

Fitting Facts to Theory in Digital Literacy Implementation: Critical Reflections on Literacy during the COVID-19 Pandemic

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Abstract. A global pandemic of COVID-19 demands efforts of adjustments in the education sector. One that should be of concern to education policymakers is digitalizing literacy. In this study, we problematize the existing policies to digital literacy intended to meet the uncertainty resulting from the COVID-19 outbreak. We begin by reconsidering the policies upon the issues and present problems and challenges of digital literacy identified from empirical evidence thereafter. We also offer solutions for digital literacy implementation efforts. A focus-group discussion with members of the school supervisors of the local Department of Education and Culture of Malang, East Java, Indonesia was arranged to elicit reflections on factors contributing the success of building digital literacy in the pandemic time. The findings of this study recommend that digital literacy requires the penetration of determining policy and collaborative actions to cut down the impact of online risk in the teaching and learning processes. This can be the initial escalier for schools and parents' alertness in guiding and maximizing the appropriate and safe media using technology for the Indonesian young generation.

Keywords: Digital Literacy, Digital Divide, Policy, Problems, Challenges

1 Introduction

Recently, scholars of digital literacy have suggested that the term "digital literacy" embodies more notions of exclusion and division than is commonly supposed. The term exposes the contradictory politics of literacy education in more current and provocative ways" [1][2]. Prior to the COVID-19 pandemic that allows online learning, digital literacy is foreseen to be the fundamental foundation in the education sector in the future [3][4]. Scholars and policymakers conclude that digital literacy needs embodiment within the educational curriculum. This conclusion makes the concept of digital literacy key for students primarily during the COVID-19 pandemic [4]. All the same, constructs on the urgency of digital literacy in the pandemic time thus far underline the need for good digital literacy skills in the community and focus on infodemic Notwithstanding the COVID-19 outbreak, problems in digital literacy are more complex, ranging from the low potentiality of program or policy implementation to digital divide.

Pertinent to digital divide, around the 1990s, scholars posed that the obtrusive issue on digital literacy was about a digital divide between the different parts of the world [2][5]. Bolstering this digital divide issue, studies on digital literacy in COVID-19 pandemic identify

digital divide in access to digital literacy [6]. As an approving illustration, learners who are more technologically literate due to more supportive parents deal with digital literacy differently than those who are less advantaged. Therefore, this pandemic has sculptured and annexed to the already ongoing implementation of the digitalization of society and education. In this way, the promotion of digital education calls for immediate intervention on policy basis to those disadvantaged. This study contributes new evidence to literature of the significance of setting up digital literacy in the context of a pandemic of COVID-19 and addresses the specific research objectives, i.e. to present problems and challenges of digital literacy identified from empirical evidence in Malang Municipality, to address the policies upon the issues, and to highlight the significance of providing critical reflections on digital literacy during pandemic.

2 Research Method

This research is by nature qualitative approach. The data were gathered from focus group discussion (FGD) involving four school supervisors in the local Department of Education and Culture of Malang Municipality of Indonesia, researchers, and three primary school principals. School supervisors and school principals are the policymakers and policy implementers for digital literacy program in Malang. They are in charge for the setting and implementation of digital literacy in the municipality. Focused group discussion was appropriate to explore in depth about the policy for digital literacy and its implementation at schools in Malang, particularly in primary school levels. The underlying rationale is that Malang Municipality is acknowledged as one of educational cities in Indonesia. In addition, the focus of discussion includes identifying the empirical evidence on problems and challenges in the implementation of digital literacy. To understand the policy of developing (digital) literacy several aspects were assessed including (1) the policy at national level; (2) the policy at sub-national level, (3) program implementation, and (4) digital literacy model. We perform the elicited data into two phases.

Phase 1: Identifying problems of policies in digital literacy which comprised: (1) documenting results of FGD; (2) synthesizing documents relating to digital literacy policies and empirical facts; (3) vignetting series of critical inquiries on digital literacy enhancement.

Phase 2 : Reflecting the suitability of policies and empirical facts on digital literacy

3 Results and Discussion

3.1 Issue on Nation-Level and Sub-Nation Level Policies on Digital Literacy

In recent burgeoning publications about digital literacy, we found that the existing policies toward the notion of digital literacy appear to be similar to how policy makers gave an initial response to the COVID-19 outbreak. At the beginning of the pandemic, politicians, mass media, and the government preferred to announce it as a state of emergency, a notion that brought about twofold implications. On the one hand, it informed the citizen of something negative and primarily unexpected, whether it gives rise to destruction or else coming into calamity. On the other hand, it required those supposedly in charge of commanding actions to react promptly, effectively, and within a measurable impact—the quick and immediate steps that might cost a reflective and critical attitude. In an educational context, resembling the perspective that schools

met with an emergency condition, replacing offline meetings with online sessions through internet mediation is obligatory at any cost.

We may say that the government's literacy program in digitizing is a bit of slower. Nonetheless, as part of the efforts and commitments to develop literacy in pandemic era, The Indonesian government is currently placing the acquisition of digital literacy as their goal. The first and foremost, the President of Indonesia launched the National Digital Literacy Program on May 20, 2021. The rationale is that digital space is now filled with a lot of negative content, hate speech, hoaxes, gambling, and even crimes in various forms. It is a collective obligation to improve people's digital skills so that they continue to flood the digital space with positive content, which educates, soothes, and calls for peace. President emphasizes that digital literacy is nation's big work, the government, and all components of the nation. Institutions and various communities are supposed to involve in this national digital literacy program so that this movement continues to roll, expand, and encourage initiatives elsewhere.

Preceding and more structured efforts have been made by the Minister of Education, Culture, Research, and Technology Nadiem Makarim. The Minister has issued a definite policy of removing the National Examination and replacing it with the AKM (Minimum Competency Assessment) in which three elements, i.e. literacy, character surveys, and environmental surveys serve as the basis for providing assessments. The literacy itself is organized of interrelated elements of reading literacy and numeracy literacy. Reading literacy focuses on reading fiction by identifying the content of the reading and extracting information from the reading. As an attempt to meet literacy challenge in COVID-19 pandemic, The Ministry of Education, Culture, Research, and Technology for one thing creates an application for digital library management of printed and recorded collections in the library called SLiMS (Senayan Library Management System) in 2021. It is a web-based open source library automation system which can be adopted for school library. By this application, the Ministry appears to be cognizant on fact that the COVID-19 pandemic has intensified the need for self-directed learning competence. Long before the pandemic, The Ministry of Education, Culture, Research, and Technology has published an e-book on digital literacy support materials in 2017. These efforts demonstrate the government's commitment to digital literacy. However, the big problem is that there is no definite policy for implementing digital literacy program. Implementation of digital literacy is passed down to the policy implementers (when the policy is not yet properly in place). In Malang context, for instance, there is no explicit program devoted for digital literacy development.

Efforts and endeavors regarding literacy have been made by policy makers at at sub-nation level. The efforts are regrettably more physical than digital or digitized materials, such as the constructing of library buildings, granting for fiction, non-fiction, and science books. This suggest that policy to pursue digital literacy is principally invisible. Local government needs to put the program for digital literacy development in priority in this pandemic situation, particularly devoted for teachers and learners at school so that both parties could maximize the learning or literacy development via the integration of technology in their learning.

3.2 Problems and Challenges

Several problems related to digital literacy during the COVID-19 pandemic were identified as digital divide. The first and foremost, compelling differences in students' access to digital literacy opportunities during the pandemic are identified. Notable differences in access to digital tools between students in public schools and their private counterparts are also found. We found that just a few leading private schools have implemented a digital library program in which non-subject books have been inputted and can be accessed digitally. There are also schools that have

programmed digital libraries but are limited to digital catalogs, not yet digitizing reading books or non-subject books due to the pandemic. Yet, many other schools have not been able to program digital libraries which are generally government schools or small private schools. Implemented digital literacy program is just a few to count, one of which is in a leading private elementary school as a pilot school. The program was initiated before the pandemic and currently exists and runs well. Difference was found in government elementary schools in which the digital literacy program has not yet been initiated. The use of digital media, especially during this pandemic, is very focused as a medium of learning and communication between students, between teachers. The aforementioned problems lead to challenges in developing reading and writing in today's digital era. It has been evident that students' reading interest is low even when they hold digital devices in their hand. Mobile phone, for example, is device for playing games or reading web comics instead of a device for reading or learning. In the end, the role of digital competence is accessibility to various quality learning resources [7].

Another matter to consider as challenge is the significant association between parental supports and guidance and the ability to encourage children's home learning during this pandemic time. The role of parents is essential in facilitating the development of reading and writing literacy during pandemic situation. Less parental support will bring negative influence toward children literacy in this digital era. Parents should be able to make children get engaged in reading with mobile-assisted learning or other technological tools. However, with the implementation of the distance learning policy as it is today, there are not a few problems faced by less digitally literate parents. As it happens, skills of parents in the digital literacy retain impacts on the parental approach for children's digital media use [8].

3.3 Tentative Solutions

One very important solution is also about revitalizing libraries and giving children the opportunity to write stories and have books written. As an integrative part of problems and challenges, solution for digitizing libraries, and printed book collections of stories to be digitized can be an alternative. This effort require exceptionally particular supports and attention from relevant authorities (school, teachers, government) and parents. While digital divide is structural problems, then, the solution offered must include adjustment in structured conditioning (by taking into account the regulations, infrastructure, culture, etc). As for the gaps in opportunities, access to digital device, and program implementation become the problems which must be addressed by making digital literacy part of policy-based academic activities. As for digitized books, they can be the solution for digital divide. Nonetheless, the success of the problems in accessing the books must be acknowledged to rely heavily on parents and family supports and guidance (which is notably for young learners).

4 Conclusion

As digital literacy is now a necessity for the realization of educational operations, collaboration between the community and the government is required to improve Indonesian digital literacy. The government, both at the national and sub-national levels, need to start a digital literacy campaign by actively involving the community which can be started from the introduction of basic things which necessitate parental guidance. As for school, endeavors are better be organized on policy basis. Despite the various obstacles, the literacy development

model in the future must be led toward digitalization with one condition that public cooperation is well-managed and seriously escorted. Thus, immediate and comprehensive actions for digital literacy must be taken by involving all related elements. These points inspire that commonsense is so strong, meaning that there is a set of ideas about literacy which are then simply matched with reality.

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