Development of a Website-Based Integrated Welfare Literacy Model

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Abstract. The rapid progression of technology presents an opportunity to bolster literacy levels through digital means. This research delves into the creation of a website-based integrated welfare literacy model, targeting the education and teaching sectors. Collaborating with the Malang City Education and Culture Agency, the study's objective is to uplift teacher literacy, anticipating a ripple effect on student learning. Leveraging a design method grounded in a needs survey, the website's development follows a testing and dissemination approach. An explanatory qualitative methodology, aided by Focus Group Discussions, forms the backbone of data collection. Participants encompass teachers, students, parents, and librarians from secondary schools in Malang City, Indonesia. The accumulated data guides the formulation of a model, which subsequently informs the website design, piloted with a teacher cohort. Through this endeavor, the research illuminates the potential of web-based platforms in reshaping literacy landscapes, underlining the significance of digital interventions in contemporary education.
Keywords: Welfare literacy, knowledge management, web-based literacy.

1 Introduction

One of the current national development goals is poverty alleviation and the improvement of basic services through the equitable provision of quality education across Indonesia. Activities that strengthen literacy for the benefit of the community play a crucial role in achieving this goal. Research indicates that up to 55% of Indonesians who complete their education have limited abilities to cope with daily life due to poor literacy skills. Literacy through education must be complemented by adult literacy, the results of which should surpass educational instruction.

Adult literacy refers to the percentage of the population aged 15 and above who can read, write, and comprehend short and simple statements about daily life. In 2020, Indonesia scored 3.46 points. The following year, 2021, this increased to 3.49 points (a rise of 0.03 points). This year, Indonesia saw a further increase of 0.05 points, moving from 3.49 to 3.54 points (Agustini, 2023). To understand the various literacy skills in Indonesia, we must first grasp the concept of literacy. According to the National Assessment of Literacy for Adults, literacy is "the ability to use printed and written information to function in society, achieve one's goals, and develop one's knowledge and potential." This definition was used in 1992 and 2002 but may not fully apply to today's world. With the advancement of technology, there is a need for digital literacy (the ability to obtain information through digital media). Defining literacy clearly is not easy. Mikulecky and Diehl (1980) stated that establishing literacy goals is challenging because every cultural group has its own definition. However, in simple terms, literacy can be understood as an individual's ability to read, write, and understand information through various media, such as print and digital media.

Literacy can be divided into four levels: the ability to gather reading materials, understand implied meanings, and generate ideas, theories, creativity, and new innovations. The fourth level, which is the pinnacle, is the ability to produce high-quality products and services that can compete globally. With the development of technology and the internet, websites can be used to reach geographically distant communities. Websites have become a form of information management in the digital world. The adoption of websites serves different purposes in various sectors. In education, websites are used to innovate the learning process through e-learning (Sitepu et al., 2017). In the business sector, websites are used to reach a broader customer base by creating e-commerce (R. R. Rerung, 2018). Meanwhile, in the government sector, websites are used to achieve good governance through e-government (Saleh, 2015; Dunan, 2020). In the context of literacy, this website serves as a connecting medium for the enhancement of welfare literacy.

Therefore, this study aims to develop an integrated welfare literacy model through a website. A variety of literacies can significantly contribute to the welfare of society. Hence, the integration of literacy is carried out to provide easy access to the public and is expected to have an optimal positive impact.

2   Literature Review

The concept of literacy has evolved in tandem with the development of information and communication technology. Abidin et al. (2017) describe literacy as a developing concept that subsequently influences the use of various digital media in learning in classrooms, schools, and communities. According to Indarto (2017), literacy involves activities such as reading, writing, and practical activities that are adapted to knowledge and social relationships. Literacy encompasses the knowledge and skills needed for students to acquire, understand, analyze, and evaluate information, recognize meaning, express thoughts and feelings, develop ideas and opinions, form relationships, and engage in academic and extracurricular activities. Faizah et al. (2016) also offers a

different perspective on the concept of literacy in the context of the school literacy movement, which includes the ability to access information intelligently through activities involving watching, listening, reading, writing, speaking, using, and understanding.

Good basic literacy skills are a requirement in the 21st century. Basic literacy skills refer to how to apply core skills in everyday activities. There are six components of basic literacy: reading-writing-arithmetic (literacy); science literacy; technology, information, and communication literacy (ICT); financial literacy; cultural literacy; and citizenship literacy (Ministry of Education, Culture, Research and Technology, 2022).

Reading-writing-arithmetic (literacy) is the basic literacy related to the ability to listen, speak, read, write, and count. These abilities are used in analyzing to calculate, perceiving information, communicating, and describing information based on understanding and personal conclusions. Science literacy is the ability to use scientific knowledge to identify problems, draw conclusions based on evidence to understand nature and human-induced changes in nature, and make decisions. In scientific literacy, it is essential to distinguish between scientific and non-scientific issues so that scientific issues can be answered based on scientific evidence. Technology, information, and communication literacy (ICT) is the ability to understand technology's intricacies, ethics, and etiquette in using and utilizing technology. The ability to understand technology also refers to printing, presenting, and accessing the internet. In practice, ICT literacy includes turning computers on and off, managing and storing data, and operating software programs.

With good basic literacy skills, one can develop a thinking style that is in line with today's information demands, as expressed through information access capacity, information condition analysis, and alternative information system development. Additionally, one can create skills and work abilities using information sources. There are independent solutions to every problem by accessing, processing, storing, and delivering information (Landoy, Popa, Repanovici, 2020).

The advancement of technology has made it easier for people to acquire information as part of literacy activities, one of which can be done through websites. Jonathan and Lestari (2015) define a website or site as a collection of pages that display text data, static or animated image data, animation data, sound, video, and/or a combination of all, both static and dynamic, which forms a series of interconnected structures where each is connected by page networks (hyperlinks). Yumarlin (2016) provides the definition of a website as an address or location on the internet of a web page, generally creating HTML documents and can contain several photos or graphic images, music, text, and even moving images. Using this technology, information can be accessed 24 hours a day and is managed by machines.

It is also important to note some information about the components that make up a website. The first component is the domain, which can be likened to a product. Thus, the site is its brand. Writing an appealing domain can get someone into the site. Also, make sure to create a domain that is not too long and easy to remember. A good domain will also affect the search engine ranking. Ensure Search Engine Optimization and periodic domain checks. The second component is hosting, which plays a crucial role in storing all database (data storage) information. Information in the database can be

text, images, illustrations, videos, and scripts. Currently, there are many services related to hosting packages according to business and product needs. The last component is content, and the function of content is crucial. If a site has no content, it can be said that the site does not have a clear purpose. Examples that apply content include social media, company profiles, online buying and selling sites, and many others. The availability of websites as information literacy facilities should make it easier for individuals to improve their information literacy. Individuals with information literacy skills can use information effectively in decision-making, thus influencing the improvement of the welfare level (Shobaruddin, 2019).

3 Method

This research employs a qualitative approach, utilizing Focus Group Discussions (FGD) as the primary data collection method. FGDs are a staple in qualitative research, offering in-depth exploration into social issues by fostering interactive discussions amongst a select group of participants. Rather than aiming for statistical representation, this method seeks rich insights from a deliberately chosen group.

Focus group discussions were structured around a set of predefined open-ended questions to stimulate conversation and draw out diverse perspectives on literacy and welfare. Each discussion lasted approximately 90 minutes and was audio-recorded with participants' consent. Transcriptions were made post-session to ensure accuracy.

Participants were selected from five secondary schools in Malang City, Indonesia. From each school, the participants comprised: 3 students, 2 teachers, 1 librarian, and 3 parents of students. This composition ensured a holistic view, encompassing various stakeholders directly or indirectly involved in literacy initiatives within the school environment. Thus, a total of 45 participants (15 students, 10 teachers, 5 librarians, and 15 parents) took part in the FGDs. A total of six FGDs were conducted, with each group consisting of 6-8 participants.

Upon completion of the FGDs, the recordings were transcribed verbatim. The transcriptions were then subjected to thematic analysis. Initial codes were generated by closely reading and re-reading the transcripts. These codes were grouped into potential themes and were refined through continuous comparison and contrast. The aim was to identify patterns in perceptions, experiences, and suggestions related to literacy and its impact on welfare. The insights derived from this qualitative exploration will inform the development of a website tailored to bolster literacy efforts, ultimately contributing to enhanced welfare.

4 Result and Discussion

The qualitative nature of this research, grounded in focus group discussions (FGD), provided an intimate avenue to delve into participants' perceptions of "sejahtera" and its intricate relationships with happiness, spirituality, capability, competence, and skill updating. The discussions were structured yet open-ended, allowing participants to explore and express their thoughts freely. Each FGD comprised five participants, accompanied by a moderator and a note-taker to ensure the accuracy of data capture.

In a broader context, welfare encompasses the overall quality of life experienced by individuals, families, and the wider community. Greve (2008) defines welfare as a multifaceted concept that includes ensuring citizens have optimal access to economic resources, promoting a high level of well-being, establishing a minimum income guarantee to prevent poverty, and enabling individuals to possess the capabilities necessary for a quality life. Often, the terms welfare and well-being are used interchangeably, with well-being associated with feelings of comfort, happiness, or good health (Oxford University Press, 2020). The Organisation for Economic Co-operation and Development (OECD) (2015) further underscores well-being's multi-dimensional nature, encompassing aspects such as civic engagement, housing, income, work-life balance, skills, and health status. Acquiring data on welfare and well-being is crucial for understanding how various factors intersect and impact an individual's life.

Based on the FGD, teachers view "well-being" or "sejahtera" as a multifaceted concept. It is often associated with achieving set targets in life and the ability to meet economic standards. For them, well-being is not merely about financial prosperity but also about contentment, the joy of teaching, and the environment in which they work. They feel that well-being is relative and can be achieved through gratitude, good health, spending quality time with family, and deriving happiness from little things like listening to their students' stories.

Students perceive well-being in the context of their daily experiences. For them, it is about the joy of winning in games or even just participating. They feel happiness when their desires align with reality. They also associate well-being with the ability to showcase their personality, such as wearing accessories, without feeling overwhelmed by their surroundings. Yet, they also acknowledge moments of discontent, especially when reality does not match their expectations.

Parents often link well-being to their children's happiness and success. Economic stability, for them, means the ability to provide education for their children and to meet primary and secondary needs without financial constraints. They believe that well-being is not always about material wealth; it is also about the joy of seeing their children happy and having harmonious relationships within the family.

Librarians resonate with the idea that well-being is intertwined with happiness and comfort. Engaging in activities they love, such as cooking or singing, brings them immense joy. They emphasize the importance of efforts made towards achieving well-being and the unparalleled happiness that comes with those achievements. For them, the opposite of well-being is when life's goals remain unachieved.

All groups universally associate well-being with a sense of happiness, contentment, and fulfillment in their respective roles and environments. The essence of well-being, for them, is not confined to material or economic prosperity alone. It's intricately tied to personal relationships, daily experiences, and the emotional rewards derived from them. For instance, both teachers and parents find joy in the success and happiness of their students and children, respectively. Likewise, students and librarians link well-being to the alignment of reality with their aspirations and the satisfaction of achieving personal goals.

The nuances that differentiate their interpretations lie in their unique experiences and roles. Teachers view well-being as achieving set targets in their profession and finding joy in their educational environment. Students, on the other hand, emphasize the daily school experiences and the alignment of their personal desires with reality.

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Parents predominantly link well-being to their family's happiness, especially their children's success and well-being. In contrast, librarians view well-being in the light of personal achievements and the joy of indulging in activities they love. In essence, while the core sentiments about well-being converge around happiness and contentment, the sources of these feelings and the challenges that threaten them vary distinctly across the groups.

The term "kesejahteraan" from the Indonesian lexicon, when translated, closely relates to the Western concept of welfare or well-being. However, in the academic realm, welfare extends beyond individual well-being to encompass broader societal and state-driven structures. Welfare, as elaborated by Titmuss (1974) in his work "Social Policy," encompasses the set of mechanisms by which a society addresses the well-being of its members. This includes not just health and economic stability, but also social integration, education, and opportunities for individual advancement. The welfare state, a term commonly used in social policy discussions, emphasizes the role of government in ensuring the well-being of its citizens through various social programs and safety nets.

When we relate this to the insights from the transcripts, we can infer a microcosmic view of welfare. For instance, teachers, in emphasizing the importance of a positive educational environment, are indirectly highlighting the need for a robust educational policy—a cornerstone of welfare in many countries. Students, in their emphasis on daily experiences, underscore the importance of mental health and peer integration, two aspects that have become increasingly significant in discussions about youth welfare.

Parents, in their concern for the success and happiness of their children, echo the broader societal demand for a future where the next generation is better off—a principle that has driven welfare policies across nations. Their emphasis on family well-being resonates with the family-centric welfare models of countries like Sweden, where family support structures are integral to the nation's welfare approach. Librarians, in their unique position, remind us of the importance of community and cultural welfare. Libraries, often seen as hubs of community engagement and cultural preservation, play a pivotal role in societal well-being.

In a broader perspective, Sen's (1999) capability approach to welfare, as elaborated in his work "Development as Freedom," emphasizes the importance of enhancing individuals' capabilities. It is not just about material well-being but the freedom to pursue one's objectives and the capability to lead the kind of life one values. This philosophical approach to welfare aligns with the diverse interpretations of "sejahtera" we observed, where material, emotional, and relational aspects collectively contribute to well-being. In essence, while "kesejahteraan" or welfare manifests differently across cultures and societies, its core remains constant: ensuring a good quality of life for all members of society.

Distinct needs emerge for different groups, reflecting their unique roles and challenges. Teachers require an environment that fosters professional growth, acknowledges their contributions, and offers consistent support. Their well-being is intrinsically linked to the success and happiness of their students. Therefore, continuous training, a conducive teaching environment, and adequate resources, both material and emotional, are paramount.

Students seek an educational environment that not only imparts knowledge but also fosters emotional intelligence and resilience. Their well-being is intertwined with peer

relationships, academic achievements, and alignment of personal desires with reality. A supportive infrastructure that addresses academic pressures, promotes mental health, and nurtures extracurricular talents can significantly boost their well-being.

Parents are deeply invested in the success and happiness of their children. Their well-being is enhanced by stable economic conditions, access to resources that aid in parenting, and a supportive community that understands the challenges of parenthood. Programs that provide financial stability, parenting workshops, and community engagement opportunities can be pivotal in enhancing their welfare.

Librarians, often the custodians of knowledge and culture, seek recognition and resources to execute their roles effectively. Their well-being is associated with personal achievements and the joy of serving the community. Investing in state-of-the-art library infrastructure, continuous training, and community engagement initiatives can significantly contribute to their well-being. In essence, while the overarching theme of "kesejahteraan" resonates with all, the pathways to achieving it are tailored to the unique needs and challenges of each group. A holistic approach that recognizes and addresses these differential needs can significantly elevate the collective well-being of society.

In an era where individual and collective well-being is paramount, the need for a dedicated media platform becomes more evident than ever. The diverse perspectives on "well-being" or "sejahtera" among teachers, students, parents, and librarians underscore this necessity. Each group, influenced by their unique roles and experiences, seeks avenues that cater to their distinct aspirations and challenges. Websites, as versatile digital platforms, stand poised to address this multifaceted demand.

For teachers, websites can act as hubs of professional growth and collaborative discussion. Students, on the other hand, would benefit from online spaces that nurture emotional intelligence, provide academic resources, and facilitate peer interactions. Parents can find solace in platforms offering guidance on effective parenting and financial planning, while librarians would greatly value access to expansive digital archives and community engagement tools. In essence, the digital realm holds immense potential to address the varied perceptions of well-being. Tailored online platforms can not only cater to the specific needs of these diverse groups but also play a pivotal role in elevating the collective well-being of society.

Beside media, in the diverse tapestry of well-being perspectives held by teachers, students, parents, and librarians, the role of a facilitator stands out as a beacon of guidance and support. For teachers, facilitators serve as mentors, directing them towards professional growth opportunities and fostering collaborative environments. Students benefit from facilitators as counselors and mentors, helping them navigate academic challenges while bolstering their emotional intelligence. Parents, in their quest to provide a nurturing environment, find in facilitators a resourceful guide for parenting techniques and community engagement. Meanwhile, librarians, the custodians of knowledge, lean on facilitators for resource curation and community outreach, ensuring libraries remain as vibrant communal hubs. In essence, while the digital age offers a plethora of resources, the human-centric role of facilitators remains irreplaceable. Their innate ability to understand, guide, and connect individuals to the right resources ensures that the varied needs of each group are met, reinforcing the collective well-being of society.

The intricate nature of "well-being" or "sejahtera" as perceived by distinct groups – teachers, students, parents, and librarians – necessitates a comprehensive approach to address their needs. In today's digitized era, a web-based platform emerges as a promising solution. However, designing such a platform requires a holistic understanding of the unique requirements of each group and the integration of multifaceted digital literacy components to ensure its efficacy.

Content Customization is paramount. An effective platform must distinguish between the varied needs of its users. Teachers would benefit from professional development modules, teaching resources, and spaces for collaboration. Students, on the other hand, require academic resources complemented by emotional intelligence workshops and forums for peer interaction. Parents might seek parenting advice, tools for financial planning, and resources to foster community engagement. Lastly, librarians, the gatekeepers of knowledge, would be best served with access to expansive digital archives, tools for community outreach, and resources for continuous professional development.

The element of Interactivity cannot be understated. A user-centric platform thrives on engagement, necessitating features like forums, interactive chatbots, and live workshops tailored for each group. Since the FGDs revealed distinct needs for active engagement across groups. Teachers emphasized collaboration, suggesting a demand for forums and workshops for resource sharing and discussions. Students valued peer interactions, underscoring the importance of forums for experience sharing and chatbots for academic aid. Parents focused on family well-being, indicating the utility of workshops for parenting guidance and chatbots for quick tips. Librarians highlighted the role of community discussions, making forums essential for discussing library trends. In essence, a user-centric platform should tailor its interactive features to meet these specific needs.

Accessibility is equally crucial. Given the diverse technological proficiency levels across users, ensuring a user-friendly interface accessible across multiple devices is key. The FGDs highlighted the diverse range of technological proficiency among participants. Students, being from a younger generation, might be more tech-savvy and accustomed to navigating various digital platforms. However, parents and especially older teachers might not be as familiar with newer digital interfaces. Librarians, depending on their exposure to digital cataloging and resources, might fall somewhere in between. Given these disparities, it's essential that the platform is user-friendly and easily navigable. It should be designed to accommodate the least tech-savvy user, ensuring that all participants, regardless of their technological skills or the devices they use, can engage with the platform seamlessly and effectively.

Another integral component is a Feedback Mechanism. By providing users with an avenue to share feedback, platforms can remain adaptive, relevant, and effective. The FGDs revealed the multifaceted nature of "sejahtera" and the specific requirements of each participant group. Teachers' feedback is essential for refining professional development modules and resources. Students can provide insights into the relevance of academic content and emotional workshops, ensuring alignment with their daily experiences. Parents, primarily concerned with their children's well-being, can guide the platform's parenting and financial planning resources to better serve family needs. Meanwhile, librarians can offer valuable insights on the quality of digital archives and community outreach tools. By integrating a robust feedback mechanism, the platform

can stay adaptive and continuously evolve based on the dynamic needs and perspectives of its diverse users.

Resource Integration is crucial for catering to diverse learning preferences. The platform's inclusion of various formats such as articles, videos, podcasts, and interactive modules ensures a comprehensive learning experience. Insights from the FGDs further emphasized this need. Teachers, for instance, would benefit from articles for deeper understanding and videos for visual demonstrations. Students, more attuned to dynamic learning mediums, might prefer interactive modules and podcasts. Parents, on the lookout for actionable advice, could gravitate towards concise articles and instructive videos. Meanwhile, librarians, pivotal in disseminating information, would appreciate a blend of all these resources to aid in their community outreach and continuous learning endeavors.

Considering the platform would house personal insights, experiences, and possibly identifiable data, Security and Privacy become paramount. Teachers would want their professional discussions and resource sharing to be confidential. Students, sharing personal experiences and academic challenges, would need assurance that their stories remain private. Parents discussing family well-being would demand stringent data protection. Librarians, who might share library user trends and data, would prioritize the privacy of their patrons. Thus, robust measures to safeguard user data are not just a technical requirement but a critical trust-building element for all participant groups.

Furthermore, Community Building features like group discussions and expert sessions are pivotal for fostering a sense of camaraderie and shared growth. From the FGDs, it was evident that teachers value collaborative spaces, suggesting the need for forums where they can share resources, teaching methodologies, and discuss challenges. Students, being in a phase of life where peer interaction plays a significant role, would benefit immensely from group discussions, allowing them to share experiences and learn from one another. Parents, on the other hand, often seek solidarity with others facing similar parenting challenges, making expert sessions on child-rearing and family well-being invaluable. Librarians, in their unique role of bridging communities with knowledge, would find value in expert sessions tailored to enhancing community engagement and staying updated with the latest in information dissemination.

Lastly, Continuous Updates are essential to ensure that the platform remains in sync with the ever-evolving landscape of education and well-being. Teachers need to stay updated with the latest teaching methodologies and resources. Students' learning preferences and tools change rapidly with technological advancements, necessitating continuous updates to cater to their needs. Parents, in the age of information overload, would benefit from updated resources on parenting in the digital age. Librarians, given the rapid digitization of information, need a platform that evolves in tandem with the latest trends in library science and community engagement.

Envisioning a model, one can imagine a platform with a welcoming homepage with distinct sections for each user group. Profile creation would facilitate content customization, leading users to a rich library of resources tailored to their needs. Interactive workshops, discussion forums, and a robust feedback mechanism would form the core of user engagement. Features spotlighting community achievements and a system for timely notifications would round off the user experience. In conclusion, the success of a web-based integrated literacy platform hinges on its ability to resonate

with its users' unique needs and evolve based on feedback. By adopting a comprehensive approach, such a platform can significantly elevate the collective well-being of its diverse user base.
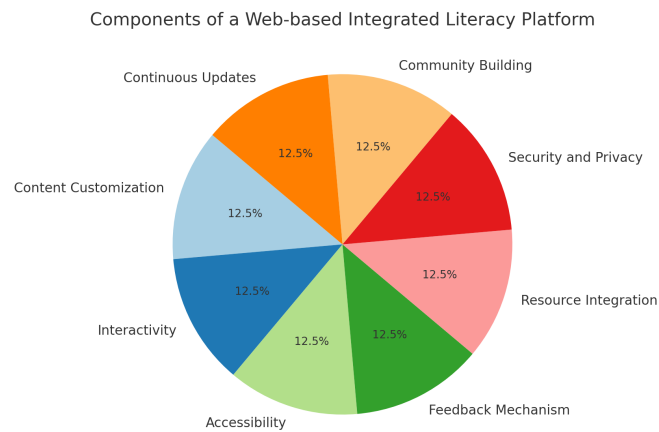

Figure 1: Components of a Web-based Integrated Literacy Platform

Here is a visualization representing the components of a Web-based Integrated Literacy Platform. Each slice of the pie chart corresponds to a crucial component, emphasizing that all components are equally vital for the platform's effectiveness and success.

5   Conclusions

From the nuanced perspectives on "well-being" or "sejahtera" held by teachers, students, parents, and librarians, it becomes evident that achieving well-being is a multifaceted endeavor, influenced by one's roles, responsibilities, and daily experiences. The digital age offers a promising avenue to address these diverse needs through web-based platforms. Such platforms, when thoughtfully designed, can act as comprehensive hubs, integrating various components like content customization, interactivity, and community building, tailored to the unique requirements of each group. The visualization underscores the equal significance of these components, highlighting the necessity for a balanced approach. In essence, a well-rounded web-based integrated literacy platform stands as a beacon of potential, bridging gaps and enhancing the collective well-being of its varied user base.

Acknowledgments

References

Abidin, dkk. 2017. Pembelajaran Literasi Strategi Meningkatkan Kemampuan Litera Matematika, Sains, Membaca, dan Menulis. Jakarta: Bumi Aksara.

Agustini, P. (2023, February 2). Indeks Literasi Digital Indonesia Kembali Meningkat Tahun 2022. Kominfo. https://aptika.kominfo.go.id/2023/02/indeks-literasi-digital-indonesia-kembali-meningkat-tahun-2022/

Diener, E., Suh, E. M., Lucas, R. E., & Smith, H. L. (1999). Subjective well-being: Three decades of progress. *Psychological Bulletin*, 125(2), 276-302.

Dunan, A. (2020). Government communications in digital era: public relation and democracy. *Pekommas,* 5(2), 73–82.

Durand, M. (2015). The OECD Better Life Initiative: How's Life? And the Measurement of Well-Being.

Faizah, D.U, et all. (2016). Panduan Gerakan Literasi Sekolah di Sekolah Sekolah Dasar. Direktorat Jenderal Pendidikan Dasar dan menengah, Kementrian Pendidikan dan Kebudayaan: Jakarta

F. Masyhur. (2014). Official website performance local government in Indonesia. *Pekommas*, 17(1), 9–14.

Ghiffary, M. N. El, Susanto, T. D., & Prabowo, A. H. (2018). Analisis Komponen Desain Layout, Warna, dan Kontrol pada Antarmuka Pengguna Aplikasi Mobile Berdasarkan Kemudahan Penggunaan (Studi Kasus: Aplikasi Olride). *Jurnal Teknik ITS*, 7(1). https://doi.org/10.12962/j23373539.v7i1.28723

Ghozali, K., & Sucahyo, Y. G. (2012). Comparative Study of E-Government Enterprise Architecture by Primary Attributes of 3 Asian Countries. *Jurnal Sistem Informasi*, 8(2), 126-132

Gil-Garcia, J. R., & Pardo, T. A. (2006). Multimethod Approaches to Understanding the Complexity of e-Government. *Int. J. Comput. Syst. Signals*, 7(2), 3-17.

Gupta, M. P., & Jana, D. (2003). E-government evaluation: A framework and case study. *Government information quarterly*, 20(4), 365-387.

Greve, B. (2008). What is welfare?. *Central European Journal of Public Policy*, 2(01), 50-73.

Handayani, P. W., & Kardia, N. P. (2010). Analisis Tingkat Implementasi E-government pada Level Kementerian Indonesia Berdasarkan Framework Deloitte & Touche. *Jurnal Sistem Informasi*, 6(2), 134-139.

Heeks, R. (2003). Most eGovernment-for-development projects fail: how can risks be reduced?.

Indarto, N. (2017). Analisis Gerakan Literasi Sekolah (Gls) Untuk Meningkatkan Kemampuan Membaca Peserta Didik Kelas IV Di SDN Tlogomas 1 Malang (Doctoral dissertation, University of Muhammadiyah Malang).

Jonathan, W., & Lestari, S. (2015). Sistem informasi UKM berbasis website pada desa Sumber Jaya. *Jurnal Teknologi Informasi dan Bisnis Pengabdian Masyarakat Darmajaya*, 1(1), 1-16.

Landøy, A., Popa, D., & Repanovici, A. (2020). *Collaboration in designing a pedagogical approach in information literacy* (p. 161). Springer Nature.

Mikulecky, L., & Diehl, W. (1980). Job Literacy: A Study of Literacy Demands, Attitudes, and Strategies in a Cross-Section of Occupations.

OECD (2013). PISA 2012 Results: Ready to Learn (Volume III) - Students' Engagement, Drive and Self-Beliefs. OECD Publishing.

Oxford University Press. (2020). Oxford English Dictionary. Oxford University Press.

Rerung, R. R. (2018). Pemrograman Web Dasar. Deepublish.

Saleh, B. (2015). Information and Communication Technology (ICT) literacy of community in Mamminasata region. *Pekommas,* 18(3), 151–160.

Seligman, M. (2011). Flourish: A visionary new understanding of happiness and well-being. Simon and Schuster.

Sen, A. (1999). Development as freedom. Oxford University Press.

Shobaruddin, M. (2019, August). Industry 4.0: Welfare literacy to face the challenges of rural community. *In Annual International Conference of Business and Public Administration* (AICoBPA 2018) (pp. 124-127). Atlantis Press.

Sitepu, H., Muchma, F. M., & Angela, D. (2017). Pengembangan aplikasi e- Learning berbasis WebRTC. *Telemat*, 11(2), 10.

Titmuss, R. M. (1974). Social policy: An introduction. George Allen & Unwin.

Yumarlin, M. Z. (2016). Evaluasi Penggunaan Website Universitas Janabadra Dengan Menggunakan Metode Usability Testing. *Informasi Interaktif*, 1(1), 34-43.

Zabriskie, R. B., & McCormick, B. P. (2003). Parent and child perspectives of family leisure involvement and satisfaction with family life. *Journal of Leisure Research*, 35(2), 163-189.