

CRITICAL ISSUES ON LEARNING PROCESS AMIDST COVID-19 PERCEIVED FROM PEDAGOGICAL PERSPECTIVES

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Abstract

This study examined the implementation of online learning that took place during the Covid-19 pandemic. The goal was to unravel and straighten out various doubts and complaints in the community who think that the implementation of online learning caused problems rather than an alternative to the practical mode of learning. The study utilized a literature study (library research), that is integrative review. It was closely related to the semi-structured review aiming at assessing, criticizing, and synthesizing the literature on the related research topic in a way that enables new theoretical frameworks and perspectives to emerge. Additionally, the process follows four phases: design, conduct, analysis, and finally structuring and writing the review. The study showed a broad misunderstanding in society about what happened during working and studying from the home period. Many people suspected that what happened was online learning. However, it is not online learning but an emergency remote teaching instead. This implied that most online learning in operations did not meet the standardized requirements as it was established. Furthermore, not using the intelligent flexible learning model (the Fifth Generation of Online Learning Mode) resulted in significant complications at the operational level. Moreover, what factually happened did not meet the characteristics of online learning systems and services. Above all, most online learning institutions still ignore the use of appropriate pedagogics. This study also demonstrated the importance of utilizing a complete instructional design so that the learning experience as a condition for the learning outcomes effectively achieved was equally present in the learning process. Comprehensive planning that was arranged systematically and structured will allow dialogue for students in the implementation stage. The dialogue space must occur not only between students and teachers as well as students and students but also, more importantly, self-dialogue for each student. Some insights for future consideration were also formulated and recommended for better online learning implementation

Keywords: online learning; emergency remote teaching; learning experience; transactional distance theory; mobile pedagogy; integrative review

INTRODUCTION

Since the outbreak of the Covid-19 entered Indonesia last March 2020, soon after that, almost all activities were carried out from home. At that time, the term of work from home (WFH), study from home, and even pray from home became so popular. Immediately, the order of ordinary life, which is usually carried out by direct and face-to-face interaction, is bridged by using media based on communication and information technology. Therefore, at that time, we became familiar with the term WFH.

Along the way, the frequency with which we carry out activities based on WFH mode has become more natural and intense. The most impacted impact is on the education sector. To be more precise, learning, including in Indonesia, at all levels and

types of education has shifted from offline learning to online learning mode. As a result of this sudden shift, there was not enough preparation to adjust. Also, there is no adequate preparation to make a good plan.

Everything is in an emergency atmosphere, many aspects as it was suddenly done became inappropriate. What else in education, especially in the learning process at all levels and types of education. As it was suddenly shifted into online, not only teachers and students face a mess, parents, schools, and even society are also affected by this shift. Many complaints from various parties appeared – complaints related to support facilities such as equipment and networks. There are also other complaints related to the stuttering of teachers in carrying out their role as virtual teachers through digital devices. To a certain extent, this condition is similar to what was underlined by (Efriana, 2021).

Correspondingly, unexpected implications, not only on aspects of education, emerge as well. Many stories are circulating in the community, both nationally and internationally, that due to online learning, many students face problems. Even there were students who get accidents that are suspected because of not strong enough to accept the burden of learning through the online system. Even community leaders and related officials are worried about the long-term impact of this online learning. Some call it 'educational stunting', or others call it the possibility of 'loss generation' (M. G Sembiring, 2021b).

In general, many people suspect that changing offline learning to online will cause high complications. Strictly speaking, its impact to a certain extent will have negative consequences for both students and teachers and ultimately for the development of the younger generation in the long term. Moreover, there is a common thread to some extent, as findings from similar research are viewed from various perspectives (Coman, C., Tiru, L. G., Mesesan-Schmitz, L., Stanciu, C., & Bularca, 2020), (Ahmed & Opoku, 2022), (Starkey, Shonfeld, Prestridge, & Cervera, 2021).

Therefore, this study aims to dissect the misguided implementation of online learning that has been practiced so far in schools and universities. This study examines what happened in the last three semesters. What exactly happened? Is the concept of online learning system not a reliable learning approach? Is online learning unreliable as a learning approach that can foster an academic atmosphere? Furthermore, many other similar philosophical and technical questions need to be addressed.

This study also examines the sufficient and necessary conditions for online learning to be as good as offline learning (M. G Sembiring, 2021a). Thus, online learning can substitute learning processes when an outbreak occurs (such as what happened due to the Covid-19 pandemic right now). Learning processes continue as usual with online learning. It is of interest to break down systems and services to make online learning as good as offline learning in practice.

1. Literature Review and Theory

Conceptually, there is no difference in results (outputs) between online and offline learning if it meets the required standards (Belawati, 2019), (M. G Sembiring, 2021a), (M. G Sembiring, 2021b), what is more, if the operating system of online learning services tightly follows the required standard. What generally distinguishes online learning from offline, merely lies in the mode of delivery. This means that the

preparations made for online learning must be prearranged so that apart from being connected and networked, it is also digital and virtual based (M. G Sembiring, 2020).

Respectively, online learning designs must also be structured and systematic to present the educational experience in the natural interaction (Garrison, 2007). Another element that is no less important is aligning the materials provided with opportunities for interaction and dialogue between students and the material (Moore, 1997). By paying attention to these two aspects, namely the educational experience and the balance of dialogue with the material provided, practically there will be no difference scholarly output between online and offline learning.

Back to the problem to be dissected in this study. We want to see the misguided implementation of online learning that makes a slanted tone about the existence of online learning. There is a gap in understanding what is conceptually understood about distance education (in this study, we use the term online learning) with authentic learning in the field. If you look at what many people have complained about that online learning is unreliable, it is simply a result of a lack of understanding.

From recent and previous related studies, what people complain about is not related to online learning. What is seen in society is emergency remote teaching. Previous studies have clearly distinguished what online learning is as well as emergency remote teaching (Whittle, Tiwari, Yan, & Williams, 2020), (Holisoh & Fitriani, 2020), (Jili, Ede, & Masuku, 2021). In essence, previous related studies distinguish what is meant by online learning versus emergency distance teaching (Hodges, Moore, Lockee, Trust, & Bond, 2020). The latter is what happens a lot. Unfortunately, due to the ignorance of most people, what is currently going on is referred to as online learning. In terms of what happened in the last three semesters, including in Indonesia, it is not online learning as has been implemented for the past few decades in various parts of the world.

Fundamentally, the difference between online learning and emergency remote teaching can be seen from the following six main aspects (Hodges et al., 2020). They are: (i) Online and distance learning based upon pedagogical project, while emergency remote teaching is based upon organizational adaptation, (ii) Online and distance learning is carefully planned, while emergency remote teaching is based upon pressing circumstances. (iii) Online and distance learning aim to offer education with minimum campus and schedule constraints, while emergency remote teaching aims to continue teaching and learning despite lockdown. (iv) Online and distance learning is based on specific instructional design, while emergency remote teaching is based on the transposition of in-class activities. (v) Online and distance learning are mostly asynchronous through learning management platforms, while emergency remote is mostly synchronous through meeting platforms. (vi) Online and distance learning is a scientific subject studied for decades, while emergency remote teaching is unfamiliar to most teachers and students, including most of the society.

In addition, very few activists in schools and even universities have begun to look at what pedagogical elements are in the context of online learning. Therefore, it is necessary to also refer to how the generation of pedagogy in online learning evolved. Initially, online learning was utilizing and following cognitive behaviourism.

Over time, pedagogy in online learning moved to constructivism and connectivism (Anderson & Dron, 2011), (Siemens, 2005), (Huschle et al., 2015).

If we also understand how online learning has evolved, from the first generation to the fifth generation, it will be very helpful in organizing online learning (McKee, 2010), (Taylor, 2001). It was stated that the first generation is called the correspondence model. The second generation is called the multimedia model. The third generation is called the telelearning model. The fourth generation is called the flexible learning model. Finally, the fifth generation is called the intelligent flexible learning model. By now, we are supposed to use the fifth generation of online learning to meet effective learning outcomes.

By mastering these horizons, as explained earlier, we will not be trapped and misguided in conducting online learning under the rules of passing. Although many aspects surround the successful implementation of online learning, theoretically, it will be very beneficial to understand the pedagogical aspects of online learning in-depth. Online or offline learning is the same if the learning experience occurs. Therefore, the main effort is to present learning experiences following appropriate pedagogical rules. Remember, technology is a tool. So, the first and foremost is understanding of the characteristics of online learning and orientation to make it happen effectively.

METHOD

The type of research utilized in this study was literature or library research, i.e., integrative review. It was closely related to the semi-structured review aiming at assessing, criticizing, and synthesizing the literature on the related research topic in a way that enables new theoretical frameworks and perspectives to emerge (Snyder, 2019). In addition, the process follows four phases as suggested, consisting of: (i) Design, (ii) Conduct, (iii) Analysis, and (iv) Structuring and writing the review.

In Phase 1: Design, we focus on why this review is needed and its contribution. In Phase 2: Conduct, we focus on the practical plan for selecting articles and how the search process and selection will be documented, including how the search process and selection will be assessed. In Phase 3: Analysis, we focus on what type of information needs to be abstracted to fulfill the purpose of the specific review, including what type of information is needed to conduct the specific analysis and how this process will be documented and reported. Finally, in Phase 4: Structuring and writing the review, we focus on what reporting standards are appropriate for this specific review, what information needs to be included in the review, and then the results should be presented and explained. This is a simpler version of seven phases of comprehensive literature review as introduced by (Williams, 2018).

RESULTS AND DISCUSSION

After reviewing several studies related to online learning, including in Indonesia, what happened was not learning, which was initially referred to as online learning. It was considered as initially derived from the distance education framework. Referring to (Hodges et al., 2020), what is happening now is the implementation of emergency remote teaching. Once again, it was not online learning.

Let us start and observe one by one. What is happening with online learning takes place today? We start the investigation and analysis based on and start from the following five aspects, namely: (i) Online learning according to the demands of the 5th generation online learning (the intelligent flexible learning model, (Taylor, 2001), (ii) Online learning system (Service and operations, (M. G Sembiring, 2020), (iii) Application of appropriate transformative pedagogy (evolution of pedagogy in online learning, (Anderson & Dron, 2011), (iv) Application of the development of learning experiences (cognitive, teaching and social presence, (Garrison, 2007), and (v) Transactional theory of distance (dialogue versus rigid support (Moore, 1997).

From the aspect of using the remote learning model, it is evident that almost all the institutions are not aware that online learning will only be effective if it applies the fifth-generation model, referred to as the so-called the intelligent flexible learning model. This implied that they applied interactive multimedia online, Internet-based access to www resources, Computer-mediated communication, automated response systems, and Campus portal access to institutional processes and resources. Besides, it must be flexible in terms of time, place, and pace. It also must have highly refined materials, advanced interactive delivery. Last but not least, related to institutional variables, costs should be approaching zero.

Hence, from this point of view, almost all online learning institutions have not carefully considered all aspects demanded by the fifth generation.

From the aspect of systems and learning services, three main service systems should have been fully utilized. The three main service systems consisted of academic, logistics, and management. Academic services provide interactive digital teaching materials, ICT-based media-assisted learning supports, and valid and reliable evaluation upon learning outcomes. Logistics services related to participant registration mechanism, delivery of various digital and printed learning materials, and implementation of online proctoring-based exams. Managerial services include support for human resources, infrastructure, finance, and quality assurance procedure.

From the document review scrutinized, it is obvious that most organizers only prepare learning media. It is only limited to providing devices and applications to run an application (e.g., Zoom). Teaching materials that are digitally designed and interactive, is not available either. Even if there are materials, they are not in the form of self-instructional, self-sufficient, and self-explained. Learning support that should have been done virtually and digitally on the one hand and networked and connected on the other did not happen. What happens, in general, is just like moving the face-to-face class to still face-to-face by using an application (Zoom and/or the like).

Now, notice how the evaluation system is built. It does not seem to describe the condition of a valid and reliable evaluation approach. The procedure for building an evaluation system has not followed the proper rules. For example, it has not utilized Bloom's taxonomy approach. The absolute requirement to build an online learning evaluation system must be arranged systematically and structured under Bloom's approach. What happens most teachers just deliver the materials and give assignments in an ordinary orientation (traditional face-to-face way)

From logistics and management aspects, it will be more visible that many prerequisites that have not been fulfilled yet. Therefore, the implementation is not appropriate being included in the realm of online learning. The registration and logistics

system still assumes that the learning system is still in the mode of offline learning. The same applies to the implementation of the exam. The exam is still in an offline learning paradigm. Moreover, human resources to support online learning are not well prepared, coupled with the lack of learning support facilities. There are still shortages of equipment, compatible applications, network readiness, and the provision of data quotas for the smooth interaction process between students and teachers, and vice versa.

The analysis from the use of pedagogy also feels extremely minimal. For face-to-face learning, the existence of pedagogics will determine the success of learning. What is more, in online learning? The pedagogical aspect plays a critical role. With a complete pedagogic course, student performance through online learning is not necessarily optimal. Meetings without meeting required a specific learning approach and certainly needs a specific pedagogy approach. What is more, in online learning, students and teachers meet in a mediated space, time, and dimension.

How to ensure that students totally presence and are confirmed in the learning process is not an easy one. Therefore, it must be pedagogically prearranged and managed cautiously.

Most online learning institutions do not yet have specially designed interactive digital teaching materials. The delivery pattern is still in the format of face-to-face interaction. This makes students easily getting irritated and depressed. It is hard to survive solely in front of a computer. Boring! If they are not approached with the appropriate pedagogic, students and teachers will be stuck. It is not easy to get students to stay in front of the computer to study for more than 60 minutes. Likewise, if they are not equipped with systematic and structured interactive digital teaching materials, teachers will have difficulty delivering the materials effectively.

Conceptually, there are no differences between online and offline learning if the learning experience is present. Presenting learning experiences in class (face to face) can indeed be more accessible. Nevertheless, that does not mean that presenting a virtual learning experience is impossible. Three domains must be sought to presenting a learning experience. The three current domains are cognitive presence, teaching presence, and social presence. In its further stages, presenting learning experience occur if the following four domains are present: cognitive, teaching, emotional, and student presence (Muskadi Sembiring, Jufrizen, & Tanjung, 2021). If these four domains are present, online learning will then produce the same output as the offline one.

Educators still have many stutters about how to present a learning experience (Rapanta, Botturi, Goodyear, Guàrdia, & Koole, 2020). Many do not understand why and what cognitive, emotional, teaching, and student presence for. Then, many more stuttered about how the teacher's approach simultaneously and virtually manifested cognitive, teaching, emotional, and student presence?

An equally important aspect is overcoming the potential of dialogue gaps that may occur when students learn the material. Whether online or offline learning, the opportunity for dialogue must be there and exist. The dialogue process strongly influences students' mastery of certain materials through interaction. Dialogue can be in the context of teacher and student, student and other students, and more

importantly, student-to-self (self-reflective, self-reflection) regarding the content being studied.

In the practice of online learning, the more arrangements are made, the fewer opportunities for dialogue are available; especially for the sake of student's self-dialogue (self-reflection). In general, when online learning is implemented, teaching materials (digitally designed and interactive) must be provided beforehand. If the teaching materials are not digitally and interactively prepared, then the opportunity for dialogue will be limited and may even be diminished. For dialogue will determine students' performance and achievement in mastering given learning materials.

For this reason, there must be a well-planned arrangement so that the balance between all components in online learning is well regulated. The balance is mainly to keep it from following technical rules and then sacrificing the learning focus. It implies that do not just because you have to follow the technical aspects and then the space for dialogue becomes limited or even disappears. The dialogue space is essential. The dialogue space is the main requirement for the presence of a learning experience to exist.

A review of the implementation of online learning based on related studies marked by technical stuttering brings us to the following three main aspects need to be seriously handled, as partly outlined by (Nartiningrum & Nugroho, 2020). First, the implementation of online learning up to this stage does not follow the rules that commonly used in online learning. Second, the practice that occurred during the last three semesters shows a lack of understanding how closely related between online learning and instructional design (educational technology at large). Third, most of them have not realized the importance and the role of pedagogy in online learning.

In short, what we have seen so far, based on the study and analysis of the five aspects described earlier, explains that what happens is not online learning. It is an emergency remote teaching instead. What is the difference between online learning and emergency remote teaching?

Emergency remote teaching does not consider pedagogical aspects on the one hand and is not planned in a systematic and structured manner on the other hands. While in online learning the planning element is crucially dominant related to pedagogy and instructional design.

Conceptually, by prioritizing pedagogy and instructional design elements, the potential for presenting learning experiences is possible. Furthermore, the balance between technical and academic interests at the operational level is aligned. Coupled with an understanding of the service system and online learning model used, it will ensure that the learning experience takes place in its entirety instead merely as of emergency remote teaching.

Below are some inspirational and futuristic thoughts on how to comprehensively prepare and implement effective online learning. This is important so we can avoid the trap of 'artificial' online learning. We are now confronted with several terms, namely open pedagogy, mobile pedagogy, transformative pedagogy (M. G Sembiring, 2021a), (Maximus Gorky Sembiring, 2022), cybergogy, pedagogy, and even pandemiagogy and panicagogy. Getting back on the right track, we need to consider the following aspects to adjust the proper pedagogy (refer to the first three: open pedagogy, mobile pedagogy, and transformative pedagogy).

What is novel in today's open, mobile, and transformative pedagogy?

Open pedagogy is a high-impact practice that empowers students. How? By providing them a chance to interlock in information creation applying renewable projects. As creators of information, students obtain a greater perception of the rights and responsibilities related to information ownership. Open, mobile and transformative pedagogy practitioners welcome collaboration, students, and broader audiences while recognizing the differences in privilege and progress that impact how students balance the benefits of sharing and a need for privacy. This actuality challenges traditional teaching roles and can transform the educational experience for teachers and students.

The products of open, mobile and transformative pedagogy are essentially student-created and openly licensed so that they may live outside of the classroom in a way that impacts the greater community for better educational opportunities.

In mobile pedagogy, for illustration, in terms of affordance and context should be readjusted. We need to reconsider from affordance perspectives that learning will be both personalized and adaptive. A maxim advised that 'learning happens in the minds and souls, not in the learning management systems, database, and multiple-choice test.' Besides, another maxim emphasized

that 'alone we can do so little, together we can do so much.' Correspondingly, 'impossible to teach people everything they need to know; the best we can do is position them where they can find when they need to know it!' These three maxims together implied that connectivity, communication, and collaboration as well as context awareness and ubiquitous access are significant for effective online learning.

As time goes on, there are needs to consider implication on today's and future learning from pedagogy perspectives. First, learning theories and primarily pedagogy should be magnified and revived related to open and mobile learning toward learning in the digital era. Second, pedagogy should be enhanced regardless of the advancement of technology.

The next consideration, how is pedagogy impacted in this recent time? It needs to create an opportunity to establish learning with the help of visual supports (e.g., moviemaking, virtual tours, develop augmented, virtual, and/or mixed reality experience. It also needs to consider outdoor learning by improving situated digital activities. These approaches can be achieved under collaborative and/or inquiry-based learning where students have more independence with the help of digital tools.

At this stage, there are many opportunities to utilize various mobile technologies to support learning that will affect pedagogy (mobile media, mobile sensors, multiple communication channels, broader access to cloud technology and collaborative resources, mobile apps, and the Internet of things). These facts implied that pedagogies do not function in a vacuum milieu. Most importantly, there is no single best pedagogy in this universe! It is always connected to students, contents, type of subjects, students personal tendency, previous knowledge, learning outcomes, strategic environment, and available technological supports.

CONCLUSION

The results of this study showed that there was a stutter in the implementation of online learning. This happened in many places. The main factor was simply a lack of understanding of the essential prerequisites for implementing online learning to be

effective. What has happened so far is not the real online learning but face-to-face learning that is zoomed in and then declared as online learning. The implementation of face-to-face learning using an application (e.g., Zoom) was referred to as emergency remote teaching.

Emergency remote teaching is by no means online learning. However, if this understanding can be the basis for learning, it will become simpler to set up online learning. At this point, it is not then too much to expect that the output of online learning will be as good as offline learning. If this equilibrium is reached, our strategy of learning during the pandemic will not be hindered.

There is a need for mutual awareness to place online learning following the underlying rules in the future. This approach is important to avoid misguiding the implementation of flexible intelligent learning model. If the learning experience is present, whether the online or offline mode is used, there will be no difference in output.

For the time being, as a soup for our soul, it is good to consider the following ten sensible reminders to take advantage of emergency remote teaching as outlined by Natalie B. Milman (<https://www.edweek.org/leadership/opinion-this-is-emergency-remote-teaching-not-just-online-teaching/2020/03>).

In her considerations, the first and foremost, school leaders and teachers need to clarify that we are functioning in an emergency. Unfortunately, there is no playbook for leading and teaching remotely at this scale. But, here are the ten functional suggestions for leaders and educators struggling to continually adjust.

- a. Communicate frequently and honestly: Frequent, straightforward, and honest communication is essential. Not only does it address questions students and families might have, but it also gives assurance that you have a plan—even if it is evolving. Also, ensure everyone knows when and how to access communications. Be sure to touch base with colleagues and students regularly—document any concerns and those with whom you need to loop back.
- b. Prioritize needs: Establish short-term and long-term priorities and steps to address them. There is a lot to be accomplished. Therefore, it is critical to determine what needs to be done and by when.
- c. Be flexible: We are functioning in uncharted territory. As a result, many policies and practices that work in brick-and-mortar settings and even regular online classes may not apply. As a result, school leaders and teachers will need to be flexible and, in some cases, very creative.
- d. Keep it simple: Although numerous companies are offering free subscriptions to many content and technology tools, this is not the time to roll out new tools—unless there is no other option.
- e. Establish routines and schedules: When a school's staff and students are distributed across many miles, it is vital to establish schedules for virtual conferences, meetings, and communications.
- f. Collaborate: School leaders should work with faculty and staff and other school leaders. This is a unique opportunity to learn from and with one another, not just within one's district or state. Many online communities have emerged on social media and in professional organizations.
- g. Engage the whole school community in decision-making: When possible and

- relevant, include a diverse range of voices in decision-making; this will recognize their roles as part of the learning community and foster buy-in.
- h. Develop contingency plans: Leaders, teachers, staff, students, and their family members will get sick and be unable to meet their responsibilities – and not only because of COVID-19. Technology will fail. Things will not always work as planned. So be sure to have contingency plans in place.
 - i. Practice, model, and promote well-being: School leaders' and teachers' well-being (not just emotional and physical but also social and intellectual) is essential. Practice, model, and promote overall well-being.
 - j. Pause, listen, reflect, and learn: We all have a great deal to learn from this pandemic. However, it is easy to blaze ahead without pausing or reflecting on lessons learned. What approaches supported the transition to emergency remote teaching and learning? What policies changed? How did stakeholders adapt?

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