

# Capturing Digital Literacy Skills in "Kampus Mengajar": Novice Teacher' Voice

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**Abstract.** In the 21st century, technological developments have snapped the world and brought significant transformations in education. The Indonesian government launches the "Kampus Mengajar" Program to face the challenges by giving opportunities for higher education students to apply their knowledge and skill in the real context when they follow teaching practice. Novice teachers are hoped to be teachers' partners in adapting the digital literacy skill in the teaching learning process. They are the agents of change to embrace the rapid growth of technology in education. Digital literacy is an important skill for both teacher and students in the hybrid teaching learning process. Hybrid learning in rural schools allows problems for digital facilities to arise, and it might be a risk of losing an effective learning process. Through this program, novice teachers are expected to be able to assist the learning process by utilizing technological skills. As one of the novice teachers who follows that program, I want to capture the digital literacy skills of both teachers and students in one of the rural area schools in Indonesia. I use the narrative inquiry method by utilizing photovoice, observation, and interviews to collect the data. It is hoped that my experience can give insights and innovation in conducting teaching practice especially in the "Kampus Mengajar" Program.

**Keywords:** Kampus Mengajar  $\cdot$  novice teacher  $\cdot$  digital literacy skills  $\cdot$  adapting technology

#### 1 Introduction

The Covid-19 epidemic had a consequence on several sectors, including education. Indonesia experienced a breakdown in the education sector along with the enactment of regulations to protect the young generation from the pandemic. Online learning has become a decision that was implemented by all schools [1]. In the new learning environment, information and communication technology becomes an innovation to help teachers teach, such as using the hybrid learning method. Hybrid Learning integrates learning methods and approaches to attain the objectives of the learning process [7]. The effectiveness of online learning that is currently being implemented has not entirely operated as expected [11]. This brings out an education crisis that stakeholders need to consider so that the students in Indonesia can continue carrying out education and

going through this difficult time. There are many obstacles with online facilities; signals, quotas, and lack of charge learning support considerable influence on the effectiveness of the online learning process.

As a result, the Minister of Education, Culture, Research, and Technology launched the "Kampus Mengajar" program to resolve various problems in education that appeared due to the Covid-19 pandemic. This program has encouraged the collaboration of stakeholders in finding solutions to existing problems by using the Hybrid learning method. "Kampus Mengajar" is one of the implementations of the "Merdeka Belajar Kampus Merdeka" (MKBM), through teaching assistance to allow students to help in the teaching and learning process in Elementary Schools and Junior High Schools in various areas in Indonesia. Within this program, it is hoped that there will be an improvement in the effectiveness of the teaching and learning process in the critical conditions of the Covid-19 pandemic because online learning has the risk of losing an effective learning process [8].

Prof. Nizam, as the Directorate General of Higher Education of the Ministry of Education, Culture, Research, and Technology, argued that this program is a solution for elementary and junior high schools which are affected by the pandemic, for supporting students who live around the school area and also to help teachers and the principals in carrying out learning activities in the coronavirus disaster. Through "Kampus Mengajar", students are involved in assisting learning activities that focus on increasing learning in literacy and numeracy. In addition, students also have activities to help adapt technology and assist the administration in schools [1].

Technology adaptation through supporting the implementation of a technology-based 4.0 learning system such as utilizing information and communication technology (ICT) in learning is beneficial for facilitating the teaching and learning process in a hybrid learning environment. Thus, both teachers and students must grasp or maximize the use of technology in the classroom. Furthermore, students are required to demonstrate analytical and critical thinking skills while processing information gleaned from the internet. The ease of accessing the internet makes digital literacy an important thing. The user access information must be educated in using the internet properly [9].

Several studies examining "Kampus Mengajar" has been done, such as the research on the implementation of the "Kampus Mengajar 1" program of 2021 in elementary schools conducted by Dahlan et al., found that this program was an influential innovation to help improve the quality of student learning during this Covid-19 pandemic [4]. Meanwhile, another study by Hamzah and Anwar had a positive attitude towards the "Kampus Mengajar" program [1, 6]. They found that this program positively impacted students and teachers to improve learning in Elementary Schools. These previous studies of "Kampus Mengajar 1" have not dealt with adapting technology like "Kampus Mengajar 2" of 2021, and also the level of the difficulties is on the Junior High School level. This study aims to describe a novice teacher's view of the digital literacy skills of both teachers and students in a hybrid learning environment in a rural area school. In addition, this study is expected to give many insights and innovations that can be a reference in "Kampus Mengajar" for future research.

#### 2 Method

This study employed a narrative inquiry method using a qualitative approach. Narrative research seeks to comprehend and then share real-life experiences through the stories of research participants [2, 3]. Hence, narrative inquiry is used as a method to describe personal stories as novice teachers. This study aims to describe the digital literacy skills of both teachers and students in one of the "Kampus Mengajar 2" placement schools located in a rural area. Data were collected using photovoice, observation, and interviews. Photovoice is based on the educational method of using visual images such as photographs or pictures to make people think critically about their community [5]. Through this critical thinking method, the authors can find and discuss the digital literacy skills truly owned in a school. Furthermore, interviews and observations are utilized to strengthen validity, generate a more comprehensive picture of the research problem, and probe multiple ways to understand the research problem [10].

### 3 Results and Discussion

One of the authors follows the "Kampus Mengajar 2" program in one of the junior high schools in Central Java. In this study, the author conducted research on the digital literacy skills of both teachers and students in a rural area school. The context of digital literacy in this study is to see both teachers' and students' ability to utilize technology to support the teaching and learning process. The authors used narrative inquiry by utilizing photovoice, interviews, and observations. Some data were obtained using visual images to describe the condition of digital literacy skills in the rural area school. Furthermore, interviews and observations have also been carried out as data triangulation to increase validity and create a more in-depth picture of the subject being studied. Here are the results data obtained by photovoice, interviews, and observations at the placement school "Kampus Mengajar 2" (Figs. 1, 2, 3, 4 and 5).

According to the aforementioned results of the data, the implementation of digital literacy in "Kampus Mengajar" is still highly expected both for the teachers and students. In this hybrid learning, various technology adaptation activities to improve digital literacy skills have been done, such as helping teachers create learning media, search online materials, operate computers and also technological tools for improving the teaching and learning process. In terms of facilities, the school has provided complete and quite qualified facilities for the teaching and learning process. Though they are not often used by the teachers and students in their teaching learning process. The abrupt transition from in-person meetings to hybrid learning causes significant anxiety for both teachers and students. They still need adaptation with the technologies by following workshops, seminars, technology-online courses, and other activities. The digital literacy skills are concerned with developing technical skills in using digital technology and are also related to more prominent contextual awareness of how to utilize the media and technology skills.



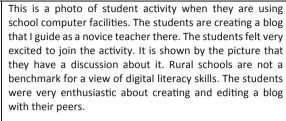
I took this photo when I came to the placement school for the first time. When observing the school conditions, I saw a beautiful school environment. This school is located in a rural area in Central Java, Indonesia. At first glance, schools in a rural area would find it difficult to get a signal for the hybrid learning, but the signal is easy to get and relatively stable.

The teaching learning process which is hybrid in this Covid-19 outbreak is really not a big problem for the facilities (computers, tablets, mobile phones, internet connection, air-conditioned rooms and hot spot area) for this school. Supported by this, teachers and students rarely experience signal limitations and lack of facilities during the hybrid learning.

Novice Teacher (NT): How are the facilities and internet connection in this school? Does it support your teaching and learning process in this hybrid learning?

"Kalau buat aku sinyal disekolah itu lancar. Sejak pandemi, ketika belajar di rumah hanya pakai HP, biasanya cari materi di youtube. Kalau di sekolah pakai buku catatan saja atau terkadang juga menggunakan HP apabila diminta guru membawa." (One of the students) "Fasilitas dan koneksi disekolah sudah mencukupi untuk mendukung pembelajaran daring maupun pembelajaran hybrid. Kecepatan internet di sekolah dapat mencapai 26 KBPs. Laboratorium komputer di sekolah juga memberikan kemudahan untuk Bapak/Ibu guru merencanakan dan melaksanakan pembelajaran daring." (One of the teachers)

Fig. 1. School Condition



Developing the students as a part of digital natives who always take advantage of digital information and be lifelong learners is a must in this hybrid learning. Not only students but also teachers should be equipped with this digital literacy skill. Based on the interview, students also notice that not all the teachers are equipped themselves with these digital literacy skills.

NT: What is your feeling about this "Kampus Mengajar" Program connected to your digital literacy skill?

"Saya merasa senang dengan kegiatan seperti ini. Walaupun kebanyakan dari guru kami masih belum menguasai bahkan belum mengetahui bagaimana cara pembuatan blog." (One of the students)

"Saya suka kegiatan mengembangkan blog dengan kakak-kakak mahasiswa. Saya kira membuat blog akan sulit, tapi ternyata sangat menyenangkan dan mudah." (One of the students)

I think digital literacy skills are not developed when the students enter higher education, but they need to be enlightened earlier especially in elementary school or junior high school.



Fig. 2. Students as Digital Natives

This is a photo of students' practical activities in utilizing technology facilities at school. This photo is taken in the computer laboratory. This is one of the programs in "Kampus Mengajar" called "Adaptasi Teknologi Bersama Mahasiswa Kampus Mengajar untuk Siswa" which is initiated by the novice teachers. As a novice teacher, I guide students who have difficulty in operating computers. The majority of students consider new things in computer operation.



It is revealed from the actions of students who are confused about how to use the computer tools. Although the students have known the names and uses of these computer tools, they find it challenging to use them.

"Saya tahu kegunaan alat-alat komputer seperti keyboard untuk mengetik dan CPU sebagai otak di suatu komputer. Tetapi dalam mengoperasikan komputer seperti menggerakan mouse, saya masih sulit mengarahkan kursor dengan baik." (One of the students)

In this digital era, digital literacy skills are necessary. Based on the above case, educational institutions need to develop digital literacy skills in a Hybrid learning environment. In the same way, improving the quality of the teaching and learning process also increases experience in learning to be more creative and innovative.

Fig. 3. Students and Critical Digital Literacy Skills



This photo is one of the "Kampus Mengajar" activities held by my friends and I as novice teachers there. It is "Adaptasi Teknologi Bersama Mahasiswa Kampus Mengajar", a workshop for teachers. The purpose of this activity is to share knowledge about technology used in the teaching and learning process so the teachers can adapt the technology to assist them in their teaching. This activity was followed by 18 teachers from different subjects. They learned about creating an interesting and creative presentation by using ppt voice, colorful slides, downloaded themes for the ppt, and also how to record their teaching materials and send it to the students.

Teachers are trained in making Powerpoint by utilizing voice, which aims to make teachers able to take full advantage of the Powerpoint feature in delivering learning materials.

Before "Kampus Mengajar" came to this school, teachers had already been given various pieces of training in utilizing technology for learning. Yet, of all these training, only a few can be applied by teachers because the training was too difficult for the teachers.

"Mahasiswa Kampus Mengajar diharapkan dapat melatih guru dalam memanfaatkan hal simple tetapi juga dapat diterapkan oleh guru di dalam proses pembelajaran Hybrid. Lebih baik guru memperoleh sedikit inovasi tetapi bisa diterapkan daripada memperoleh banyak inovasi namun sulit dilakukan." (Teacher's opinion)

As a novice teacher, I think that novice teachers must possess digital literacy skills because they will become a source of information for their students when they become teachers. Moreover, at the Elementary School and Junior High School levels, teachers are still regarded as the only credible source of information.

Fig. 4. Teachers as Digital Natives



This photo is the follow up activity which is asked by the school about "Adaptasi Teknologi Bersama Mahasiswa Kampus Mengajar". The teachers realize that digital literacy is needed in this hybrid learning. In this activity, teachers are trained to utilize ICT laboratory facilities in schools to master the operation of computers. Teachers' digital literacy skills have improved by understanding and using the information in a wide variety of sources and accessed through various computer tools.

"Apabila seorang guru tidak terlalu cakap dalam menyaring informasi yang diperoleh dari internet maka bisa jadi informasi yang disampaikan ke muridnya saat pembelajaran merupakan informasi yang salah." (Teacher's opinion)

In the era of digital information, which allows a lot of information to be easily obtained, it will be at risk if teachers do not have adequate digital literacy skills. Schools are a logical focal point for increasing the integration of digital literacy into the curriculum.

Fig. 5. Teacher and Critical Digital Literacy Skills

## 4 Conclusion

The implementation of "Kampus Mengajar 2" in a rural area has supported schools in improving their digital literacy skills. The observation results show that the condition of the placement schools in terms of facilities is quite good. Still, some teachers and students do not take advantage of these facilities to improve the teaching and learning process. Moreover, the majority of students use the internet as the primary source of learning material information. Through this program, technology adaptation is the main thing in overcoming these various problems. The teacher's role in filtering information is critical so that students do not get incorrect information. Both instructors and students should be digitally literate in order to appropriately utilize a variety of sources. Teachers are also encouraged to develop digital-based learning material in order to adapt to the conditions, making the learning and teaching process more engaging.

**Acknowledgments.** I cannot express thanks to my beloved lecturer for her support and encouragement: Mrs. Lilia Indriani, S.Pd., M.Pd.

My completion of this project would not have been possible without the instructors' and children" help at "Kampus Mengajar". Thanks to the committee "ICoPCoSE" who has organized this international conference.

**Authors' Contributions.** LA found the idea about digital literacy skills in a rural school conducted by LA in the "Kampus Mengajar" program. Then, LI decide to use the photovoice method to capture the data. LI also construct an interesting title and abstract. LA and LI wrote the introduction and gave the limit of the study. LA constructed the methodology for this study. LI adds and fixes some data that has been compiled before. LA and LI gather the data both from primary data and secondary data. Then, LA and LI discussed the finding and wrote the result in the result and discussion. LA and LI wrote the conclusion of the study and reviewed it together.

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