A SYSTEMATIC REVIEW: DIGITAL LITERACY FOR STRENGTHENING CHARACTER IN FACING THE ERA OF SOCIETY 5.0

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Abstract

Era Society 5.0 is a concept to solve various social problems in the Industrial Revolution 4.0 era, such as a moral crisis and a decline in character values. Digital literacy is a solution to strengthen students' character values. This article aims to present information about the role of digital literacy in supporting character in the era of Society 5.0. The method used in this study was PRISMA (Preferred Items for Systematic Reviews and Meta-Analysis), which consisted of three steps: identification, screening, and inclusion. The number of articles found is 512 from 2018 to 2022. This study decided to review 17 items based on three systematic literature review analysis steps. The results showed that (1) the most frequently used method is the qualitative method with data collection techniques such as interviews, observation, and documentation, (2) technological capabilities and digital literacy competencies must be balanced, (3) schools need to apply digital literacy competencies to strengthen the value of the character to avoid negative impact from using technology to remain competitive in the international arena while remaining polite and of good character.

Keywords: Character Building; Digital Literacy; Era Society 5.0


INTRODUCTION

Development technology is currently in the digital era (Suardi et al., 2022). Previously, world civilization was in the age of the Revolution Industry 4.0 (Kurniawan, 2020) as a whole aspect with utilizing digital technology (Dito & Pujiastuti, 2021). The world is entering a revolution Society 5.0 (Keban, 2022). Era Society 5.0 was rolled out by the Government of Japan at the end of 2015 (Sá et al., 2021). Society 5.0 was created to make resolve turmoil disruption (Ariastika, 2022), as well as various challenges and problems social from innovation born in the era of the Revolution Industry 4.0 (Ramdani et al., 2020) like Internet on Things (IoT), Artificial Intelligence (AI), Big Data, and Robotics (Özdemir & Hekim, 2018), as well draft fulfillment needs humans to live comfortable side by side with technology (Putriani & Hudaidah, 2021). The invasion is feared to undermine the values of human character (Yuniarto & Yudha, 2021). Society 5.0 is a concept that was initiated as more humanistic with the rapid advancement of technology (Romadhianti et al., 2021), where humans are not only objects of technology but also subject to the control progress of technology (Rouf, 2019).
Sophistication technology makes man preoccupied with the adverse impact of utilization technology (Chauhan, 2017) because technology information development must be supported by digital skills (Surianti & Hadi, 2022). Lack of knowledge in the digital era causes various misuse of digital media (Vélez & Zuazua, 2017). Arising deviations such as bullying and reviling via social media result from access to the information obtained through digital media (Ramdani et al., 2020). This becomes a challenge for students’ character development (Khasanah & Herina, 2020) in utilizing technology (List, 2019).

Recognize the negative impact of the utilization of technology; therefore, competence literacy is needed from an early age (Danimdri & Yuliani, 2018). Literacy that is important to develop in the era of Society 5.0 is digital literacy (Saputra & Al Siddiq, 2020). Digital literacy is vital in making participants educated and skilled in utilizing computerized media (Hadiansah et al., 2021). Digital literacy is setting skills or competence in the use of technology (List, 2019) for finding and critically evaluating information, reading and understanding multimedia text and hypermedia (Masyhura & Ramadan, 2021), accessing, integrating, analyzing, building new knowledge, and communicate to others (Susilawati et al., 2021).

Technologically, besides having positive benefits, it can cause conflict and negatively impact the students’ character (Suardi et al., 2022). Various conflict indicates that Indonesia has already experienced a crisis in identity and character (Alfiah et al., 2021), even though character-building is one of the goals of Indonesian education (Musa et al., 2022). The statement above is reinforced by Triyanto (2020), that the values character of students keeps decreasing in this digital era. Technology development makes them lazy and feels they have their private world, which causes a more fading value of a character (Laksana, 2021). Digital literacy is essential in forming the character of students (Masyhura & Ramadan, 2021). Strengthening character through digital literacy is essential in implementing education in the digital era (Surianti & Hadi, 2022). Based on the rampant use of digital media, schools should accelerate students' character by providing digital literacy skills (Kurniawan & Pambudi, 2018). According to Pentianasari et al. (2021), character strengthening could be strengthened through supplies prowess digital literacy. Students with competent digital literacy will be capable of limit engage in activities and behaviors that lead to a decline in values and character (Dewi et al., 2021). From the description, cultivating and strengthening values characters in the Society 5.0 era can be held through cultivating prowess and digital literacy.

Based on the description above, the article’s objective is to serve as a review systematic regarding the Role of Digital Literacy in Strengthening Character in Facing the Era of Society 5.0.

METHODS

The scope of this research examines digital literacy, strengthening character, and the era of society 5.0. The method used in this article review is The Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) 2020 by analyzing the article through article identification, screening, and the final step is article inclusion (Page et al., 2021). The results of searching articles in the period 2018 to 2022 found 512 relevant articles. Researchers decided to review 17 articles after thorough analysis. The procedure for analyzing reports through PRISMA is presented in the chart shown in Figure 1.
The identification process is the first article downloaded from journal databases: Google Scholar, Academia, ResearchGate, Publish or Perish, Elsevier, Wiley, Emerald, ERIC, and Sage. Search results get 512 articles from some keywords entered, namely "digital literacy in the era of society 5.0", "based digital literacy character in the era of society 5.0", "digital literacy in elementary schools," "digital literacy and strengthening character," "character student in 21st century", continued to write down keywords that have the equivalent word for the digital era is "technology," "in the era of society 5.0." The following keyword is "digital literacy and society era 5.0", "digital literacy and character," "character in society era 5.0", "digital literacy in elementary," and "digital literacy primary school." During the browsing process, they downloaded articles from a restricted database from the period 2018 to the year 2022. Identification process article in a manner thoroughly conducted, the researcher enters whole downloaded articles into in "In fast Duplicate File" application. Of the 512 files, 76 of the same files; via application,
the duplicate articles have been deleted. The next step is filtering the remaining pieces, which are 436 items.

The screening process article started with choosing a journal, where review books, papers, and books were excluded. Then select the most relevant articles with title research: the title and author filter based on the suitability of the content study in a thorough manner. The article title and exclusive content are not relevant and are excluded. Selected articles 47 items later researcher enter article the to in one folder. Filtering appropriateness article next is based on year. Selected papers are from 2020 to 2022, so reports until Step filtering obtained 17 of the most relevant articles with title research.

In step inclusion, identifying article criteria appropriateness, 17 items were included in one folder for analysis thoroughly. While the article is analyzed and divided, information in the grouped table becomes several topics divided into columns like author and year, method along technique data collection, and results in findings research. Author name identified for include who was contributing author, year included for include novelty from journal to be determined, method study for serve type research and techniques which data collection is most appropriately used for analysis later, and results in research to be made as review references, as well as instruction for study more, continue.

RESULTS & DISCUSSION

Results

The results of the analysis of 512 journals taken from several databases have been analyzed using the PRISMA method through various stages. From the results of the article screening, 17 articles were obtained to be reviewed in detail. The 17 article items are presented in Table 1.

Table 1. Article Data Reviewed

<table>
<thead>
<tr>
<th>No.</th>
<th>Name</th>
<th>Method</th>
<th>Findings</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Bambang Yuniarto, Rivo Panji Yudha, 2021</td>
<td>Qualitative descriptive with library research approach. The object of study: scientific articles and relevant books.</td>
<td>Character values are instilled: independence, integrity, cooperation, nationalism, religiosity, and responsibility, as well as technology ethics through digital literacy.</td>
</tr>
<tr>
<td>2.</td>
<td>Ahlah Syafiqo, M Melianah, 2020</td>
<td>Descriptive – Qualitative. Data collection by observation, interviews, and documentation</td>
<td>Schools apply digital literacy habits to build character to face the era of society 5.0 so that technological developments do not erode them.</td>
</tr>
<tr>
<td>3.</td>
<td>Rajab Agustini, Meysurah Sucihati, 2020</td>
<td>Descriptive-qualitative. Data collection by observation, documentation, and</td>
<td>Character education through the digital literacy movement to strengthen the character of independence, religiosity, nationalism, integrity, and</td>
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<tr>
<td>No.</td>
<td>Name</td>
<td>Method</td>
<td>Findings</td>
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<td>4.</td>
<td>Ni Kadek Wulan Ari Santi, Ni Putu Nia Rita Pariani, Ni Made Nindy Lusiana, Lianda D. Sartika, 2022</td>
<td>Descriptive – qualitative. Literature Study Approach by searching relevant journals, articles, books, and references.</td>
<td>The habituation of digital literacy skills can increase students' character values and help them face technological sophistication and various societal challenges 5.0.</td>
</tr>
<tr>
<td>5.</td>
<td>Syarif Abdullah, Jatu W. Wicaksono, 2020</td>
<td>Descriptive Qualitative. Literary Studies: books, scientific articles, and other sources related to the title.</td>
<td>Strategies for building character-based digital literacy (a) classroom management, (b) strengthening understanding of character values, (c) implementing character-based digital literacy, (d) understanding self-concept.</td>
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<tr>
<td>6.</td>
<td>Dinie Anggraeni Dewi, Solihin Ichas Hamid, Farah Annisa, Pingkan Regi Genika, Monica Octafiandi, 2021</td>
<td>Qualitative Descriptive Library Studies: relevant books, journals, and scientific articles</td>
<td>Educators can use Youtube and other social media to grow character through digital media, and socialization of digital ethics is needed.</td>
</tr>
<tr>
<td>7.</td>
<td>Sofyan Sauri, Nalahuddin Saleh, Anwar Sanusi, Mad 'Ali, Nunung Nursyamsiah, 2021</td>
<td>Descriptive Qualitative. Data collection: interviews, observation, documentation</td>
<td>Strengthening digital literacy-based characters: (a) learning administration planning, (b) learning with digital media, (c) learning evaluation with a Google form.</td>
</tr>
<tr>
<td>8.</td>
<td>Alfiah, Triyanto, Moch Muhtarom, 2021</td>
<td>Qualitative Descriptive with Library Studies approaches relevant journals, books, and scientific articles.</td>
<td>Digital literacy strengthens the character of responsibility, creates a critical and intelligent mindset, and guides students to behave positively.</td>
</tr>
<tr>
<td>9.</td>
<td>Abdul Wahab, Muhammad Mujtaba Mitra Zuana, Ade Risna Sari, Bagus Kuncoro, Yulius Luturmas, 2022</td>
<td>Qualitative Descriptive. Literature study of journals, scientific articles, and books relevant to the research title.</td>
<td>Character education strategy through digital literacy: getting used to reading learning resources on educational sites (internet), strengthening understanding of character values, and conducive classroom management.</td>
</tr>
<tr>
<td>10.</td>
<td>Fidia Tri Hera Ditaningsih, Kartika Nur Septianti, Rini P Rahayu, 2021</td>
<td>Qualitative Descriptive with Library Studies approaches journals and articles relevant to the research title.</td>
<td>Cultivating character through the digital literacy movement with the habit of watching videos about education for 15 minutes at the beginning of learning,</td>
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<tr>
<td>11.</td>
<td>Sherli Pentianasari,</td>
<td>Descriptive-qualitative. With a</td>
<td>Strengthening character education through thematic learning processes</td>
</tr>
<tr>
<td>No.</td>
<td>Name</td>
<td>Method</td>
<td>Findings</td>
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<td></td>
<td>Nisa A Fithri, Fadhilah D</td>
<td>literature study approach:</td>
<td>can utilize technology and social media.</td>
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<tr>
<td>11</td>
<td>Amalia, Badruli Martati, 2022</td>
<td>analysis of journals relevant to the title.</td>
<td></td>
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<tr>
<td>12</td>
<td>Susanto, 2021</td>
<td>Qualitative. Data collection: interview (zoom), WhatsApp voice call, virtual observation, questionnaire (google form), document study.</td>
<td>Strategies for instilling digital literacy were integrated into learning resources, with examples from educators and education staff. Digital literacy can prevent deviant behavior.</td>
</tr>
<tr>
<td>13</td>
<td>Rona Romadhianti, Ratna Dewi Kartika Sari, 2021</td>
<td>Descriptive - Qualitative. Data collection: questionnaires, documentation, and interviews.</td>
<td>Constraints in learning: limited human resources, facilities and infrastructure, location of school demographics, and management of digital media could be more optimal.</td>
</tr>
<tr>
<td>14</td>
<td>Triyanto, 2020</td>
<td>Descriptive – Qualitative. Collecting data using surveys, interviews, observation, and literature study</td>
<td>Challenge: learning about navigating digital ethics (balance, safety, bullying, copyright, plagiarism, and sexting).</td>
</tr>
<tr>
<td>15</td>
<td>Hengky Sofyan, Zulfi Dalilah, 2022</td>
<td>Descriptive - Qualitative. Library Studies. Analysis journals, books, and scientific articles.</td>
<td>Character education forms quality human resources. The five main pillars of character: are independence, nationalism, cooperation, integrity, and religion.</td>
</tr>
<tr>
<td>16</td>
<td>Yuli Diah Saptorini, Tengku Amanda Putri, 2022</td>
<td>Qualitative descriptive. Literature Study. Analysis of relevant journals, books, and scientific articles.</td>
<td>There are implementations of character education (a) active learning, (b) the use of technology to think critically, (c) digital literacy, and (d) a conducive learning environment.</td>
</tr>
<tr>
<td>17</td>
<td>Joseph Belen Keban, 2022</td>
<td>Qualitative Descriptive. Literature Study: Analysis of relevant scientific journals and books.</td>
<td>It is crucial to cultivate independence, religion, cooperation, integrity, and a nationalist character from one's self.</td>
</tr>
</tbody>
</table>

Discussion

Based on searches and analysis of articles, there are mixed results regarding character-based digital literacy in the era of Society 5.0. The increasingly massive development of technology (Ditaningsih et al., 2021) requires students to have the skills to use and take advantage of technological sophistication (Romadhianti et al., 2021) so as
not to fall into the adverse effects (Dewi et al., 2021) of the increasingly rapid technological developments (Chauhan, 2017). The results of Abdullah & Wicaksono’s (2020) research show that digital literacy based on character education is urgent to implement in elementary schools because the students are currently a decrease in value character (Triyanto, 2020). Thus indicating that schools need to apply digital literacy competencies to strengthen student character (Pentianasari et al., 2021). Relate to the results of research by Alfiah et al. (2021); digital literacy can strengthen the character of students because digital literacy competencies can create critical and intelligent mindsets and guide them to find, evaluate, use, and create information that demands positive behavior (Santi et al., 2022). A similar study by Dewi et al. (2021) shows that digital literacy plays a vital role in developing students’ character. Students tend to be interested in technology, like social media, so educators can use this to strengthen character through digital media. According to Yuniarto & Yudha (2021), character education through digital literacy can enhance the values of independence, integrity, cooperation, nationalism, and religiosity, which are the proper steps to face the era of society 5.0. The same thing was conveyed in the research by Agustini & Suchiati (2020), Sofyan & Dalilah (2022), and Keban (2022). Recognize the importance of digital literacy for strengthening character, so institutions must implement digital literacy habits in the learning process in schools. Schools also instill the understanding of the literal digital dimension to face the era of society 5.0 so that the rapid advancement of technology does not erode students and compete in the international arena (Ahlah & Melianah, 2020).

Strategies for character building, as conveyed by Abdullah & Wicaksono (2020), include (1) conducive classroom management, (2) strengthening understanding of character values, (3) understanding self-concept, and (4) implementation of character-based digital literacy. Yuniarto & Yudha (2021) conveyed that digital learning literacy can be developed through a multiliteracy model. Through multiliteracy competence, students can construct new knowledge, have better digital literacy skills in utilizing digital devices, and have a responsible, polite, social, and ethical character in technology. Sauri et al. (2022) explained more fully how to implement strengthening character education through digital literacy. This step is carried out through various activities, including (1) learning planning by utilizing digital devices, (2) the learning process utilizing digital media by playing videos that aim to improve the religious character of students and using PowerPoint in delivering material, (3) evaluating learning by using google forms. Evaluation activities are carried out by writing reports on students’ daily activities. This activity can strengthen the character of students. Implementation of character education through digital literacy can be done through various strategies, such as searching for and reading learning materials online (links provided by educators). Students are asked to summarize so that this can instill and strengthen independent, fond of reading, creative, and disciplined character (Wahab et al., 2022).

Character building can also be implemented through the school's digital literacy movement by watching educational videos for approximately 15 minutes at the beginning of learning (Ditaningsih et al., 2021). Saptorini & Putri (2022) stated that the implementation of character education strategies in the era of society 5.0, including (1) the use of technology through Artificial Intelligence (AI), where students can communicate and exchange information through digital media. The strategy is expected to form the character of critical thinking, independence, creativity, and integrity, (2) developing digital literacy skills with character to face the era of society, 5.0 (3) creating a conducive learning environment by utilizing technology. According to Susanto (2021), the benefits of digital literacy can prevent behavioral deviations in students, including; preventing bullying, avoiding access to harmful content, and preventing cybercrime.
Romadhianti et al. (2021) mention several obstacles to implementing digital literacy in schools, such as limited Human Resources (HR), limited facilities and infrastructure, management of digital literacy media that could have been more optimal, and the demographic location of the school. Challenges that must be faced to teach students about navigating ethics in the digital era include balance, safety and security, bullying, copyright and plagiarism, and sexting. Education policymakers must play an active role in the sustainable development of digital-based character education to ensure the implementation of effective character-based digital learning (Triyanto, 2020).

CONCLUSION

Based on the data collected and analyzed, the most frequent method used from reviewed articles is the method qualitative with various techniques of data collection, including interviews, observations, and documentation. Some of the findings from the research reviewed convey that schools need to apply digital literacy competencies to students to strengthen their character and avoid technology’s negative impacts. Keep abreast of developments in the digital era, which is currently in the era of society 5.0, so that students still have the skills to be digitally literate and can still compete in the international arena. However, students are also polite and have good character.

REFERENCES


Ramdani, D., Hidayat, D. N., Sumarna, A., & Santika, I. (2020). Ideal Character of


