

# Students' Digital Literacy In English Learning At Senior High School

**Muhammad Firos Salam Dimiyati**  
Universitas Swadaya Gunung Jati

---

## Article Info

### Article history:

Received: September 15<sup>th</sup>, 2024

Revised: October 5<sup>th</sup>, 2024

Accepted: November 2<sup>nd</sup>, 2024

### Keywords:

Digital Literacy

English Learning

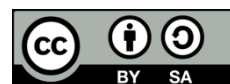
Qualitative Research

---

## ABSTRACT

This research investigates the level of digital literacy in English learning among senior high school students. The study was motivated by the results of the Program for International Student Assessment (PISA) conducted by the Organization for Economic Cooperation and Development (OECD). In 2009, Indonesian students ranked 57th with a score of 396 (OECD average 493), and in 2012, they dropped to 64th with the same score (OECD average 496). Research by Mitchell Kapoor cited in Nasrullah (2017) highlighted that while young people have good access to digital media, their ability to use it effectively for self-development is lacking, as indicated by a declining reading culture. The main problem addressed is determining the level of digital literacy in English learning among high school students. The research used a qualitative approach, focusing on students in grades 10, 11, and 12 at SMAN 2 Majalengka during the 2019-2020 academic year. Data collection involved questionnaires and interviews, and data analysis followed the steps of data reduction, data display, and conclusion drawing. Findings showed that most students did not participate in extracurricular English learning groups or join external English study groups. They sometimes used digital media, computers, and internet resources for assignments and communication related to English learning. Students frequently accessed browsers for English learning materials and very often used translation applications. Overall, the research concluded that the digital literacy level among students at SMAN 2 Majalengka is at level two.

*This is an open access article under the [CC BY-SA](#) license.*



---

## Corresponding Author:

Muhammad Firos Salam Dimiyati

Email: [firossalam2023@gmail.com](mailto:firossalam2023@gmail.com)

---

## 1. INTRODUCTION

Indonesia has emerged as one of the countries with the highest number of internet users in the world, reflecting the rapid growth of digital connectivity across the nation. According to a report by the Indonesian Internet Service Providers Association (APJII) in collaboration with the University of Indonesia's Communication Research Center, the number of internet users in 2015 reached 88.1 million. This figure surged to 132 million in 2017, signifying a dramatic 51 percent increase in just one year (wearesocial.sg, 2017). Such significant growth underlines the increasing digital presence in various aspects of daily life, particularly among youth. The extensive digital engagement among Indonesian youth, estimated at around 70 million individuals, highlights the potential and the challenges of

digital literacy in educational contexts. Young people in Indonesia spend an average of nearly five hours per day online using various devices such as smartphones, personal computers, and laptops. This substantial digital activity prompts questions about how well students utilize online resources for educational and self-development purposes. Despite the opportunities afforded by the digital age, there is a concern that digital access has not always been accompanied by the necessary skills to critically and effectively navigate and utilize digital content.

The concept of literacy has evolved significantly in response to technological advancements. Literacy, which was once defined solely as the ability to read and write (UNESCO, 2005), has expanded to encompass a broader range of competencies, including digital literacy. Digital literacy involves not just basic reading and writing skills but also the ability to locate, evaluate, and use digital information critically and responsibly. This shift is especially pertinent in the 21st century, where educational success is increasingly tied to the capacity to understand and engage with digital content in a reflective and analytical manner. However, current practices in schools across Indonesia show that digital literacy skills are not being fully realized. The Programme for International Student Assessment (PISA) results highlight this gap. In 2009, Indonesian students ranked 57th in reading comprehension with a score of 396, below the OECD average of 493. This trend continued in 2012, with students ranking 64th and maintaining the same score while the OECD average rose to 496. These outcomes suggest that the educational system has not yet effectively adapted to foster the critical literacy skills needed to support lifelong learning in an increasingly digital world (Bachtiar, Juhana, & Pratiwi, 2024; Bachtiar & Puspitasari, 2024).

To address these challenges, the Ministry of Education and Culture launched the School Literacy Movement (Gerakan Literasi Sekolah/GLS), aimed at improving literacy rates by involving various stakeholders in the educational sector. This initiative spans central, provincial, and district levels and incorporates the active participation of external and community elements, such as parents, alumni, and the business sector. While this movement marks an essential step forward, its focus on traditional literacy does not fully capture the unique demands of digital literacy in the modern era. Moreover, studies indicate that despite having substantial digital access, many young people lack the proficiency to utilize these tools for meaningful educational purposes. Research by Mitchell Kapoor in Nasrullah (2017) revealed that while young individuals are skilled in accessing digital media, their ability to use this media for obtaining self-development information remains limited. This deficiency is further compounded by the diverse nature of digital content, which varies widely in terms of relevance, credibility, and quality (Hagel, 2012; Irasuti & Bachtiar, 2024). The proliferation of media outlets in Indonesia, which reached approximately 43,400 by 2017, with only 243 officially registered with the Press Council, underscores the challenges students face in discerning reliable information (Kumparan, 2017).

Research on digital literacy at the university level, such as the study conducted by Tatiana Shopova in 2014, highlights the importance of improving students' digital literacy and ICT skills for their academic success. The study reveals that many students, although proficient in using social media, emails, and engaging in online communities, often lack the necessary competencies to effectively utilize information and communication technologies (ICT) for academic tasks and problem-solving. This gap in digital skills affects their ability to fully engage in the learning process and perform well in their studies. It is crucial for educational institutions to recognize the need for fostering comprehensive digital literacy that not only prepares students for the digital demands of academia but also equips them with skills that enhance their competitiveness in the labor market. This issue, therefore, is significant as it reflects the growing importance of digital literacy in both academic and professional contexts. This context forms the basis for exploring how digital literacy is

---

integrated into English learning at the senior high school level. English has been a compulsory subject in the Indonesian curriculum since junior high school, making it an ideal area to study the application of digital literacy. Understanding how students and educators engage with digital resources in English learning can provide insights into the effectiveness of current educational strategies and identify areas for further development.

Considering these observations, the researcher seeks to explore the extent and effectiveness of digital literacy usage within the context of English learning at the senior high school level. Understanding how senior high school students integrate digital literacy into their learning processes provides valuable insights into their ability to navigate, utilize, and benefit from digital environments to support their educational outcomes. By examining the different levels at which digital literacy is demonstrated in English learning, this research aims to uncover whether students are merely using basic digital skills or if they are advancing toward more sophisticated and transformative digital practices that enhance learning experiences. This aligns with the research question: What are the levels of digital literacy in English Learning at Senior High School? The findings will contribute to the broader understanding of how digital competencies are being developed and applied in educational contexts, which is increasingly vital in a digitally driven academic landscape.

## **2. LITERATURE REVIEW**

### **2.1 Digital Literacy**

The concept of digital literacy was popularized by Paul Gilster in *Digital Literacy* (1997), where it is defined as the ability to understand and use information in multiple forms through computer devices. This foundational idea goes beyond basic technical skills, encompassing the cognitive ability to process information effectively. Bawden (2001) expands on this by connecting digital literacy with computer and information literacy, noting that computer literacy emerged in the 1980s with the rise of microcomputers, while information literacy became prevalent in the 1990s as networked technology facilitated information compilation and dissemination. According to Bawden, digital literacy involves technical and analytical skills for accessing, compiling, understanding, and distributing information.

Further enriching this perspective, the 2018 report from the UNESCO Institute for Statistics and the Global Alliance to Monitor Learning describes digital literacy as a comprehensive set of abilities, including accessing, managing, integrating, evaluating, and creating information through digital technology for active societal participation. Ferguson, cited in Sutrianto (2016), outlines digital literacy's multifaceted nature, breaking it into components like basic literacy, library literacy, media literacy, technology literacy, and visual literacy. These elements highlight the progression from foundational reading and writing skills to more complex digital competencies necessary for navigating the modern digital world.

### **2.2 Digital Literacy Skills**

Digital literacy encompasses a range of skills and competencies that go beyond basic computer use. While there is no official list of skills associated with digital literacy, Bawden (2001) outlines several key components. First, digital literacy involves "knowledge assembly," which refers to the ability to gather reliable information from diverse sources. This requires the retrieval of information from various platforms, as well as critical thinking skills to evaluate the validity and completeness of the sources, especially considering the limitations and potential biases of online content. The ability to assess the reliability of information is crucial in the digital age, where misinformation can easily spread.

---

Another important aspect of digital literacy is the capacity to read and understand non-sequential and dynamic material (Bawden, 2001). In today's digital environment, information is often presented in non-linear formats, such as hyperlinks and multimedia, making it essential for individuals to adapt their reading strategies. Additionally, digital literacy includes an awareness of the value of traditional tools in conjunction with modern, networked media, as well as the understanding of "people networks" as valuable sources of advice and help. These networks, such as social media platforms and online communities, provide opportunities for collaboration and sharing of information.

Managing incoming information is also a critical skill in digital literacy. Using filters and agents to sort and organize information can help individuals cope with the overwhelming amount of data available online. Moreover, digital literacy involves being comfortable with publishing and communicating information, whether through creating content or engaging in online discussions. This ability to both access and share information is a key competency in a digitally connected world. Gilster (1997) further summarizes these aspects by identifying four core competencies of digital literacy: internet searching, hypertext navigation, knowledge assembly, and content evaluation. While these competencies form the foundation of digital literacy, they do not encompass all the challenges and skills needed to navigate the digital landscape. Digital literacy is multifaceted and continuously evolving, as new tools and technologies emerge.

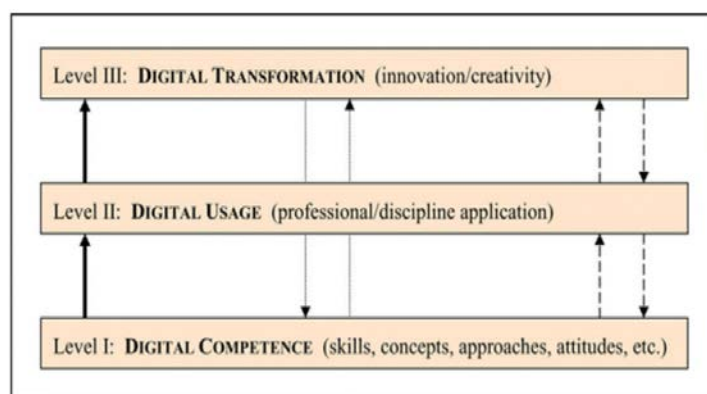
### 2.3 Digital Literacy Levels

Mayes and Fowler, as cited in Martin (2009), propose a structured framework that explain three levels of digital literacy. The first level of digital literacy is Digital competence. Martin (2009) highlights that digital competence encompasses various processes using digital tools across diverse tasks, such as academic writing or multimedia presentations, involving resources like text, images, and videos. Mastery ranges from basic skills to advanced analytical levels, but defining precise levels of expertise can be challenging. To address this, Martin (2003b) categorizes digital competence into three distinct professional development levels: aspirant, practitioner, and consultant. This framework underscores the significance of transferable key competencies for effective participation in both personal and professional contexts.

The second Level of digital literacy is Digital Usage. Allan Martin explains that digital competence is mainly about applying digital skills in specific professional or life contexts. The way people use digital tools depends on their personal experiences and the requirements of the task they are working on. Each person brings their own level of digital literacy to the situation, and the way they use digital tools is shaped by the context of their profession or community. This means that digital skills are not just about knowing how to use technology but are also influenced by the specific needs of the job or activity, becoming a natural part of the culture in professional groups, which Wenger calls "communities of practice."

The third level of digital literacy, referred to as digital competence, focuses on using digital tools to promote innovation and creativity. At this stage, individuals or groups leverage their digital skills to drive meaningful changes within their professional or community contexts. This transformation can occur at various levels individual, group, or organizational and is characterized by the ability to create digital products, offer new solutions, and contribute to progress in a specific domain. While reaching this level of transformation is not a requirement for digital literacy, it underscores the importance of advanced digital skills in fostering growth and innovation. Digital competence is about more than just using digital tools effectively; it involves applying those tools in ways that create value and lead to significant, positive changes in the digital landscape.

---



### 3. METHOD

#### 3.1 Research design

This research employs a qualitative approach, which centers on gaining an in-depth understanding of a topic by capturing the perspectives of the individuals being studied. Unlike quantitative methods, which focus on numerical data and statistical analysis, qualitative research delves into exploring complex human experiences such as ideas, perceptions, opinions, and beliefs factors that cannot be effectively measured through numbers alone. As noted by Sulisty-Basuki (2006), the primary goal of qualitative research is to provide a comprehensive and nuanced understanding of a particular subject through the lens of human experiences and viewpoints. This approach allows researchers to interpret and contextualize how participants perceive their world, adding depth to the findings. Kirk and Miller, as cited in Moleong (2004), further emphasize that qualitative research is fundamentally rooted in observing individuals within their natural environments. By documenting interactions and using participants' own language, researchers can accurately describe their experiences, making the insights gained more authentic and reflective of real-life situations. This method thus enables a holistic exploration that unveils the subtleties and underlying meanings behind human behavior and interactions.

#### 3.2 Setting and Participants

This research was carried out at SMAN 2 Majalengka, a high school located in Majalengka, Jawa Barat, Indonesia, with a total student population of 1,296 during the 2019-2020 academic year. To gather data, the researcher used a sampling method called area sampling, or cluster sampling, as explained by Creswell (2008). This method is useful when selecting participants from specific groups or classes within a larger population. Instead of choosing students randomly from the entire school, the researcher focused on particular grades (10, 11, and 12) and selected a sample of 324 students from those grades to represent the entire student body. These 324 students were chosen as the larger group, and by studying this sample, the researcher can make inferences about the overall student population at the school. The use of area sampling helps streamline the process and ensures that the data collected accurately represents the diverse perspectives within the school.

#### 3.3 Research Instruments

This study used questionnaires and interviews to collect data. In qualitative research, the researcher is considered the primary instrument, playing a crucial role in guiding the research focus, data collection, analysis, and interpretation (Sugiyono, 2010; Creswell,

2010). Researchers must be fully immersed in the research context and prepared to understand the situation deeply (Sukmadinata, 2010). This combination of questionnaires and interview allows comprehensive data gathering, ensuring thorough understanding and accurate interpretation of the observed phenomena. The questionnaire was designed to gather data about students' digital literacy levels in English learning, while the interview guide was used to gather supporting data, allowing the researcher to explore the students' experiences and perceptions in more depth.

### 3.4 Data Collection

The data for this research were collected using both questionnaires and interviews. According to Creswell (2010), qualitative data collection occurs in natural settings where researchers interact directly with participants to obtain authentic and meaningful insights, as well as a deeper understanding of the subject being studied. In this case, the researcher engaged with students from SMAN 2 Majalengka to gather data on their digital literacy practices in English learning. The questionnaire, a key tool in the research, was designed to collect data on specific research variables. It was structured to gather information about the students' use of digital media, tools, and resources for learning English. This approach helped ensure that the data collected was directly relevant to the research objectives.

In addition to the questionnaire, interviews were conducted to supplement and deepen the data collected from the participants. Interviews are an essential method in qualitative research because they allow researchers to gain more profound insights into participants' perceptions, experiences, and interpretations of the studied phenomena. Unlike questionnaires, interviews provide an opportunity for researchers to engage directly with participants, creating a space for richer, more detailed responses that may not be captured through observation or closed-ended questions alone (Sugiyono, 2010). The interview process allows for flexibility, enabling the researcher to ask follow-up questions, clarify responses, and probe deeper into specific aspects of the participants' experiences. In this research, the researcher conducted interviews with a total of 6 students from SMAN 2 Majalengka, representing grades X, XI, and XII. The sample included two students from grade X, two from grade XI, and two from grade XII, ensuring a balanced representation of students at different levels of their Senior High School education. The purpose of these interviews was to gather qualitative data regarding students' personal experiences, challenges, and perspectives on how they apply digital literacy in their school activities, particularly in their English learning. By incorporating interviews, the research aimed to complement the survey data and provide a deeper, more nuanced understanding of how digital tools and resources are used by students in their daily educational practices. This approach was intended to enhance the overall quality and depth of the research findings.

### 3.5 Data Analysis

In the data analysis stage, researchers follow the three key pathways outlined by Miles and Huberman (1994). The first stage is data reduction, a critical step in managing the vast amounts of data collected during fieldwork. As researchers immerse themselves more deeply in the research process, the data becomes increasingly complex and detailed. To make sense of this, researchers need to reduce the data by summarizing the most important points, focusing on key themes, and eliminating irrelevant or unnecessary information. According to Creswell (2010), this process involves categorizing the data in a systematic manner, reviewing it multiple times, and refining the information to ensure that it aligns with the research objectives. The goal of data reduction is to clarify the patterns and trends within the data, which makes it easier for researchers to conduct further analysis and draw meaningful conclusions.

---

The next stage is data display, where the researcher organizes and presents the reduced data. The purpose of this step is to visualize and communicate the data in a way that highlights important relationships and trends. Researchers can present the data through various forms, including narrative descriptions, charts, diagrams, or flowcharts. This step is vital because it allows researchers to effectively communicate their findings and make the data accessible for interpretation. By presenting the data in an organized manner, researchers can help themselves and others better understand the connections between different categories and how they relate to the research questions. In qualitative research, this stage often involves writing up detailed descriptions or reports that present the findings in a coherent and clear way.

The final step in the data analysis process is conclusion drawing. This stage involves interpreting the data and drawing conclusions that answer the research questions or provide insights into the research problem. As Miles and Huberman (1994) explain, qualitative research often does not provide clear-cut answers, and the conclusions may evolve as new insights emerge during analysis. Nevertheless, the goal is to make sense of the data by providing a comprehensive understanding of the issues explored in the study. In some cases, the conclusions may confirm the initial research problem, while in others, they may lead to new directions or hypotheses. According to Sugiyono (2010), the conclusions should offer a clear response to the problem formulation and provide meaningful insights that contribute to the broader understanding of the topic under investigation.

## **4. RESULTS AND DISCUSSION**

### **4.1. Questionnaire**

The questionnaire results indicate that students use digital media in varying frequencies to support their English learning. A majority of students (46.60%) often use translation applications like Google Translate, while 35.19% frequently open browsers to access English subject matter. Many students (36.42%) also search for English content through multiple browsers, and 39.51% sometimes access platforms like YouTube to enhance their language skills. While 37.04% of students sometimes use English learning websites, 34.57% report using digital media to complete assignments. Notably, a large portion of students (66.36%) never participate in extracurricular English learning groups, and 69.44% never join external English study groups. Additionally, 41.36% sometimes submit assignments digitally, and 32.41% use digital tools to ease their understanding of English.

### **4.2. Interview**

The interviews with six students from SMAN 2 Majalengka revealed various insights into the use of digital media in learning English. The students primarily used digital media for supplementary material not covered in textbooks, as well as for listening, speaking, and translation activities. All students stated that they frequently used digital media for English learning and found it helpful in improving their understanding of grammar, speaking, listening, and other aspects of English. All six students used digital media to complete assignments given by their teachers, with four using smartphones and two using both smartphones and laptops. Four students reported always relying on digital media as a learning source, while two did not use it consistently. Five out of six students indicated that they accessed digital media to ensure the objectivity, accuracy, and reliability of sources relevant to their assignments, while one student did not.

---

All six students confirmed using digital media as a problem-solving tool in learning English and combined multiple digital resources such as YouTube, Google Translate, and other translation apps. Four students frequently updated their digital tools, whereas two only did so occasionally. Regarding interactions, three students often communicated with their English teachers using digital media, while the other three did so occasionally. Four students used digital media to interact with others relevant to their English learning, but two did not. Three students participated in English learning communities at school, while three did not. Outside of school, three students joined digital communities for English learning, and the remaining three did not participate in such groups. These findings indicate that while the use of digital media in English learning is prevalent among students, there is variation in how often and in what ways it is used to support their studies.

#### 4.3. Discussion

The research findings, gathered from both questionnaire and interview data, provide a comprehensive overview of the digital literacy practices among students at SMAN 2 Majalengka. It was found that most students did not actively participate in extracurricular English learning groups or join English study groups outside of school, nor did they frequently use the school's internet network for English learning. However, a significant portion of students regularly engaged in digital activities to enhance their learning experience. Many students sometimes utilized digital media resources, such as computer programs and various software including digital videos, video games, web pages, and databases, alongside social media platforms. They occasionally operated digital tools (mouse, keyboard, printer) and accessed online video platforms like YouTube, Me Tube, and Periscope to support their English language skills.

Students were also reported to sometimes visit English learning websites, use digital media for completing and submitting assignments, and incorporate these tools to simplify and accelerate their learning process, making it more engaging and enjoyable. Moreover, they occasionally employed digital communication tools as supplementary resources for English learning. On a more frequent basis, students opened browsers (e.g., Internet Explorer, Mozilla, Opera, Chrome) to search for English content and often utilized translation applications such as Google Translate, Microsoft Translator, Translate Voice, and Easy Language Translator to aid in their understanding and task completion. These findings underscore the diverse range of digital media usage among students, revealing a varied but meaningful integration of digital tools in their educational practices.

There are three levels of digital literacy (Martin, 2009). Digital competences refer to a range of skills involving the effective use of digital tools in wide area. These skills include searching for information online, creating and editing documents, communicating electronically. Level 2 is the digital usage which is the application of digital competence within specific professional or domain contexts which in this study refers to students and their ability to use the digital tool in problem solving study problem. Level 3 is Digital Transformation. This level is reached when students use their digital skills to create new ideas, foster innovation, and drive meaningful changes in their work or field of expertise.

Based on the research findings and Martin's (2009) theory of digital literacy levels, it can be concluded that the digital literacy practices among students at SMAN 2 Majalengka predominantly align with Level 2: Digital Usage. While students do not frequently participate in extracurricular English learning groups or utilize the school's internet for learning, they do show active engagement with digital tools to support their education. The students demonstrated digital competence through activities like using browsers for research, employing translation applications, accessing online learning platforms, and submitting assignments digitally. These practices illustrate that they apply digital skills within their



educational context to enhance their learning, solve academic problems, and support English language acquisition.

The findings also indicate that students have not yet reached Level 3: Digital Transformation, where digital skills would be used to foster innovation or create significant changes in their academic environment. While students effectively use digital tools for practical tasks and problem-solving, there is limited evidence of them leveraging these skills for creating new ideas or transformative learning experiences. Thus, SMAN 2 Majalengka's students are best characterized as operating within Level 2 of digital literacy, showing capable use of digital tools within their educational sphere but not yet achieving the innovative and creative application required for full digital transformation.

#### 4. CONCLUSION

Based on the research findings, it can be concluded that the students of SMAN 2 Majalengka demonstrate a solid understanding of digital literacy, particularly in the context of their English learning. They actively use various digital tools such as browsers, translation applications, and online learning platforms to support their academic needs. These practices align with Level 2 of digital literacy, as defined by Martin (2009), where students apply their digital competencies to solve academic problems, conduct research, and enhance their learning experiences. However, their use of digital tools is primarily focused on practical tasks rather than fostering innovation or transforming their academic practices.

Although the students show proficiency in using digital media within their educational context, the research reveals that they have not yet reached Level 3: Digital Transformation. At this stage, digital tools would be used to create new ideas, foster innovation, and drive significant changes in the learning environment. The findings suggest that while students at SMAN 2 Majalengka are effectively integrating digital tools into their education, they are still at the stage where these tools are used primarily for task completion and problem-solving, rather than for innovative or transformative purposes. Therefore, the students' digital literacy practices are best characterized as falling within Level 2, indicating a competent but not yet transformative use of digital resources in their learning processes.

#### REFERENCES

- Acharya Bidhan. (2010). *Questionnaire Design. For a Training – cum-Workshop in Research Methodology Organised by Centre for Post-graduate Studies*. Nepal Engineering College.
- Asosiasi Penyelenggara Jasa Internet Indonesia (APJII). *Penetrasi & Perilaku Pengguna Internet Indonesia* (2017).
- Bachtiar, B., Juhana, J., & Pratiwi, W. R. (2024). Indonesian English Language Teachers' Conceptions of Critical Thinking: Challenge and Strategy. *International Journal of Evaluation and Research in Education (IJERE)*, 13(1), 617.  
<https://doi.org/10.11591/ijere.v13i1.26467>
- Bachtiar, B., & Puspitasari, M. (2024). Barriers and Strategies in Implementing Innovative and Collaborative Learning: A Case of Indonesian English Language Teaching. *IJEE (Indonesian Journal of English Education)*, 11(1), 61–76.  
<https://doi.org/10.15408/ijee.v11i1.38434>
- Bawden, D. (2001). *Information and Digital Literacies: A Review of Concepts in Journal of Documentation*, 57(2), 218-259.
- Creswell Jhon W.(2016). *Research Design: Pendekatan Metode Kualitatif, Kuantitatif, dan Campuran*. Pustaka Pelajar.
- Irasuti, I., & Bachtiar, B. (2024). Empowering Indonesian EFL Teachers: The Transformative Impact of Visual Literacy Training on Teaching Materials. *International Journal of*
-

- Learning, Teaching and Educational Research*, 23(8), 116–136.  
<https://doi.org/10.26803/ijlter.23.8.7>
- Martin Allan. (2009). *Digital Literacy for the Third Age: Sustaining Identity in an Uncertain World*. *eLearning Papers*. www.elearningpapers.eu No. 12 • February 2009 • ISSN 1887-1542.
- Miles Matthew B., A. Huberman Michael, and Saldaña Johnny. *Qualitative Data Analysis, A Methods Sourcebook*.
- Knobel Michele and Colin Lankshear. (2006). *Digital Literacy and Digital Literacies: Policy, Pedagogy and Research Considerations for Education*. *digital kompetense* | 1-2006 | vol. 1 | side 12–24.
- Mueller, D.J. (1992). *Mengukur Sikap Sosial: Pegangan untuk Peneliti dan Praktisi*, (E.S. Kartawidjaja. Jakarta: radar Jaya Offset
- Nasrullah, R., Aditya, W., Satya, T.I., Nento, M.N., dkk. (2017). *Materi Pendukung Gerakan Literasi Digital*. Jakarta : Kementerian Pendidikan dan Kebudayaan.
- Creswell Jhon W.(2016). *Research Design: Pendekatan Metode Kualitatif, Kuantitatif, dan Campuran*. Pustaka Pelajar.
- Knobel Michele and Colin Lankshear. (2006). *Digital Literacy and Digital Literacies: Policy, Pedagogy and Research Considerations for Education*. *digital kompetense* | 1-2006 | vol. 1 | side 12–24.
- Mueller, D.J. (1992). *Mengukur Sikap Sosial: Pegangan untuk Peneliti dan Praktisi*, (E.S. Kartawidjaja. Jakarta: radar Jaya Offset
- Nasrullah, R., Aditya, W., Satya, T.I., Nento, M.N., dkk. (2017). *Materi Pendukung Gerakan Literasi Digital*. Jakarta : Kementerian Pendidikan dan Kebudayaan.
- Acharya Bidhan. (2010). *Questionnaire Design. For a Training – cum-Workshop in Research Methodology Organised by Centre for Post-graduate Studies*. Nepal Engineering College.
- Asosiasi Penyelenggara Jasa Internet Indonesia (APJII). *Penetrasi & Perilaku Pengguna Internet Indonesia* (2017).
- Bawden, D. (2001). *Information and Digital Literacies: A Review of Concepts in Journal of Documentation*, 57(2), 218-259.
- Martin Allan. (2009). *Digital Literacy for the Third Age: Sustaining Identity in an Uncertain World*. *eLearning Papers*. www.elearningpapers.eu No. 12 • February 2009 • ISSN 1887-1542.
- Miles Matthew B., A. Huberman Michael, and Saldaña Johnny. *Qualitative Data Analysis, A Methods Sourcebook*.
- Selly. (2016). *The Influence Of E-Books On Reading Habit And Reading Comprehension Achievement Of The Eleventh-Graders Of Sma Xaverius 1 Palembang*. *Journal Of English Literacy Education*, Vol. 3, No. 1, May. 2016.
- Shopova T. (2014) *Digital Literacy of Students and Its Improvement at the University*, *Journal on Efficiency and Responsibility in Education and Science*, Vol. 7, No. 2, pp. 26-32, online ISSN 1803-1617, printed ISSN 1803-1617, doi: 10.7160/eriesj.2014.070201.
- Yoram Eshet-Alkalai. (2004). *Digital Literacy: A Conceptual Framework for Survival Skills in the Digital Era*. *Jl. of Educational Multimedia and Hypermedia* (2004) 13(1),93-106. Mayer, R. E. (2001). Cambridge University Press.
-