report – global digital insights. Data Reportal

Yaraş, Z., & Öztürk, F. K. (2022). Society 5.0 in human technology integration: Digital transformation in educational organizations*. *International Journal of Progressive Education*, *18*(1), 458–474. https://doi.org/10.29329/ijpe.2022.426.26