

## The Advantages of Digital Literacy Skill and Technology Innovation to Improve Student Learning Result in Disruption of the Covid-19

Siti Nur Azizah<sup>1</sup>, Vani Wirawan<sup>2</sup>, Emy Yunita Rahma Pratiwi<sup>3</sup>, Mulyadi<sup>4</sup>, Fahrina Yustiasari Liriwati<sup>5</sup>

<sup>1</sup> Universitas Putra Bangsa, Kebumen, Indonesia

<sup>2</sup> Universitas Jenderal Achmad Yani Yogyakarta, Indonesia

<sup>3</sup> Universitas Hasyim Asy'ari Jombang, Indonesia

<sup>4</sup> STAI Auliaurrasyidin Tembilahan Riau, Indonesia

 [sitnuraziz@yahoo.com](mailto:sitnuraziz@yahoo.com)

### ABSTRACT

This research purposed to examine the benefits of digital competency and e-learning during the Pandemic that interrupted schooling. Expert opinions published in different international publications were used to address the question. The core of our results from a wide range of subjects, including the benefits of digital literacy, is that it is undoubtedly capable of innovating learning that has been disrupted since the Pandemic struck the globe. Although expert opinions differ significantly, the abilities of pupils and other educators in digital technology are so essential that educational disruption will be very fearful. To address the research's topic, the first the researchers looked for data in the literature and then performed a study that included coding systems, theme verification, assessment, and in-depth interpretation. This is qualitative research that takes a phenomenological approach to its design. The findings showed that digital literacy is defined as students' capacity to arrange knowledge in the world of learning, from seeking to communicating, with little instructor assistance. This document includes, among other things, a summary of the study's results with the hopes of providing more information for educators and educational researchers interested in using digital literacy to innovate teaching during the Pandemic.

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### INTRODUCTION

From the point of view of professional training, digital literacy skills are the power to obtain information, the ability in learning meetings to achieve promising results, both exclusively online and in face-to-face meetings (Burns, 2011). So proficiency, when associated with instructive education programs, is an attempt to emerge at the stage of outlining the background as far as listening, paying attention, composing, reading, communicating, and sharing information. However, the skill point of view is not only interpreted as an effort to improve the quality and ability in

terms of training, but this education also implies new abilities or capacities and capacities that people or students in learning can use according to their abilities. The purpose of learning and working is identified with innovation and further education (Watson, 2008). Returning to the learning setting in the school environment where academic ability is identified with the advanced innovation outline that students' ability to master the content and understand the content of the educational plan is precious if they have some computerized driven abilities (Tuzlukova et al., 2017). Each student is relied on to dominate learning content if they do not dominate innovation, how to dominate content, how to get data content, how to get data, and how students will convey data or offer data. They get. This is identified with advanced proficiency in an instructive climate where all parts of the training must be experienced in obtaining computerized education and how to apply it to achievement in the scholastic world (Monix, 2012).

So for the current situation, education is not only seen as another ability in terms of the ability to learn to see every content of national and international language exercises or foreign languages, but with computerization or advanced skills, it must be the ability to describe learning. For example, material in the process of understanding learning texts or learning content aims to develop their understanding further both at the instructive level and when returning to the world of work (Li and Zhang, 2010). So part of the ability driven by computerization or proficiency, students are relied on to find out or relate to information later. They move around having a vision to later apply it in recording their problems in the realm of training itself because the benefits and inconveniences of computerized education may exist (Mohamed et al., 2020). In light of the significance of computerized proficiency, we specialists need to inspect education sources and perceptions to get some genuine proof or proof of examination that has been done in different nations; what are the benefits of advanced proficiency in improving learning, particularly when taking in and instruction from rudimentary, auxiliary to tertiary levels are halted because of the spread of the Covid-19 issue or reacting to government approaches to stop the spread of Covid-19 in Indonesia.

Advanced education is critical because, as indicated by specialists, computerized proficiency enjoys benefits in further developing learning results and quality (Council, 2012). With the capacity of innovation to develop learning, even though understudies cannot meet educators in class or meet straightforwardly with companions in the school climate, the learning system can in any case, happen. Be that as it may, this cooperation is significantly helped by abilities in dominating innovation with computerized innovation. So they can all the more effectively follow the exercises introduced online by their separate schools. So for that confidence in innovation that enjoys benefits, this test should be replied to by investigating the benefits and impediments of this computerized innovation.

The explanation we pick research sources or information from field discoveries made by past analysts that have been distributed in different worldwide distributions, this remembers discoveries and reports for different substances and settings in global instruction with the expectation that these discoveries are fascinating with an end goal to foster new information and foster the expert aptitude of instructors and different gatherings identified with training in the current computerized period. So later, the aftereffects of this exploration will be shared by educators and understudies and will likewise be helped by teaming up with organizations in the public authority area that direct how disturbed learning can be overwhelmed with suitable proficiency and digitalization for instructors and understudies (Keim et al., 2010).

The core problem of this study is that after students are required to go home and start learning with technology or distance, then there are at least students who must have basic skills how to take advantage of digital literacy, including; Able to improve the ability to filter news/information obtained from social media/internet. Able to educate the public about the truth of news/information (Haryadi & Rakhman, (2020). Understand the importance of privacy of social media user data. These literacy skills are essential because people can process various information, understand messages, and communicate effectively with others in various forms by having digital literacy skills. Thus, the social and cultural life of the community during the Covid-19 pandemic will tend to be safe and conducive if it can be done by minimizing direct contact. So there is no other way, apart from the policy of sending students back to study remotely. So the government made a sudden breakthrough and hoped the only solution was digitization and its capabilities.

So, the specificity of this study lies in digital literacy skills where the abilities and insights of a student in the aspect of using digital technology, communication tools, making and evaluating information healthily and carefully, and obeying the law in life. The uniqueness of digital literacy is the ability and insight of the school board and students and parents in using digital technology, communication dissemination tools, making and evaluating information healthily and carefully, and obeying the law in life. This study is very relevant for us to carry out (Devri Suherdi, et al, 2021).

Following the subject of the issue to be contemplated, to be explicitly looking for a profound comprehension of the upsides of advanced education in developing and figuring out how to develop understudy learning results during the Pandemic further. So we attempted to pick an approach to find information as a solution to this examination issue, specifically through an investigation of many writing as books, logical works, instructive diary distributions, particularly computerized proficiency and disabled learning results, because of the continuous Pandemic in Indonesia (Octaberlina and Muslimin, 2020; Suroso et al., 2021). In this examination, the inquiries we will reply to include the advantages of computerized education in redesigning learning and further developing understudy learning results during learning problems because of the Pandemic, advanced education ready to develop understudy learning in Indonesia during the Pandemic. Distributed journals reacted to learning issues during the Covid-19 Pandemic

## **METHODS**

This research is qualitative research with a phenomenological approach in its design. As this examination relies on additional information, we will use proficiency level as material for this investigation. We will look at information electronically from various data sources and distribution sources, aggregating the global distribution used for schools, particularly the distributions of ERIC, Elsevier, Google Books, Google Scholar, Taylor&Francis, and several other well-known distributions around the world which we restricted from 2015. until 2021 (Sgier, 2012). Then the data analysis begins by using a coding, evaluation, and interpretation system to get answer data as new findings in valid and reliable data. During the previous five years, the progress of innovation and prowess was extraordinary in Indonesia, even universally, so this exam will clarify the progress of science in teaching and education in this country (Melović et al., 2020).

## **RESULT AND DISCUSSION**

### **The benefits of digital literacy**

Evidence of the superiority of digital technology in handling education affected by the Pandemic is a study (Basir et al, 2021). During the COVID-19 Disruption, how can universities entrust digital literacy to improve student learning outcomes? Universities worldwide have increased their use of trustworthy distance learning solutions since the policy of sending students home to study due to the epidemic. During the COVID-19 disruption, the answer rests on digital literacy to maintain and improve student learning outcomes. As a result, researchers have demonstrated it in many international papers through in-depth analytical and investigative efforts. The same thing was also proven by Zulkarnain et al., (2020) who said the digital literacy skills of Mathematics students through e-learning in the COVID-19 era through a case study at the University of Riau.

Hypothetically, the interruption of understudy picking up during the Pandemic has demonstrated that advanced innovation significantly helps understudy and educator learning. Notwithstanding, even though the upsides of innovation are exceptionally incredible in noting understudy learning issues, in case understudies' abilities in utilizing mechanical or advanced proficiency abilities are inadequate with regards to, it very well may be found out that mechanical benefits nearly do not superiorly affect learning arrangements during a pandemic interruption (Muna Muzahim Abbas, 2020). Muna's discoveries in his examination.

Sá and Serpa, (2020) demonstrate that online learning happens the upsides of computerized innovation was essential. They do not mean a lot if understudies' capacity to comprehend and apply advanced innovation is still questioned. So the issue of dominating understudy innovation with the issues looked at during the interruption of the Pandemic is a chance for analysts to discover. It depends on the current hypothesis of how the learning issues of understudies upset by the Pandemic can be tackled with innovation upheld by the abilities of understudies and instructor boards in moving agreement and working computerized innovation offices to deliver high worth understudy learning (Tejedor et al., 2020).

The motivation behind this digital competency study is to help students and other educational communities affected by pandemic disturbances (Aslan et al., 2020). An exploratory task is required to present a draft work plan or proposition with an investigative subject to see how computerized mastery dominates and the power it has in adapting students' current work; Students in Indonesia, in particular, are still in an atmosphere of pandemic disruption so that learning is considered to have stopped because of sending students back to where they grew up. However, due partly to the convenience of this innovation and government regulations, mainly online or online learning and education guidelines, it expects educators to hone their skills in utilizing these innovations and see how to become proficient (Code et al., 2020).

Expressly, computerized education is accepted to have the option to build the adequacy of learning, essentially ready to be an answer so that learning proceeds to happen and with the expectation that it will not just proceed yet additionally work on the nature of understudy learning. While carrying out wellbeing programs, results are needed by the public authority by confining the development of individuals for an enormous scope. Then again, the aftereffects of this examination are additionally expected to be one of the reports that should be ready to satisfy a few necessities to acquire or finish or get an instructive understanding at the school level.

### **Digital literacy in school and after**

In advanced education, there are a few basic scholarly abilities that understudies should know and apply in their academic life and work (Mardina, 2017). As understudies, advanced proficiency abilities incorporate the capacity to utilize computerized innovation to discover data, assess, use, make, and use it shrewdly, insightfully, cautiously, and properly as per its utilization both in the academic setting during training and with regards to work in the wake of moving on from school. As indicated by Maulana, (2015) overall, there are a few advantages as referenced above where advanced proficiency can be felt, including saving time, learning quicker, setting aside cash, being safer, consistently forward-thinking, consistently associated, settling on better choices, and can help educate clients work, be glad, and impact the universe of academic.

The coronavirus outbreak has encouraged the world of education to adapt to all challenges with online education. There are many signs that this disruption will change many parts of business and education (Basir et al., 2021). If distance education is proven to save students, online education and digital technology may be one of the things that need to be developed. Undoubtedly, his innovations in online learning due to COVID-19 happened urgently and unexpectedly. However, if done as needed, online learning and evaluation have several advantages and challenges (Sá and Serpa, 2020).

Given that the in-school learning model is unlikely to continue face-to-face sessions for at least some time longer and some experts estimate it may take up to a year for a coronavirus vaccine to become commercially accessible, this should be good news for anyone who wants to live, back to normal next year. It can be customized. However, in the meantime, educational leaders must, with all innovations, transform the student world into an intuitive way under digital technology (Tzifopoulos, 2020). Online education allows instructors and students to choose their own pace of learning, with the added advantage of designing a schedule that suits everyone (Dumford and Miller, 2018) better learning without sacrificing anything. Teachers and students can acquire critical time management skills through online learning, making it easier to maintain a healthy work-study balance to take on more responsibilities and exercise more autonomy and adjustment in this Pandemic and another critical era (Keengwe and Kidd, 2010).

Online schooling programs upheld by advanced education are expensive. Everything scholastics can set aside a ton of cash by taking on online projects. They can likewise save time on housing and transportation. However, online classes are typically less expensive. As per an overview, educational expenses are the main factor for understudies picking on the web programs, as demonstrated by 40% of respondents (Kim and Frick, 2011). It had been the highest level decision for the past four years, authorities on the matter agree. It is straightforward to arrive. With online instruction, understudies can take in, or educators can educate from any place on the planet. There is no more need to make a trip starting with one spot then onto the next or following a hectic timetable.

What is more, online digital saves time and sets aside cash, which students can use for different things. Virtual study halls can likewise be gotten to from any web association, so voyaging is an extraordinary method to exploit them. For instance, online training is an outstanding choice if students are concentrating abroad and need a vocation (Dhawan, 2020). There are zero excuses to quit working or study to venture

out to new and intriguing areas. Students get an essential ability. Self-restraint, self-inspiration, and correspondence are, for the most part, characteristics needed for internet learning. Students will see that students will have the option to rapidly sharpen and further develop the center abilities as an online student. For instance, they should habitually contact the teacher and collaborators, both verbally and recorded as a hard copy.

The relational abilities will improve accordingly. Likewise, students ought to urge themselves to finish online courses and present their online tasks, as online courses offer less help than face-to-classes. In contrast to a vis-à-vis setting, where it could be hard to offer essential criticism, an online climate permits one to commit more opportunity to contemplate the course and offering insightful remarks. This takes into account a customized learning experience. Adaptability, as expressed prior, can assist students with setting their own learning pace. Online instruction, then again, is customized to the necessities and capacities of every understudy (Sahoo et al., 2021).

Online classes are generally more modest than conventional classes. Most web-based learning frameworks permit each understudy in turn, which considers more contact and criticism among students and the educator in practically any circumstance. Educators may regularly discover an assortment of materials on the web, like recordings, photographs, and digital books, and they may likewise incorporate different arrangements, like gatherings or discussions, to advance their talks. Furthermore, this extra data can be gotten to whenever and from any area, giving students a more robust and tweaked instruction. Online schools are turning out to be more famous. The Covid pestilence has recently sped up progressive education organizations' utilization of internet learning (Rapanta et al., 2020).

Likewise, understudies and educators set aside time and cash, which can be utilized for different things (Gui and Argentin, 2011). With the assistance of computerized proficiency, educators and understudies have tracked down the ideal approach to accept virtual study halls as they can be gotten to from any place with a web association. Online instruction upheld by computerized proficiency abilities is an excellent decision if understudies concentrate abroad and need to seek after a calling, for instance. There is no compelling reason to stop work or study to venture out to new and intriguing spots. Understudies get significant resources (Henne, 2015). Just advanced helped internet learning requires self-restraint, self-inspiration, and relational abilities. Online understudies will see that they can rapidly clean and work on their essential abilities with little help from an educator.

Understudies ought to, for instance, speak with instructors and understudy collaborators consistently, both orally and recorded as a hard copy. Subsequently, understudies' relational abilities will increment. Understudies ought to likewise urge themselves to finish online examinations and submit online tasks, as internet instructing gives less help than eye-to-eye addresses. In contrast to the eye-to-eye circumstances, where essential criticism might be trying to give, online conditions permit understudies to invest more energy contemplating courses and giving significant critique. This takes into consideration a tweaked learning experience. As referenced before, adaptability permits educators to pick the speed of understudy learning alone (Bertram, 2020). Then, online instruction is custom-fitted to the particular necessities and abilities of every understudy. Conventional courses are generally more prominent than online courses. In many situations, most internet learning frameworks permit just a single understudy, taking more critical communication and input among understudy and educators. Instructors often get to

an assortment of online assets, like recordings, pictures, and digital books, and they may likewise utilize various configurations to enhance their talks, like gatherings or conversations. Furthermore, understudies can get to this extra data whenever and anyplace, making their schooling unique and customized. Online schooling is turning out to be more famous. Since the Covid episode has expanded, web-based learning in Indonesia and different nations has become significant. Malad-created nations have entered the online class model as expertise (Dam et al., 2020).

Colleges in Indonesia are likewise continuously creating web-based learning models. Next is the joint college effort. Frey, (2019) say that this organization among understudies and advanced abilities should be sought after to address additional training issues as the world wrestles with the outcomes of COVID-19. Schools and universities are planning for a profound and fast change to an online-just method of scholastic commitment. There is a critical requirement for more instructive techniques to guarantee understudy commitment in virtual conveyance models and dominance of computerized education, essentials for adjusting to internet learning frameworks. Aside from the reasons referenced above, there are numerous extra motivations to look for online schooling. The vast majority of the present understudies imagine that online training is identical to or better than regular study hall instruction (Gomes et al., 2015).

The Covid-19 Pandemic has raised critical difficulties for the advanced education local area around the world. One specific test has been the startling solicitation for beforehand eye-to-eye college courses to be educated on the web. Our discoveries point at the plan of learning exercises with specific qualities and the requirement for adjusting evaluation to the new learning necessities. We end by reflecting on how reacting to an emergency might hasten improved education and learning rehearses in the post-digital period.

### **Experts perceive online learning during Pandemic.**

The effect of COVID-19 on the school training framework has brought Challenges and freedoms to take on online educating and learning, according to Garg et al., (2020). SARS-CoV-2 (Severe Acute Respiratory Syndrome Coronavirus 2) has rapidly spread across the globe, resulting in a scenario of highly compelling pneumonia. The COVID19 Pandemic has caused a significant shift in educational learning structures across the globe. Academic foundation partners are having difficulty adopting new online education systems. The late renamed Ministry of Education has delivered the New Education Policy (NEP) 2020.

Agustina and Cheng, (2020) demonstrated how the COVID-19 Pandemic affected students' perceptions of online learning. This research examines the perspectives of Indonesian middle school students on studying courses during COVID-19. The viewpoints of auxiliary understudies on internet preparation in Indonesia were characterized. The study's findings revealed that electronic learning was unable to provide the desired effects in young nations such as Indonesia, where a large portion of understudies are unable to use the internet due to particular and financial problems. High-level training understudies raised various problems, including a lack of eye-to-eye contact with the instructor, reaction speed, and nonattendance of regular homeroom socializing. (Mohamed et al., 2020). The Effects of Coronavirus (COVID-19) on Higher Education in Mogadishu, Somalia Case Study Private Universities The primary goal of this investigation is to look at the effect of COVID-19 on Mogadishu-Somalia guidelines. The majority of academic institutions were closed 28 (56%); nevertheless, several perceptive foundations 45 (22.5%) had said, "Our association is

not completely open, but there are significant interferences." 126 (66.7%) of the primary responders utilized Zoom Meeting, whereas 40 (21.2%) used Google Study Lobby. The most immediate effect for understudies has been that the temporary end of extraordinarily close and individual instruction at a high-level training institution has left them, especially understudies, cash-strapped.

Understudy emotional wellness amidst the COVID-19 Pandemic, according to arenas Arenas et al., (2021) is a need for extra examination and quick preparations. The global spread of the Covid disease (COVID-19) flare-up has rapidly exacerbated its overall health problem. Self-reported bothersome and restless symptomatology is quite prevalent in the general population, according to emerging studies. Under normal circumstances, significant levels of emotional anguish and subsequent poor academic results are shared among undergrads. As a direct consequence of these activities, understudies may experience reduced motivation for contemplation, more critical elements to adapt autonomously, relinquishing daily routines, and maybe more excellent dropout rates. He claims that this will help with the by-and-large global emotional well-being issue that has arisen due to this period of unprecedented disruption and vulnerability.

Xue et al., (2020) machine learning method to Twitter discussions and emotions regarding the COVID-19 Pandemic. For info, epidemiological research, particularly public response monitoring, Twitter is a significant information hotspot. From March 7 to April 21, 2020, we analyzed 4 million Twitter tweets associated with the COVID-19 Pandemic using a list of 20 hashtags. For example, a few topics, confirmed cases and death rates, preventative measures, wellness experts, and unpleasant mental reactions are consistently trending on Twitter. Alomari et al., (2021) Coronavirus: Using dispersed machine learning, detect government pandemic actions and public concerns using Twitter Arabic data. More than 56 million people have been infected with almost 1.35 million passings as of November 19, 2020, and the numbers are growing. We collect a dataset of 14 million tweets from Saudi Arabia using the instrument from February 1, 2020, to June 1, 2020. There are 15 government pandemic measures, public concerns, and six large-scale issues that we have identified (monetary maintainability and social supportability).

The main findings here are that with technology and the ability to apply it in the study, educational communities have responded to the government's policy of sending students to learn using technology. Based on that rationale, we have concluded that technology, in particular digital literacy abilities, may support their learning even in the difficult situation after Covid-19 hit the education world.

This study has pointed out that technology and the ability to use it would support students and other educational communities only by applying technology in their study and even for evaluation that until now is still in a debate among educators and experts in the field and curriculum use (Lee, 2014). So here lies the difference with other findings where digital literacy is essential to ensure the ability to survive in a modern world with technology that is developing so fast. If students cannot use digital technology and process the information they get well, it will be challenging .

## **CONCLUSION**

As for the essence of our findings through a study of many topics, including the advantages of digital literacy, it can indeed innovate learning that has been disrupted since the Pandemic hit the world. The views of experts are indeed very diverse, but in essence, they are the skills of students and other educators in digital technology so



fundamental that educational disruption will be very petrified. Because basically, digital literacy is the ability of students to organize information in the world of learning, from searching to communicating with a bit of teacher support. This is, among other things, a summary of the findings of this study with the hope of becoming additional input for educators and educational researchers related to digital literacy to innovate teaching during the Pandemic.

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All authors have worked in a shared roles in conducting and research report. There is no any conflicted in managing project.

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