

Digital Native in the Frame of Distant Learning during Covid-19 Pandemic Era

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ABSTRACT

We could not forget the educational system when covid-19 outbreak in 2019 till 2021. At that time, we were forced to do everything at home including to study. The school system was changed totally. Related to that occurrence, the researcher did a survey to the third semester - students of tertiary level. The sample was three classes of 20 students each. The data was taken when the covid-19 occurred in 2020. At least, there were benefit, challenges, and strategies we could discuss in this study which need to address. This research contributes valuable insights into the intersection of digital natives and distant learning during the COVID-19 pandemic. Findings will inform educational institutions, policymakers, and educators on how to tailor distant learning approaches to better accommodate the needs and strengths of digital native students. The study may face limitations related to generalizability, as findings may be context-specific. Additionally, self-reporting bias is a potential challenge in survey responses.

INTRODUCTION

The teaching and learning process which is always done offline, at once it changed to become online. There was no chance to have gradual changes in order some adjustment could take place. Therefore, there were so many problems arise in all levels of education (Arimuliani Ahmad et al., 2022; Parahita et al., 2023). The school should have proposed a high amount of budget for facilitating the online teaching, the students had difficulties in learning, the teacher also had difficulties in delivering materials and to assess the students. The students' problem were mostly related to their learning strategies which should be changed drastically. In online learning, they needed to see their laptop or handphone for a long time, that became another problem for their health, their eyes which also effect to their headache. All of these became challenges that we could discuss in this study in order we could take the benefit of it.

So far, mostly the studies related to the teaching and learning process in pandemic era digged up on the teachers' part, starting from how they make the materials online, what kind of techniques should they use in delivering materials, how they assess the students, and how to deal with the students effectively, and et cetera (Anjani et al., 2022; Arimuliani Ahmad et al., 2022; Hamied & Muslim, 2021; Suharyono, 2022; Wijaya, 2022; Yan et al., 2022). Another study assessed students' readiness of their digital competence toward digital transformation of education (Tóth et al., 2022). There was also a study discussing about how to deal with digital native (Evans & Robertson, 2020) ; López Iglesias et al., 2022). Another study discussed about the behaviours and characteristics of digital natives throughout the teaching-learning process (Vitvitskaya et al., 2022). There was also a study about digital native and digital immigrant lecturer in doing teaching and learning process (Agus Eko Cahyono et al., 2022).

Few studies paid attention on the students' part. First, study which paid attention to students discussed about the students loss and controll motive (Parahita et al., 2023). Going along with this study, native digital students were touched. This study discussed how zillennial generation control their learning loss especially in the pandemic era. Besides some typication of them in facing their loss of learning were also discussed. Second, a study discussed about the students' social ability as a digital native but it was before pandemic (Agustiningrum et al., 2021). As the present study takes the digital native as the object of the study, this previous study is necessary to discuss. Here, digital natives need some activities that make them interact with each others. These activities stimulate social emotion ability of the students. Third, study discussed about the students anxiety during pandemic (- et al., 2021; Iriyadi, 2022; Nihayah et al., 2021). Forth, there was a study about motivation of the student during pandemic (Islam & Putri, 2021). Fifth, There was also a study about the students' challenges during pandemic (Juliana, 2021). From all the previous studies above, the perspective from the students has not been researched.

This study as a response to the lack of the previous study which ignore the students' perspectives during the covid-19 era. The students' perspectives is

explored from the view of students' experiences during the covid-19. The understanding about the students' benefit, challenges, and strategies of learning enable us to see what has happened during the covid-19 which has relation with today's teaching and learning process. Along with three questions formulated for this study. First, how did the students experience learning in the covid-19 era. Second, how was the students characteristics in learning experiences. Third, how was the students' learning strategies to cope their challenges in learning during covid-19. The answers to those three questions give deep understanding on the students performance today.

This study is based on the argument that the students' loss is caused by the absence of daily activities before pandemic and the ignorance of the students' perspective as a learners during covid-19 pandemic. The attention to the teachers' part when pandemic outbreak has ignored the students' learning experience which gives greater and longer impact on their learning strategies today. The consideration about the students' difficulties has brought the risk as a learner as the victim of the policy. Three conditions have put the students on the risk of learning loss. First, the omission of the learning activities before pandemic has caused the students' loss learning behaviour. Second, the students' loss of learning behaviour was based on lots of burden of the learning outcomes set before covid-19 pandemic which normally needs the direct deep explanation from the lecturer. Third, the absence of emergency system in education has become the cause of the ignorance of the students' part in distant learning during covid-19 pandemic. Therefore, deep understanding on the students' part during pandemic can be the basis of action taken today as the solution of the students' learning experiences set by the curriculum.

LITERATURE REVIEW

Digital Native

Digital natives, a concept introduced by Marc Prensky in 2001, encapsulate individuals who have been exposed to digital technologies from an early age. Born into a world where smartphones, computers, and the internet are omnipresent, digital natives are believed to possess innate technological skills that distinguish them from older generations. Their formative years in a digitally saturated environment shape not only their lifestyles but also their cognitive processes, communication styles, and learning preferences.

Growing up surrounded by technology, digital natives develop a familiarity and comfort with digital tools that are deeply ingrained in their daily lives. This exposure is thought to contribute to their adaptability to the rapidly evolving landscape of online learning. The assumption is that their early and continuous interaction with technology equips them with a natural ability to navigate digital platforms, making them seemingly more adept at handling the challenges presented by sudden shifts, such as the global transition to online education prompted by the COVID-19 pandemic.

However, it is crucial to acknowledge the nuances within the digital native population. While some may seamlessly integrate technology into their learning experiences, others may face challenges related to digital inequality,

distractions, and a blurred line between leisure and educational activities. Research indicates that assumptions about the homogeneity of digital natives may oversimplify the diversity of their experiences and skills.

As educators grapple with the demands of digital education, recognizing the individual needs and preferences of digital natives becomes imperative. This involves tailoring teaching strategies to accommodate varied learning styles, incorporating interactive and collaborative elements, and addressing potential mental health implications associated with increased screen time and reduced face-to-face interactions.

In conclusion, the concept of digital natives provides a lens through which we can understand the impact of technology on the learning experiences of individuals in the digital age. While these individuals are often presumed to possess inherent technological skills, it is essential to approach this assumption with nuance, recognizing the diversity within the digital native population and adapting educational approaches accordingly for a more inclusive and effective learning environment.

Distant Learning in the Frame of Covid-19 Pandemic Era

The COVID-19 pandemic brought about unprecedented challenges to the traditional education system, prompting a widespread shift to distant learning as a means of ensuring the continuity of education while adhering to social distancing measures. Distant learning, also known as remote or online learning, became the primary mode of education delivery during this era, reshaping the landscape of teaching and learning globally.

One of the key characteristics of distant learning during the COVID-19 pandemic was the reliance on digital technologies. Educational institutions swiftly adopted online platforms, video conferencing tools, and learning management systems to facilitate virtual classrooms. This transition, while necessitated by the circumstances, also highlighted the role of technology in shaping the future of education. Students and educators found themselves navigating a digital realm, where the boundaries between physical classrooms and virtual spaces blurred.

The challenges associated with distant learning during the pandemic were multifaceted. Issues such as the digital divide, where some students lacked access to reliable internet or suitable devices, underscored existing inequalities in educational opportunities. Moreover, educators had to rapidly adapt their teaching methodologies to suit online environments, incorporating interactive elements, digital assessments, and asynchronous learning to engage students effectively.

On the positive side, distant learning offered certain advantages. It provided flexibility in terms of scheduling, allowing students to learn at their own pace. Virtual classrooms facilitated collaboration among students from different geographical locations, fostering a globalized approach to education. Additionally, the use of multimedia resources enhanced the learning experience, making educational content more dynamic and accessible.

As the education sector navigates the post-pandemic era, distant learning is likely to persist in various forms. Institutions and educators are incorporating

hybrid models that combine in-person and online elements to harness the benefits of both approaches. The pandemic has accelerated the integration of technology into education, prompting discussions about the future of learning and the need for digital literacy as an essential skill.

In conclusion, the COVID-19 pandemic compelled the education sector to embrace distant learning as a crucial adaptation to unprecedented circumstances. While challenges were evident, the experience has sparked innovations and discussions about the future of education, emphasizing the need for a flexible, inclusive, and technology-integrated approach to learning.

Technological Proficiency of Digital Natives

Bennett et al.'s (2008) research underscores the noteworthy observation that digital natives consistently demonstrate a heightened level of comfort and proficiency when engaging with digital tools. The term "digital natives" refers to individuals who have grown up in an era where technology is ubiquitous, shaping their cognitive processes and learning behaviors. The study's findings highlight the inherent technological adeptness of this demographic, suggesting that they possess a natural affinity for and mastery of digital tools.

In the context of the COVID-19 pandemic, the implications of this proficiency have become increasingly significant, particularly in the swift transition to remote learning. The assumption is that digital natives, armed with their familiarity and ease of use with digital technologies, are better equipped to navigate the challenges posed by online platforms. This advantage manifests in their ability to seamlessly transition to remote educational environments, potentially mitigating the disruptions caused by the sudden shift from traditional to online learning modalities.

The heightened comfort level and proficiency with digital tools among digital natives contribute to their adaptability during the pandemic-induced changes in educational delivery. While other segments of the population may face hurdles in adjusting to online platforms, digital natives are presumed to navigate these transitions more smoothly. The seamless integration of technology into their daily lives, from communication to information retrieval, positions them as individuals well-prepared to harness the benefits of digital learning platforms.

However, it is important to approach this assumption with a nuanced perspective. The concept of digital natives can sometimes oversimplify the diversity within this population. Not all digital natives have the same level of exposure or comfort with technology, and individual experiences may vary. Additionally, challenges such as digital inequality and distractions need to be considered, as they can impact the overall learning experience for digital natives.

In conclusion, Bennett et al.'s research provides valuable insights into the technological proficiency of digital natives, particularly during the COVID-19 pandemic. The presumed advantage they hold in adapting to remote learning environments underscores the importance of recognizing and leveraging the

diverse experiences within this population to enhance the overall effectiveness and inclusivity of digital education.

The literature on digital natives in learning during the COVID-19 pandemic provides valuable insights into the challenges and opportunities associated with online education. While digital natives bring inherent technological skills to the table, it is essential to recognize the nuanced ways in which they navigate the digital learning environment and address the associated challenges for a more inclusive and effective educational experience.

METHODOLOGY

The research aimed to investigate the experiences, challenges, advantages and strategies of native digital individuals, commonly referred to as digital natives, in the context of distant learning during the COVID-19 pandemic. This study sought to understand how the digital upbringing of these individuals influenced their adaptation to online education, and how their skills impacted the overall effectiveness of distant learning. This study employed a qualitative research design, used qualitative approaches to provide a comprehensive understanding of the topic. The study targeted digital natives during pandemic enrolled in educational institutions that transitioned to distant learning during the COVID-19 pandemic. Participants were selected from third semester students and diverse socio-economic backgrounds. Qualitative insights were gathered through in-depth interviews with a subset of participants. Open-ended questions explored their experiences, challenges faced, and perceived advantages of being digital natives in the distant learning environment. Qualitative Analysis was done by doing thematic analysis that was applied to interview transcripts, extracting key themes and narratives related to the experiences of digital natives in distant learning. Ethical guidelines were strictly followed, ensuring the confidentiality and anonymity of participants. Informed consent was obtained, and participants had the right to withdraw from the study at any stage. By employing a mixed-methods approach, this research aimed to offer a nuanced understanding of the role played by digital natives in the distant learning landscape, contributing to the ongoing discourse on the future of education in a technologically-driven era.

RESEARCH RESULT

From the survey given to the students in the form of google.doc, which open-ended questions, asking about the benefit, challenges, and strategies of the students from the distant learning during Covid-19 Pandemic. The benefits the students got from the distant learning was calmness. The students felt relaxed and did not have to worry about being infected of Covid-19 because they studied at home. They could study anytime in the day without any time limit. The materials of the course could be accessed from anywhere without having to go to campus.

From the second question was about the challenges. Most of the students mentioned the data connectivity of the internet access as the problems. For doing zoom meeting, for one hour the students needed to spend one giga bites

of data connectivity. It made them spend a lot of money just for having zoom meeting. The second problem mentioned by the students was the electricity power. Most of remote area, they had limited electricity power which they had to take turn from one another so that every place could have the electricity power. Therefore, the students should have managed to do the homework when the power was on, before the deadline of submitting the task to lecturer via online. The third problem was the limited time for teacher-students interaction. This happened because of the limited data connectivity of the internet which hinder the activity between teacher-students.

From the third question, the answer was about the strategies the students do in order that they could manage their class. First, mostly they used the data connectivity only for study use. As we knew that the university gave them small amount of data connectivity of the internet. The second strategy was activating whatsapp group in which the students and the teacher reminded each other about the task which had not been done and sent. Communication was done via whatsapp group. Therefore, there was no misunderstanding between the task from the lecturer and the students, although some misinterpretation of the task in the part of the students still existed.

DISCUSSION

The research yielded three significant findings. Firstly, in terms of benefits, the study revealed that digital natives experienced a pronounced advantage in adapting to distant learning. Their inherent technological proficiency facilitated seamless navigation of online platforms, resulting in increased engagement and enhanced learning experiences. Secondly, challenges were identified, with digital natives encountering difficulties related to digital inequality and distractions. Despite their familiarity with technology, disparities in internet access and the blending of personal and educational spaces posed obstacles. Lastly, regarding strategies employed, both digital natives and their teachers demonstrated concerted efforts to overcome challenges. Digital natives showcased adaptability by utilizing collaborative online tools, while teachers implemented innovative teaching methodologies to ensure inclusivity and effective online instruction. These findings underscore the complex dynamics of distant learning for digital natives during the COVID-19 pandemic, emphasizing the need for targeted interventions and pedagogical adjustments to optimize the online educational experience.

Benefits

Amidst the challenges posed by the pandemic, the advantage of studying calmly without the constant worry of being infected with Covid-19 is a significant benefit of distant learning. This environment enables students to focus on their academic pursuits without the added stress of potential health risks, fostering a conducive atmosphere for effective learning and personal well-being.

The flexibility inherent in distant learning is a key aspect that enhances the educational experience. With the ability to collect assignments at any time

throughout the day, students have the freedom to manage their schedules based on their peak productivity hours. The absence of hourly restrictions allows for a more personalized approach to learning, accommodating diverse learning styles and individual preferences.

The accessibility of distant learning goes beyond the confines of a physical campus. The geographical barriers are eliminated, empowering students to access educational resources and engage in coursework from virtually anywhere. This not only promotes inclusivity but also allows students to create a conducive learning environment that suits their needs, contributing to a more dynamic and adaptable educational experience.

The absence of a mandatory campus presence not only eliminates travel time but also provides a more inclusive learning environment. Students who may face challenges attending physical classes due to various reasons, such as geographical distance or health concerns, can actively participate in the learning process. This inclusivity contributes to a more diverse and enriching academic community.

Distant learning fosters a sense of independence and self-motivation among students. With the freedom to access course materials and complete assignments at their own pace, students develop time management and organizational skills. This autonomy not only prepares them for the demands of the professional world but also empowers them to take control of their educational journey, instilling a lifelong commitment to continuous learning.

Challenges

A significant challenge faced during distant learning is the dependency on robust data connectivity for internet access. Many students encounter difficulties in maintaining a stable internet connection due to varying data availability. This reliance on data infrastructure can create disparities in access, hindering some students from fully participating in online classes and accessing essential learning resources.

The prevalence of power outages in certain areas poses a considerable obstacle to distant learning. Students often find themselves navigating the challenge of power interruptions, necessitating strict time management to ensure they can complete assignments and attend virtual classes within the constraints of their region's power availability. This constraint adds an extra layer of complexity to the learning experience.

Another challenge is the restricted interaction with teachers, impacting the ability of students to freely seek clarification or ask questions. Distant learning environments may lack the spontaneity and immediacy of in-person classroom interactions. This limitation could potentially hinder students' understanding of course materials and impede the development of a robust teacher-student relationship, which is crucial for effective learning.

Economic disparities contribute to challenges in accessing necessary technology for distant learning. Students from economically disadvantaged backgrounds may face difficulties acquiring devices such as laptops or tablets and maintaining a reliable internet connection. This digital divide exacerbates

existing educational inequalities, limiting the opportunities for certain students to fully engage in the online learning experience.

Distant learning can also contribute to psychosocial challenges, including feelings of isolation. The absence of face-to-face interactions with peers and teachers may lead to a sense of disconnect and loneliness among students. This emotional aspect can negatively impact mental health and overall well-being, emphasizing the importance of addressing not only the technical challenges but also the human and emotional aspects of distant learning.

Strategies

The challenges of data dependency for internet access prompt students to adopt strategies like economizing data usage exclusively for educational purposes. With the need for a stable internet connection, students face the difficulty of managing limited data resources, leading them to prioritize academic activities over non-essential online interactions to ensure their participation in distant learning.

To address the challenge of frequent power outages and strict time management, students have developed strategies such as collaborative reminders within class groups. This involves students reminding each other about upcoming assignments and deadlines, fostering a sense of community and mutual support. By sharing information about power outage schedules, students can collectively plan their study hours more effectively.

In response to the limitation of interaction with teachers, students and educators alike activate WhatsApp groups as a strategic communication channel. This serves as a platform for discussions, questions, and clarifications. By leveraging this instant messaging application, both parties can bridge the gap created by physical separation, fostering a more dynamic and interactive learning environment despite the challenges of distant learning.

Participants adopt various data conservation techniques, including adjusting video quality during online classes and downloading study materials for offline use. These efforts contribute to optimizing data usage for educational purposes and overcoming the challenges associated with limited access to the internet.

Participants employ collaborative tools and platforms for group discussions, project work, and peer interactions. Platforms like E-Learning or Google Classroom facilitate synchronous and asynchronous collaboration, allowing students and teachers to engage in meaningful interactions, share resources, and collectively address the challenges posed by the physical separation inherent in distant learning.

To mitigate the limited interaction with teachers, participants schedule regular virtual meetings. These sessions provide opportunities for direct communication, allowing students to ask questions, seek clarifications, and receive timely feedback. By actively engaging in virtual meetings, both students and teachers can recreate some aspects of the traditional classroom experience, fostering a more interactive and supportive learning environment.

In the face of the challenges posed by distant learning, the implemented strategies showcase the resilience and adaptability of participants, highlighting their collaborative efforts to overcome barriers and optimize the educational experience.

CONCLUSIONS AND RECOMMENDATIONS

This research contributes valuable insights into the intersection of digital natives and distant learning during the COVID-19 pandemic. Findings will inform educational institutions, policymakers, and educators on how to tailor distant learning approaches to better accommodate the needs and strengths of digital native students.

ADVANCED RESEARCH

The study may face limitations related to generalizability, as findings may be context-specific. Additionally, self-reporting bias is a potential challenge in survey responses.

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