

Construction of Knowledge and Learning Experience to Build Digital Literacy in Marginal Communities

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Abstract. Digital literacy is a construction of knowledge and experience for suburban communities in using social media, with various ways used by the community to appreciate the presence of digital technology to help people work online, as well as appreciation from marginal communities along with the development of digital literacy into a construction of knowledge and experiential study. This study employs a qualitative approach with a case study method, focusing on 10 informants who are members of the Mulung Village community, active members of a youth organization, and community facilitators. The research results show that the construction of knowledge and learning experiences in building digital literacy for marginalized communities in marginal communities, which is manifest in community appreciation for the presence of digital technology, which provides convenience, new insights, and benefits as informal learning within the family, acting a mass communication tool, as a forum for the younger generation to discuss, social interaction in cyberspace, and generating consumer behavior in society, as well as an exploration of the younger generation's skills and knowledge in using social media. In conclusion, digital literacy can foster community connection among marginalized communities through mass communication, independent learning experiences, and social media forums, fostering tolerance and empathy, and fostering support for digitalization through a sense of empathy and community support. The study's novelty lies in its in-depth exploration of the interplay between digital literacy, community engagement, and empowerment, particularly for marginalized groups. It demonstrates how digital literacy can foster a sense of belonging, tolerance, and empathy within the community, ultimately leading to a more inclusive and supportive environment for digitalization.

Keywords: knowledge construction; learning experience; digital literacy; marginal communities

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INTRODUCTION

Digital literacy is a crucial skill for active participation in society, especially in an increasingly technology-driven economy. However, marginal communities often face significant barriers to accessing and utilizing digital tools and resources. The construction of knowledge and learning experiences tailored to these communities is essential for fostering digital literacy and enabling individuals to engage more fully in the digital landscape (Pellas et al., 2019; Shrouf & Rodgers, 2018). In this context, it is important to note that marginalized communities play an integral role in urban life, and learning communities are crucial for their future success. The differences in social construction between urban communities and marginalized communities also indicate that

individuals' ongoing interaction with their subjectively owned and experienced reality is key to the learning process.

Marginal communities are integral to urban life, and learning communities are crucial for their future success (Achmad et al., 2021). Urban communities' social construction differs significantly from marginal communities', as it involves continuous individual interaction with subjectively owned and experienced reality (Garry Falloon, 2020; Hidayah, 2022). Marginal communities are learning communities constantly updated with developments in technology and information, a form of self-update by constructing knowledge and learning experiences in building digital literacy. Karang Taruna Bintang Timur Community in Mulung Village, Driyorejo District, Gresik Regency, is a forum for marginalized communities to construct community knowledge and learning experiences. In this context, digital literacy becomes an important aspect that is not only related to the mastery of technology but also to how the community understands and utilizes that technology in everyday life.

Digital literacy is a construction of knowledge and experience of marginalized communities in using social media, with various ways used by the community to appreciate the presence of digital technology to help people work online, as well as appreciation from marginalized communities along with the development of digital literacy into the construction of knowledge and learning experiences (Tinmaz et al., 2022; Hiller A. Spires et al., 2019; McDougall et al., 2018). Digital literacy is considered the ability to understand and use information using technology wisely (Heri Syafrial, 2023). Digital literacy is seen as a series of skills, knowledge, and attitudes of society in adopting digital technology and accessing digital information effectively, efficiently, and ethically to increase digital comfort (Firmansyah et al., 2022; Julien H et al., 2022).

One of the main issues faced by marginalized communities regarding digital literacy is the limited access to digital technology, both in terms of devices and internet connectivity. The theory of the digital divide explains that socio-economic, educational, and geographical factors greatly influence the ability of individuals or groups to optimally utilize digital technology. In this context, marginalized communities often lack adequate access to develop digital literacy, which further deepens socio-economic disparities. This research is important as it seeks to bridge this gap through learning strategies that are relevant to the characteristics and needs of the community (Van Dijk, 2017). In marginalized communities, the development of digital literacy is not only about accessing information but also about how the community collectively builds knowledge through learning experiences and interaction with one another. Furthermore, the theory of nonformal learning can be used to support the importance of community-based learning experiences (Knowles et al., 2020). Marginalized communities often do not engage in formal education but acquire skills through nonformal and informal learning. In this regard, digital literacy can be gained through hands-on practice, observation, or activities facilitated by the community.

Digital literacy as a core competency is essential. It is not merely about the technical skills of using devices, but also includes the ability to understand, evaluate, and critically utilize information. For marginalized communities, digital literacy is an important tool to expand their economic, social, and political opportunities. Adequate digital literacy enables marginalized communities to actively participate in the digital society, including in employment, education, and broader social engagement (Davydov et al., 2020).

Empirical studies by Andrade & Doolin (2016) have shown that improving digital literacy in marginalized communities can significantly contribute to reducing social and economic inequality. Additionally, research by Van Deursen & Van Dijk (2014) highlights that digital literacy also impacts

social and political participation. They found that communities with limited digital literacy are often excluded from opportunities to participate in broader social and political life. This underscores the importance of this research in promoting the development of digital literacy in marginalized communities, enabling them to actively engage in an increasingly digital society.

Haythornthwaite (2022) and Rogoff (2022) explain that social media illustrates how digitalization now reaches everyone on a daily basis; each individual can interact with social media, facilitating participation in learning and discussions, which are essential components of digital literacy. Online learning creates an informal space for individual learning, utilizing content analysis and automated coding techniques to enhance digital literacy skills. In this context, social media serves as a platform for discussing knowledge and facilitating informal learning, enabling users to engage in knowledge exchange and validation processes that are crucial for developing digital literacy.

This is supported again by previous research conducted by Mardiana (2022), which found that a significant number of Indonesians who use social media have a knowledge gap regarding online news. While public interest in using social media is substantial, there is also a considerable lack of knowledge about digital literacy, basic ethics in using social media, and a low level of public vigilance in preventing the spread of hoax information on these platforms. Based on the data presented above, researchers are interested in researching the construction of knowledge and learning experiences to build digital literacy in marginalized communities. This research aims to examine the construction of knowledge and learning experiences to build digital literacy in marginalized communities.

METHODS

The digital divide is a serious issue that requires effective community-based interventions. The approaches of social constructivism, nonformal learning, and digital literacy as critical competencies indicate that marginalized communities can overcome technological and social barriers if given the opportunity to learn through meaningful social interactions and hands-on experiences. This research has the potential to make a significant positive impact on the empowerment of marginalized communities in the digital era.

This research employs a qualitative approach, utilizing a case study method to capture social situations through behavior, organizational functionalization, and experience. The study uses primary and secondary data sources, with primary data obtained directly from the research location through interviews with informants and secondary data sources providing indirect information like observation results and documentation (Rustanto, 2015; Yin, 2016). The informant criteria include being a member of the Mulung Village community, an active member of a youth organization, and a community facilitator. Researchers engage in continuous experiences with informants to obtain information and explore phenomena in the field. These phenomena are interpreted and given meaning to align with the research objectives, focusing on learning organizations as community empowerment institutions. The data collection techniques used in this research:

In-depth Interview

Data collection carried out by researchers with informants consisted of facilitators who provided education about the importance of building digital literacy, people who understood the existence of digital technology, and young community members as a means of distributing information about digital literacy.

Participant observation

In this research, researchers used participatory observation, which was carried out by observing and staying at the research location. This included (a) activities carried out by marginalized communities ranging from families to the social environment, (b) construction of community knowledge in understanding digital literacy, and (c) observations regarding the research location.

Document Study

In this research, researchers also used documentation studies as complementary data from primary information. Documentation studies include activity reports that explain the knowledge construction process and learning experiences in building digital literacy. Data collection instruments use interview and observation guidelines. In this case, they are also equipped with a recording device and field notes.

The data analysis technique uses interactive analysis by Miles, Huberman, & Saldana (2014), which consists of several stages including: (1) data reduction is the stage that researchers use to compile a summary of what has been obtained, categorizing the data results by assigning codes according to their placement so that the data is detailed according to its categories, then the data is selected to simplify the data results and exclude data that is not appropriate to the research context; (2) data display or presentation of data that is arranged systematically and in sentences that are easy to understand, and the form of data display usually changes the field results obtained such as charts or matrices which are reprocessed into narrative text; and (3) verifying the data and making conclusions is the final stage in analyzing the data. In this stage, the researcher looks for relationships, similarities, and differences to conclude. Initial conclusions are supported by valid and consistent evidence when researchers go into the field to collect data, and these conclusions are credible (Bergin, 2018).

RESULTS AND DISCUSSION

Public Appreciation of Digital Technology Developments

Public appreciation is manifested in the ease of using digital technology, namely that people appreciate its presence, making it easier to live an increasingly modern life and providing digital insight along with the times (Mavidou, & Kakana, 2019). The appreciation of marginalized communities is manifested in the usefulness of digital technology, namely digital literacy, offering knowledge, experience, and skills to assist in completing work online. This condition is in line with the definition of digital literacy, which is seen as a series of skills, knowledge, and attitudes of people in adopting digital technology, as well as accessing digital information effectively, efficiently, and ethically to increase digital comfort (Julien et al., 2022; Nordicity, 2018).

Digital literacy is the construction of knowledge and experience of marginalized communities by using social media. People use various ways to appreciate the presence of digital technology to help people work online (Rahmatullah et al., 2022). The condition of marginalized communities in appreciating knowledge and learning experiences in building digital literacy is in line with the results of UH's interview as a member of the youth organization as follows: A form of appreciation for the development of digital literacy is participating in enjoying developments so as not to be left behind and trying to utilize digital media to help with online work.

Based on the interview results, UH explains that the public appreciates developments in the times that require people to keep up with the times and the benefits of digital media. This condition is also similar to that expressed by informant H, a member of Karang Taruna, who stated, "By exchanging opinions about social media or digital media in order to gain broader insight, which is certain to upgrade yourself further so that you are not easily satisfied with current knowledge and experience. This". Appreciation from marginalized communities and the development of digital literacy become a construction of knowledge and learning experience. This condition is in line with the results of interviews with informants from marginal community N as follows: "In enjoying the development of digital literacy by absorbing the knowledge and experience of other people so that in the future when we have problems regarding something, we can apply the knowledge and skills of that person."

Based on the interview results, this method explains that learning from other people's knowledge and experience can be learned from in the future. This is also confirmed by the opinion of informant R as facilitator: "Using digital literacy at school, and utilizing digital technology facilities to assist in the learning process." Based on this statement, there is an explanation that digital literacy provides convenience and usefulness in using digital technology for the learning process. Based on the interviews with urban communities, it can be concluded that the community's appreciation for the construction of knowledge and learning experiences to build digital literacy in marginalized communities can be depicted in chart form. The community appreciates digital literacy on social media in terms of two aspects, namely: (1) ease of using digital technology, namely that the public appreciates that digital literacy makes life easier in line with the times and provides insight for the public as users of digital technology; and (2) the usefulness of digital technology, that is, digital technology that is developing in society offers knowledge, experience, and skills that become the supporting capacity of marginalized communities to make it easier to complete work, and as provisions to keep up with developments in an increasingly digitalized era.

The Urgency of Digital Literacy in Families

The younger generation considers technological advances as changes in times that are increasingly modern, easier, and more instantaneous. This condition also occurs in marginalized communities' knowledge-construction processes and learning experiences. Digital literacy occurs informally from close family, relatives, and the community. Digital literacy in families is a process of explaining digital literacy through stages of informal family activities. This discussion of light topics leads to main topics related to digital technology, which families widely use to help with daily activities, such as digital information (Ginting et al., 2021; Valenzuela et al., 2022).

Digital literacy is implemented through the family in a relaxed manner, discussing light topics and relating to daily needs, which makes it easier for family members to understand (Aliagas & Margallo, 2017). This is also supported by observations that most families from marginalized communities in Mulung Village already use social media. However, for the older generation, social media use is limited to entertainment. Observations made by researchers are that many people still need clarification about current social media applications because there are too many features. Hence, they must remember that many people use the WhatsApp application as an online communication medium when using social media. Based on the results of these observations it is also supported by the results of interviews with SA as a marginalized community as follows: "Directing and explaining the function of social media applications wisely to utilize digital technology as entertainment and as a means of literacy for family members who do not understand social media, for example providing literacy assistance digital with parents, grandparents while relaxing at home discussing light topics."

Digital capital taught from the family environment makes it a habitual activity. The community's learning process is through individual experiences when interacting within the family environment, thus creating a habitus (Kurnia et al., 2019) and forming habitus through family education, the social environment, and school (Amaruddin et al., 2020). This aligns with Ki Hajar Dewantara's tri-center concept of education, which states that society forms habits from the family, community, and school (Musolin & Nisa, 2021).

Based on this explanation, digital literacy in families means digital literacy education is through family-wide activities. This starts with discussing light topics about activities at home and then moves

on to topics that focus more on digitalization and the use of digital tools to make it easier for family members to communicate digital and digital information.

Digital Literacy Connects Marginalized Communities

Digital literacy connects marginalized communities as a mass communication tool, namely social media, to connect marginalized communities with outside communities. Digital literacy is the key to building a communication civilization in the digital era, digital devices, and digital network technology to participate in social life in society (Nancy Law et al., 2018; Sri Nurhayati & Ai Masri Nurul Falah, 2020). Building digital literacy in marginalized communities who work using digital technology is a challenging matter. With the knowledge and learning experience of the community, the presence of the community becomes an integral part of building digital literacy in commuter communities (Ryan et al., 2023)

This statement is also explained through the results of AG's interview as a member of the youth organization: The construction of knowledge and learning experiences experienced by the community. For example, when using social media, Instagram has various communities and themes connected to overseas. We can see this even without meeting face-to-face—another distant part of the world. Implementation of social media used by the community, especially as a mass communication tool, so that communication can connect the community through learning experiences (sharing) discussion topics. Therefore, the learning experience can create a bond within the group by discussing topics.

Digital literacy connects marginalized communities through the same learning experience; namely, people as learners gain digital literacy knowledge and experience through reviewing the same topics related to digital technology material (Setiadi et al., 2023). This condition is the beginning of the emergence of community learning communities. Communities built through circles of friends and a limited number of followers create new imaginary communities for building social relationships through social media platforms: *Facebook, TikTok, Instagram, YouTube, WhatsApp, and X (Twitter)* (Rahman et al., 2021). Digital literacy connects marginalized communities through social media as a discussion forum; marginalized communities use social media to review social problems related to the social environment.

Based on this explanation, digital literacy not only connects marginalized communities but also provides an illustration that there are three influencing aspects, namely: (1) mass communication tools, namely social media as a link for society in mass communication that connects marginalized communities with outside communities; (2) the same learning experience, namely through digital literacy, marginalized communities get the same learning experience related to digital technology. Therefore, the topics reviewed are similar and not significantly different; (3) social media as a forum for discussion, namely social media, becomes a forum for community discussion to resolve social problems related to the surrounding environment.

Interaction of Marginalized Communities with the Social Environment

The social environment of marginalized communities is a place for digital literacy for people to learn about social media, interact with each other, establish business relationships, and as a place for communication between community members (Lehtimaki et al., 2020). With digital technology, marginalized communities use social media more often for communication. Thus, activities held directly tend to decrease.

The social environment that develops in marginalized communities has become an increasingly modern societal culture with the presence of digital technology. The positive side that can be taken from digital technology today is that technology makes it easier for people to carry out daily activities. The results of interviews with UH also support this explanation as a youth organization: "Relationships with the community are excellent; when someone needs it, we usually help each other, and the level of tolerance can be said to be quite high. This can be seen from the fact that interactions carried out via social media do not close cooperation. From the community if other communities need help".

The interaction of society with the social environment is a process of establishing a sense of empathy in a responsive society and making digital technology a part of everyday life. This interaction can be seen based on the observation results, which explain that some people need help but only use social media as a channel for information. This information does not reduce the sense of cooperation between fellow communities. Marginal communities with urban progress are very supportive of digitalization in all aspects. Interaction with the changing social environment and digitalization provides space for society to accept technological advances in the era of globalization. These technological advances also provide an understanding that involving digital technology well and wisely can provide convenience in everyday life (Hufad et al., 2019; Hidayah, 2021).

Based on this explanation, it can be concluded that society's interaction with the social environment has three main aspects, namely: (1) tolerance, marginalized communities are starting to use social media as a means of social interaction frequently and as a medium for connecting relationships; (2) society's interaction with the social environment is reflected through a sense of empathy, namely marginalized communities feel a high sense of empathy for social media users who need help, so that a sense of belonging appears in the minds of the people; and (3) community interaction with the social environment is reflected through digitalization support, namely marginalized communities get support in using social media, easy access to data, and help people complete activities online.

Evaluation of Digital Literacy Understanding

Evaluation of digital literacy based on increasing understanding of social media shows that marginalized communities understand social media well. However, some individuals still need to use digital technology proficiently due to limited digital facilities. The use of social media among marginalized communities is very effective in helping them complete work and settle monthly bills online. Daily, people are becoming accustomed to digital media (Rahmatullah et al., 2022).

Marginal areas are the forerunner to forming intelligent cities as city supports. Complex technology involves a mutualistic symbiosis between people, technology, environment, organizations, and infrastructure to improve people's quality of life and work experience in the city (Khazanah & Azdy, 2016; Zheng Chuan, 2020). This statement aligns with the results of N's interview as a community member, stating, "The effectiveness of people's understanding of digital literacy needs to be reminded again by facilitating it."

Digital literacy is based on exploring the younger generation's skills, and social media has many special features that offer skills, self-exploration, and self-development for the younger generation. Marginalized communities use social media wisely and positively as a means of information, communication, and entertainment, and it helps them complete work and avoid hoax issues (Park et al., 2021). The effectiveness of using social media is still balanced with digital literacy, which aligns

with the increasingly sophisticated era of digital technology. The conditions above align with what the SA informant expressed as a marginalized community: “The effectiveness of people's understanding of digital literacy is effective. People operate social media for communication and seeking information related to job demands”.

Evaluation of understanding of digital literacy has four main aspects, namely: (1) increasing understanding of social media, namely marginalized communities have a good understanding of social media, although there are some individuals who are not yet proficient in using digital technology, due to limited digital facilities; (2) the effectiveness of using social media, namely the effective use of social media to help marginalized communities complete work, help settle monthly bills online, and people become accustomed to digital media every day; (3) exploration of the skills of the younger generation, namely social media which has many special features that offer skills and self-exploration, as well as self-development for the younger generation; and (4) using social media wisely and positively, that is, people who use social media use social media wisely and positively as a means of information, communication, entertainment media, and help in completing work, as well as avoiding hoax issues.

CONCLUSION

The construction of digital literacy in suburban communities is a multifaceted endeavor that involves community engagement, cultural relevance, and practical applications. These communities appreciate the presence of digital technology, which provides conveniences, insights, and benefits. The construction of community knowledge is carried out informally through the closest family, and digital literacy connects them with the broader community through mass communication, independent learning experiences, and social media. This interaction creates a sense of empathy and community support for digitalization. The positive impact of digital literacy increases understanding the use of social media by suburban communities and its effectiveness in completing tasks. The younger generation's skills in using digital media can be developed, and being wise in using social media can minimize hoax news in the broader community. Recognizing the transformative power of digital literacy as a catalyst for social change and empowering communities.

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