

Research Takeaways: The Benefits of Digital Literacy in the Early and Middle

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Abstract

The changing era of digital technology is growing rapidly and affects the activities of people of different ages. Children are now living in a world that allows them to have easy access to digital media whether it is at home or school. It's known that the effects can be either negative or positive. This study is aimed at exploring the benefits of digital literacy for children in early and middle childhood. The method used was a literature review by doing a critical reading of several recent and peer-reviewed articles and discussed analytically. The results showed that the use of digital literacy in the classroom in the previous research had benefits towards literacy development with the assistance of adults.

Keywords: Digital literacy; children; classroom

Abstrak

Perubahan era menjadi digital sangat berkembang cepat dan mempengaruhi aktivitas orang dari berbagai level usia. Anak – anak sekarang hidup dalam dunia dimana mereka memperoleh akses yang mudah pada digital media di rumah maupun di lingkungan sekolah. Sudah diketahui bahwa akses digital media pada anak memiliki efek yang negatif maupun positif. Tujuan penelitian ini adalah untuk mengeksplorasi manfaat – manfaat dari penggunaan literasi digital bagi anak di usia dini maupun pertengahan. Metode yang digunakan yakni literatur review melalui reading yang mendalam dengan mengkaji pustaka – pustaka terdahulu yang terbaru dan peer-reviewed dan kemudian disajikan dalam diskusi yang analitis. Hasilnya menunjukkan bahwa penggunaan literasi digital di kelas yang ada pada riset terdahulu memiliki manfaat pada perkembangan literasi anak dengan adanya pendampingan dari orang dewasa.

Kata Kunci: literasi digital; anak; kelas

INTRODUCTION

The children in this digital era are now living in an environment that changes a lot from the previous era. It then affects on how they are growing up and taking care of in their family life as well as their social life. The exposure of digital technologies, especially the use of gadgets is irresistible. As a result, they spend more of their times in doing online activities at home than having real social life outside. Not to mention, during the covid-19 outbreak, the use of gadgets is more profound during the school from home period.

According to Fatmawati & Sholikin (2019), today's generation is the generation who was born while the development of digital media is growing rapidly. They also are known for their abilities to be skillful and know the use of digital media, especially gadgets. Children's ability in assessing digital technology is very robust in which they are able to operate as effective as possible as the authors and readers of digital media and to navigate the technology itself in a confidence and competence ways (Marsh, 2016). It is also known that children at the early age, most of them, by the age of two are using tablets or laptops and a third of those children aged under five

have their own tablets (Marsh et.al., 2015). This results to the shift of literacy media engaged by children from print to digital which needs a crucial concern from adults.

The success of children's literacy and learning using either print or digital media is based on the assistance and interaction from their parents or adults. (Gee and Hayes, 2011; Sefton-Green, et.al., 2016). The significance changing of children's interaction and time spent on digital media is at the same time altering the quality of their digital literacy engagement. However, some parents are anxious to the negative impacts of digital media and they tend to resist in exposing digital media for children's literacy development since their literacy habits may be copied by their children (Burgess et.al., 2002). Thus, it is very important for adults to help and give assistance during children's digital media exploration at the early age in order to assist their digital literacy engagement.

Children in today's era is unavoidably experiencing the fast growing of digital technologies. The trends show how digital technologies ease human activities as if the whole world is accessible through our hands, such as: a kid can play game through a game app from the smartphone, do homework, chat with friends, and other activities that used to be impossibly done individually. Scholars also saw that this trends as a transformation of literacy practices that were developed by young children and somehow changed the nature of learning (Husbye et al., 2012). As such, the objective of this study is to know on how digital literacy practices in the classroom could benefits students' learning development in order to be successful in the future.

METHODS

This study was conducted using literature review approach by gathering several current and peer reviewed researches in digital literacy which showed its benefits for young children's learning development. The current researches would help in providing an up-to-date and various literacy instructions that could be applied within these time periods as its usability and familiarity are quickly and continuously changed in today's digital era. Meanwhile, the peer reviewed articles were important for its exemplary quality in the research field. Furthermore, those related articles were investigated through critical reading. At the end, several plausible findings were noted and discussed in the following paragraphs in a way that might be useful for teachers-educators' teaching practices about the benefits of digital literacy in the classroom.

RESULT AND DISCUSSION

The study from Husbye et al. (2012) examined various classroom contexts in exploring the possibilities of playful early literacy curricula by using filmmaking as a conduit. The classrooms involved in their study were two preschool classrooms, a K-1 multiage classroom, and a K-8 elective filmmaking classroom. In a yearlong observation, children were interacted with popular media clips, collaborative script writing, storyboarding, media toys animation, puppets' making, and film producing. In a preschool classroom, for example, children quickly learned how to operate the camera. Once they had been told the fundamental use of the camera by the instructor, they quickly expanded their meaning making in various camera reproduction. To record the act out of a storyline, children either put the camera on the table to maintain its balance or worked in pairs to back and forth operating the camera and acting out. From this study (Husbye et al., 2012), the researchers noted that the interaction with digital literacy could help children to collaboratively discover to produce an intentionally constructed and interesting video product and to collaboratively experiment with multi modes of literacy production. In addition, the experience explored in this study might further develop children's fundamental perspective in which they could learn to think as media producers and not just consumers of digital technology.

Reading the article from Husbye et al. (2012) helped in clarifying the benefit of ICT (*Information and Communication Technology*) literacy play shop project used in Indonesian context. It's an ICT based literacy

activity which goal was to incorporate digital tabletop puppet performance into traditional folktale picture book storying which was also part of English curriculum in Indonesia. Accordingly, Wohlgend (2013) said, "picture books bridge curriculum and popular media filmmaking." In the project, the book was used as a tool to work with creative arts and digital media such as laptop and camera/cell phone to produce a digital tabletop puppet performance. Furthermore, by looking at the study from Husbye et al. (2012), the project that we planned was similar to one of the children projects in their study. Thus, the digital tabletop puppet performance can possibly accommodate the same benefit in developing multi modes literacy reproduction to the students. It may be a promising media to develop children's literacy skill as found in Maureen, I. Y., van der Meij, H., & de Jong, T. (2018) in which storytelling can be used as an approach for enhancing literacy and digital literacy development in early childhood classrooms. It is also similar to the study by Kumpulainen, Sairanen, and Nordstorm (2020) showed that the children's digital literacy practices were related to the use of multimodal texts and the operational, cultural and creative of literacy dimensions.

Similarly, the second article from Dalton (2013) presented the benefit of hyperlink strategy as a digital tool to invite students' multimodal expression. In her study, the students were able to explore and convey the characters' speech by recording it and added it into the hyperlink. The researcher conducted a simple and familiar digital literacy-based instruction to elementary kids by incorporating picture book reading activity into a follow-up digital based discussion. It was familiar to the students because they usually could find it while reading an e-book, playing games, and so on and through a small group assistance, the students could simply explore it on their own. In the study, the researcher used hypertext linking from a *Microsoft PowerPoint App* to generate an engaging discussion after reading *The Lion and The Mouse*. Students were encouraged to independently added comments, pictures, recorded sound through hyperlink as a way to exchange meaning with members of the class. As such, hypertext linking could offer children multiple ways of thinking about, critiquing, and expressing their meaning-making of written and illustrated text.

It could be seen that the hyperlink strategy in Dalton's study (2013) could bridge between traditional reading activity and new literacy experience through digital technology. After reading aloud the picture book to the students, the traditional oral discussion which usually employed limited modes provided from books could be replaced by exchanging ideas through multimodal expression as it was experienced in the hyperlink strategy. By doing that, students could bring their home experience while they were clicking the hyperlink from e-book and game into a more productive hyperlink they made in the classroom.

In the third article, however, D'Agostino et al. (2015) not only discussed the benefits of using *LetterWorks iPad App* for struggling readers but also identified teachers' misfit between their beliefs in literacy teaching and learning and the use of the digital app as a barrier. In a mixed-methods study toward 6- to 7-year-old children in an Early Reading Intervention, Reading Recovery, children in the treatment group performed higher score on alphabetic measures than children who learned using magnetic letters in the control group. The researchers argued that the significant achievement might be because several factors such as; the children who used *LetterWorks* app might have been more engaged and motivated, the time spent in preparing the app was lesser than the traditional activity using magnetic letter, and probably the tendency of magnetic letters to move out of orientation on the chalkboard challenged the beginning readers more than the simple movement in the digital app. Despite the positive benefits of the digital app, the researchers also argued that the teachers' misfit perception was because the teachers might have a perspective that the letters in the digital app couldn't be touched or manipulated in the same way as magnetic letters yet this finding couldn't be generalized as the general characteristic of Reading Recovery teachers since the sample of the teachers in this study was small.

It can be seen that the teachers' misfit perception in D'Agostino et al. study (2015) might need further clarification during their professional development since this might be also a barrier for the students to

experience the fast growing of digital literacy. Rather than seeing the digital app as a barrier, teachers might take the benefit from this new literacy technology as a way to negotiate and/or integrate between the traditional activity using magnetic letter and the new app using *LetterWorks*. Moreover, the positive effects of *LetterWorks* found in the study could be a profound input to consider this app as an additional tool to work together with the traditional activity in helping struggling readers in which this collaboration might influence a more significant learning achievement. Besides, by allowing students to experience different tool through a digital app at school might help struggling readers to be engaged with digital technology that might not be experienced at home and to prepare them to face the 21st-century career and life readiness.

Additionally, the last article was from McGrail and Davis (2011) who promoted blogging as a means to connect with a broader audience. In a fifth-grade classroom, the blogging teacher and the classroom teacher worked together to integrate blogging experience into the existing curriculum, with the writing as the main focus. From a yearlong learning and encouragement in blogging, according to the findings of the study, students obtained several benefits from the activity such as; (1) getting more active engagement with the audience through the commenting feature in blogging activity, (2) growing student bloggers' sense of agency and students' confidence as they made new connections and friends, and (3) gaining sense of ownership as they learned to make sense the language experiment by themselves. As such, promoting blogging activity in the classroom might be a good chance to create a new space for learning that connected traditional classroom setting to the learning experience beyond the classroom. According to the researchers, this blogging activity was not merely to transfer writing activity in the classroom into digital space, yet it was a new way to help students constructing the nature of active written communication.

CONCLUSION

To sum up, the studies discussed in this literature review exhibited positive effects of digital literacy in children's learning development. Although there might be still some struggles, the overtime reinforcement and practices through professional development might help teachers to facilitate the children achieving most of the benefits in learning with the digital literacy. It was noted from most of the studies that there was a need to negotiate between the digital learning experience and the traditional one so that students could obtain equal exposure to learning experience in both spaces. At the end, the benefits discussed in the paper could illuminate teachers-educators and further integrated digital literacy learning experience into the regular classroom in a way that it might help preparing the children for success in college, career, and life during this digital era.

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