Volume X
Issue 1
March 2021
ISSN 2301-9816

JURNAL
KOMUNIKASI
INDONESIA

Digital Victim: Castellian Perspective On Education In Rural Indonesia

Rina Juwita[1], Silviana Purwanti[2], Ainun Nimatu Rohmah[3]

Abstrak/*Abstract*

Covid-19 has presented a new set of challenges in every area; higher education is one of them. The pandemic has resulted in a shift in teaching and learning communication methods, creating a new structure for digital-based education. This study investigates this phenomenon through the perspective of Castells' Network Society Theory to see the relational capacity of education in rural Indonesia. In his view, Castells summarized a distinctive concept between the flow of time and space in a networked society. The current space deals specifically with the center of social organization today where places around the world have been connected in a dynamic sector. As geographic discontinuity serves as a source of relational chaos, context and innovation will determine how a place prospers or decline, even though all will be integrated into the network society. Therefore, it is important to identify opportunities and challenges in the current scenario so that academic and government leaders can address them through the right innovations. This study conducted a survey to determine the perceived conditions of online learning by students. In addition, this study also used secondary data from scientific journals, government and non-government publications, books from various authors, websites, and public data as well as various other sources of information. The results of this study indicate that the provisions of online learning are new to limit the learning process in several ways, such as networks, costs, and interactions between lecturers and students. In the perspective of the Castells' Network Society Theory, the resuts of this study see students and lecturers as digital victims, especially in the context of teaching and learning.

Covid-19 telah menghadirkan serangkaian tantangan baru di setiap area; pendidikan tinggi adalah salah satunya. Pandemi tersebut mengakibatkan pergeseran metode komunikasi belajar mengajar, menciptakan struktur baru pendidikan berbasis digital. Studi ini mengkaji fenomena tersebut melalui perspektif Castells 'Network Society Theory untuk melihat kapasitas relasional pendidikan di pedesaan Indonesia. Dalam pandangannya, Castells merangkum konsep khas antara aliran waktu dan ruang dalam masyarakat berjejaring. Ruang saat ini secara khusus berkaitan dengan pusat organisasi sosial saat ini di mana tempat-tempat di seluruh dunia telah terhubung dalam sektor yang dinamis. Karena diskontinuitas geografis sebagai sumber kekacauan relasional, maka konteks dan inovasi akan menentukan bagaimana suatu tempat berkembang atau menurun, meskipun semua akan terintegrasi ke dalam jaringan masyarakat. Oleh karena itu, penting untuk mengidentifikasi peluang dan tantangan dalam skenario saat ini agar para pemimpin akademisi dan pemerintahan dapat mengatasinya melalui inovasi yang tepat. Penelitian ini menggunakan metode survei untuk mengetahui kondisi pembelajaran daring yang dirasakan oleh siswa. Selain itu, penelitian ini juga menggunakan data sekunder dari jurnal ilmiah, publikasi pemerintah dan non pemerintah, buku dari berbagai penulis, situs internet dan data umum serta berbagai sumber informasi lainnya. Hasil penelitian ini menunjukkan bahwa ketentuan pembelajaran secara daring masih terbilang baru dan terbukti dari proses pembelajaran dalam beberapa hal, seperti terbatasnya jaringan internet, biaya, dan interaksi antara dosen dan mahasiswa. Dalam perspektif Castells 'Network Society Theory, bahwa mahasiswa dan dosen pada penelitian sebagai korban digital, terutama dalam konteks proses belajar mengajar.

Kata kunci/*Keywords:*

Covid-19, higher education, online class, communication power, digital victim.

Covid-19, pendidikan tinggi, kelas daring, kekuatan komunikasi, korban digital.

[1,2,3]Program of Communication Studies, Mulawarman University, email: rinajuwita1704@gmail.

Introduction

The world is currently experiencing a global COVID-19 pandemic. The pandemic status was declared by the World Health Organisation on March 11, 2020 as it has struck at least 214 countries. This situation forced more than half of the population to lock themselves in their house, and it further has greatly impacted many aspects of lives and brought about a whole set of new challenges in every possible realm. One of the most discussed issues is how education process is changed dramatically in just a matter of days. Covid-19 pandemic is what Sener (2010) said about the wildcard effect for the develop-

ment of online education. The emergency condition has forced conventional teaching-learning to shut down. There were no precedent events as a benchmark, and all elements of Higher Education Institutions (HEI) must adopt online education without proper preparation. As a result, the method remains ineffective in countries that have poor internet access (Adnan & Anwar, 2020; Marinoni et al., 2020).

Following their respective government regulations, educations institutions in various countries immediately impose a ban on face-to-face teaching and learning activities, and it's no exception for HEIs. A survey conducted by the International Association of Universities (IAU) shows that most of the HEIs have migrated to the online education system, while others are still developing digital infrastructure and learning methods (Marinoni et al., 2020).

To prevent the virus spreading within the institutions, the Indonesian Ministry of Education and Culture (KEMENDIKBUD) has published the Circular No. 3 Year 2020 on Prevention of Covid-19 in Education Units since the beginning of the pandemic. A report from the Ministry of Education and Culture of Indonesia said 96% of HEIs have conducted online teaching and learning as of May 2020 (Humas Ditjen Dikti, 2020). The government decided the new method to be compulsory for tertiary education in all zones for the 2020-2021 academic year (Kasih, 2020). Some HEIs were able to take fully advantage of this moment to boost the potential benefits of digital platform by creating a unique learning content. It has become a novel experience from the conventional learning process which increased students' enthusiasm. Based on the ministry internal survey, the online learning was running effectively even though the changes occurred in a relatively short time. More than 80% of the subjects surveyed stated that lectures, learning materials, as well as the assessment and students' comprehension on the learning topics were affectual (Media Indonesia, 2020). Therefore, the government encouraged HEIs to implement distance learning permanently in the future, and name it as the next normal (Ihsanuddin, 2020).

However, the effectivity of online learning is very much debatable for some reasons. Many other studies have examined online education during the pandemic, whether they were about the impacts towards constituents (students, parents, and lecturers), learning system, or impact on HEIs business. Some studies exposed a positive perception of students toward online learning (Firman & Rahayu, 2020; Khasanah et al., 2020; Pakpahan & Fitriani, 2020). Yet, Kurshan (2020) analysed that the online education system resulted on disconnected students. The existence of geographical and social distance prevents students from having a strong teaching-learning experience. The socialisation that usually occurs in class disappears and interactions becomes limited (Adnan & Anwar, 2020). In addition, studying from home makes it difficult for students to concentrate and has difficulty in understanding the material (Nadeak, 2020).

On the other hand, methodological readiness is another challenge for educators in online learning. Adnan & Anwar (2020) saw that HEIs must improve the curriculum and content design which is appropriate for online lectures. Therefore, creating a digital teaching-learning situation is not easy in the context of Indonesian education, which has so far relied on face-to-face meetings in the classroom. Blended learning as the government's recommendation in terms of methods, must be in line with an organized function of a standard operating procedure. Besides, digital literacy is also an important thing to pay attention to (Kurshan, 2020). Technology transformation can only occur if educators master technology appropriately with clear goals and are active in class activities (Veletsianos, 2016). In the case of Indonesia, data from Badan Pusat Statistik (2018) showed that 98.35% HEIs students had access to the internet, but the same report showed 90.51% of students accessed internet for social media, 88.33% for news/information, and 79.98% to do assignment. In short, access toward education platforms is still lacking and therefore digital literacy is also another challenge very crucial to solve (Berliyanto & Santoso, 2018).

Moreover, HEIs must also be able to convince constituents that the business will continue even in a different environment (Hartman, 2020). Pandemic creates new problems in terms of costs for carrying out teaching and learning activities. On the one hand, students and their parents are burdened by internet quota fees. Consequently, they appealed for tuition financing relief by making #MendikbudDicariMahasiswa viral on social media during demonstrations in several areas. Moreover, HEIs must continue to carry out existing business activities. Another challenge is the decreased participation and interest of prospective students to attend lectures at formal institutions. Prospective students may choose a more affordable and diverse online education, for example, MOOCs programs that have been offered by the world's leading universities.

Some countries still perceive online education as an emerging technology. For HEIs in developing and underdeveloped countries, infrastructure, technical and cost problems are barriers that lie ahead (Adnan & Anwar, 2020). Moreover, geographic obstacles and internet penetration are other challenges for an archipelago country like Indonesia. It is the opposite of the developed countries such as the USA or European Union, where HEIs have even been able to develop online education extensively, such as in the MOOCs program. As Basilaia & Kvavadze (2020) explained that infrastructure is fundamental in which HEIs with supporting technical capabilities can successfully carry out online education. In other words, people with poor internet connection hardly enjoy online education methods. As

a result, people who live in big cities will benefit more than those who live in rural areas (Berliyanto & Santoso, 2018).

Learning emerging technology is intertwined with the context of the socio-cultural environment (Veletsianos, 2016). For this reason, the socio-structural context must be considered to examine the online education phenomenon. From a communication perspective, the context can be viewed in the realm of the network society theory where communication technology affects all domains of life in an ever-changing pattern. This condition creates power relations which may create counter-power challenges from the majority of the public if there are contradictions in the values or norms of the existing power (Castells, 2007).

Castells (2009) stated that pandemic conditions may well described the phenomenon of power in society; both macro and micro, like in Indonesia. At the macro level, the government's decision on the obligation of online education is a form of power which forces students and lecturers to change the way of teaching and learning in higher education. Meanwhile, on a micro-level, internet service providers and online meeting companies have the power to provide online education facilities. However, as an emerging technology, the Indonesian people are not fully ready to apply online education as the major method. Apart from infrastructure, methodology, and cost factors, people's habits towards internet use are also a challenge. Based on research by the Indonesian Central Bureau of Statistics, learning and doing assignments were not the main goals of students accessing the internet, where 76.32% accessed the internet only for entertainment (games, watching, and so on), and 75.69% accessed it for social media (Rachmawati et al., 2018).

Therefore, this study investigates the phenomenon of online education in Indonesia, which still has uneven internet penetration, especially in rural areas. According to the Indonesian Internet Service Providers Association/APJII (2019), rural areas are administrative areas where most of their economic activity or GDP comes from the agricultural sector and natural resource management, for example East Kalimantan which depends on the mining sector with a share of 33.2% (YoY) (Bank Indonesia, 2018). Based on APJII's annual research, internet penetration in the Kalimantan region was only 6.6%, East Kalimantan was only 1.7%; lagging far behind Java which reached 55.7% (APJII, 2019). Therefore, urban areas are more technology conscious than rural areas, making it more likely for online education (Mohsin et al., 2016). As proved in previous research in an India's city of Nalgonda, 76.95% of students and teachers in rural areas faced problems in the teaching-learning process, but it was only 23.04% in urban areas (Yadav, 2017).

Like all historical transformations, the emergence of new social structures is related to the basic redefinition of human material existence; space and time, such as Giddens (1984), Lash & Urry (1994), Mitchell (2003), Graham & Marvin (2001), Hall & Pain (2006), and Tabboni (2006), among others, argued. And Castells, in his view, recapped the distinctive concept between *space of flows* and *timeless time* in the network society. Power relations are embedded in the social construction of space and time, while being conditioned by the space-time formation which characterizes society. Space and time are redefined both by the emergence of new social structures and the struggle for power over the forms and programs of these social structures. Space and time express the power relations of the network society.

Therefore, based on those frameworks, this paper will evaluate the forms of communication power on online education from rural Indonesia standpoint as follow: 1) internet penetration is the main challenge for rural areas (*networking power*); 2) human resources' capabilities and HEIs' facilities between two areas blur the quality standards of digital education (*network power*); 3) HEIs' ability to ensure their constituent's satisfaction will impact its business (*networked power*); 4) the rising of MOOCs and other certified programs may weaken HEIs in rural areas which still lack of resources and knowledge on e-learning infrastructure and development (*network-making power*). The analysis brought out an undeniable cohesion gap of higher education in Indonesia during pandemic which is rarely discussed comprehensively. Hence, this study proposes some suggestions for HEIs, academic leadership, and the government to address this issue through innovations in focused areas.

Literature Review

Manuel Castells, in his trilogy assumed that information technology has brought a new form of social organisation which was conceptualised as 'network society'. This 'network society' is defined as "a society whose social structure is made of network powered by microelectronics-based information and communication technologies" (Castells, 2004, p. 3). The idea of network itself is understood as a program made of nodes that communicate and cooperate with one another (Castells, 2004). This interrelated system enables an efficient organisational system thanks to three main characteristics as described by Castells (2010): flexibility, scalability, and survivability. Flexibility is interpreted as a concept in which networks can reconfigure themselves according to the demands of a changing environment but still working towards the same goal. Scalability is a characteristic in which the network does not display a fixed size or number of elements; the shape and extent of which varies depending on the connectivity of the members. Last is survivability, which means because of its decentralised structure, the network is more resistant to attack and vulnerable on individual nodes. Hence, the network society is the denomination given to the

social morphology of the information age (Castells, 2000).

The advent of the internet and its pervasive compliance led to important structural changes in the world we live in, even in its most intrinsic systematic features. Castells (2004) highlighted two specific features of the network society: '*space of flows*' and '*timeless time*'. These two concepts do not replace the previous structures of space and time. On the contrary, they all coexists and are also cultural expressions of the network society (Castells, 2004). This means that time and space as physical concepts still exist; however, the limitations once possessed by humans are less clear. The technologies that characterize network societies destroy geographic and economic boundaries.

However, it is important to note that Castell's arguments are not universal nor do they represent an overall picture of the disparate economic and political realities that co-exist in the world. The "inclusive/exclusive" binary nature of the network arrangement is an important limitation of his theory and it was acknowledged by Castells himself (Castells, 2004, p.4). This logic confirms that certain parts of the network may only communicate and share information with other members of this structure. It means if any subject is cut off from this arrangement, he/she is automatically excluded from the universe. This social binary perspective, therefore, implies that there are two distinctive and contrasting realities within the same planet: those who live by people who are part of the network - and, therefore, have information and influence; and those who live cut off to the network. The latter hence is becoming powerless and weak. This binary structure therefore creates a digital divide, a concept studied by Warschauer, Knobel, & Stone (2004, p.586). It is defined as a barrier which is "characterized not only by physical access to computers and connectivity, but also by access to additional resources that enable people to use technology too." This means that people and society who have not been fortunate enough to enjoy the benefits of technology are isolated from the reality of those who are already adept.

In this network society, Castells (2010) clearly described how social, economic, politic, and cultural aspects are created and recreated individual' digital interactions. Information technology revolution of the 18th century is mentioned as one of the drivers which reorganises the capitalist system in the context of production, experience, and power relations globally. This revolution had put human as manufacturing power itself rather than only being the subject of the decision-making process of the production, as mind and machine are increasingly interrelated. Castells strongly affirmed that the core of this revolution and transformation is information and communication technologies (ICTs) where these are not only an application tool but also a process which has to be developed over time (Castells, 2010).

In Castells' view, economy is interpreted as informational matter since globalisation and networks are part of economic elements. In the 20th century, new information technology became the basic mechanism in almost all strategies used to maximise profits, both at local and global context; where people whom unable to adapt would be excluded from the economic system (Castells, 2010). The economic global transition to capitalism through information nationalism forms global networks which in Castells' term is mentioned as 'network institutions' since the computer network is the sine qua non of corporations which builds strategic alliances and implements a complex network of independent decision-making processes. This networking situation makes people keep updated with the latest information to be able sharing the costs and risks of their business so then staying outside the network is something difficult to do so. By referring to Weber's Protestants Ethics and the Spirit of Capitalism, Castells' Spirit of Informationalism (Castells, 2010, p.210) revealed that organisation is not merely a subject but more as a network which has many aspects of current life' cultures.

The transformation of global economy shaped by services sector in this current information society generates what Castells called as 'fragmented societies' (Castells, 2010, p.296). This is a situation where people are not in a global labour force state but more to the extent one is becoming more dependent to each other in this multi-faceted virtual culture. Therefore, the integration of current electronic communication (intertwined within computer communication, new media and social networks) further creates 'the culture of real virtuality' which is of course determined by social interests, government policies and business strategies.

Unlike many other social science theories, Castells (2010) assumed that in what he called the network societies, space is something that organises time, which in these industrial times constitute of the developing service sector and the global flow of information. Therefore, in this new industrial space, time is getting more flexible and space is getting more singular since people are in a more mobile way of state. The relationship between architecture and society are becoming blurred since the flow of spaces is not necessarily spaceless, but its structural logic is spaceless. Moreover, the flow of spaces also further dissolved the time which is compressed by the new communication technologies. The concepts of 'concurrency' and 'timelessness' have emerged as the result of time transformation by the culture of real virtuality.

Despite the discrepancies in academia regarding the important role of technology and information, it seems undeniable that they have had an enormous direct impact on the way current society is organized - as we can see in our own

reliance on information technology in daily life. Current pandemic situation fits perfectly into the theory of Castells where there is a widespread use of several ICT platforms in education sector. In more than 100 countries, education institutions prompted to switch its learning-teaching activities into virtual up until unpredictable period. This situation surely won't be a problem as long as one has access to the internet.

However, based on the study conducted by ITU Telecommunication Development Bureau in 2019, among 4.1 billion people using the internet worldwide, most of them were people live in developing countries. Only about 47.1% in developing countries and 19.1% in least developed countries had access to the internet (ITU Telecommunication Development Bureau, 2019). Apart from the inter-regional different proportion of the internet penetration in countries like Africa and Asia, this transition of education to virtual platform puts some challenges into practice. Ones who have already had access, resources, and skills adapt gradually and embrace this practice as a new normal life which allows them to move forward and keep pursuing their education. Yet, many are struggling to live day to day let alone to have computer device, quota or a smartphone as obligatory devices in online class during this pandemic.

Research Methodology

The research methodology shows the logic of the process development used to produce the theory, namely the procedural framework in which the study is conducted (Remenyi et al., 1998). Using quantitative survey analysis, this article critically examined the experience of shifting conventional teaching-learning activities to be fully virtualized on HEIs during the outbreak both for students and lecturer, particularly in eastern part of Kalimantan. The data was collected by means of an online survey to achieve results consistent with the objectives and scope of this study.

In this study, secondary data were used to enrich the article. For secondary data collection we have used published data sources. Published data were collected from: i) various government publications or non-governmental organizations, ii) various research reports prepared by researchers, universities, economists, etc., iii) books of various authors, handbooks, magazines, and newspapers, iv) journals, vii) websites, and vi) public records and statistics, historical documents, and other published sources of information.

The data obtained from various sources were further analysed narratively. It started by reading the data several times to get familiar with them and later we looked for basic patterns to transcribe the data. By revisiting the research objectives, the collected data were coded to identify respondents' answers. Once the data were coded, responses to research questions were further explored to understand the story and narrative from students and lecturers' personal experiences throughout the crisis.

Results

As mentioned before, based on APJII's definition, East-Kalimantan is classified as rural yet this would be the Indonesia's capital city in 2024. Our study gathered responses from lecturers (32.47%) and students (67.53%) in East Kalimantan to investigate their perspective on the online teaching-learning system during the pandemic. There are 96.3% of the received responses admitted to learning and teaching from home, where 85% of them accessed the internet to carry out these activities every working day (Monday to Friday). These findings depict the concept of a network society that being virtual is the new practice of socialized communication (Castells, 2005). Students and lecturers are subservient actors of power relationships within the education environment. In the case of teaching-learning, they must comply with the government as the dominant actor through rules of conducting the activities. Their relationship is asymmetrical, which means one actor has a greater degree to influence his will and values over the other (Castells, 2009).

However, 82.1% of participants disagreed if this WFH/SFH became permanent. As Castells (2010) stated, the new social structure is characterized by two social forms which create the concept of space of flows and timeless time. This study result shows that the respondents regretted the use of multi-platforms to access online learning. This may be due to the unpreparedness of the HEIs in carrying out online learning activities. Some HEIs already have an online education system but are not yet established, while 51.3% of respondents said their institution did not provide the application. Another interesting result of this study, that instead of internet connection, the cost came out as the biggest problem to follow the current system by 75.6% of respondents. Meanwhile, 41% of respondents agreed and 24.4% strongly agreed that the readiness of appropriate teaching methods and materials was another challenge for online systems. From the three elements of the space of flow, the majority of students and lecturers in rural areas agree that inadequate facilities are an obstacle for this system. Therefore, only 17.9% of respondents agreed and strongly agreed that the online system could produce good quality education.

In the context of the network society, the space of flow refers to the possibility of practicing simultaneity without contiguity. This study shows that simultaneity may not happen in the case of online education during the pandemic in Indonesia rural area. Most respondents of this study (88.5%) agreed that they had no other choice but to execute online teaching and learning, and they (82.1%) also felt afraid of being left behind if they did not implement the online learning system.

Moreover, there is about 33.3% of respondents admitted they had difficulty accessing the internet due to spotty connection from where they live. Such respondents struggled to connect, and this situation created a daunting challenge for many rural communities like those in East Kalimantan where many people live in remote areas and are sometimes unserved by internet providers. Data from APJII (2019) showed that internet penetration in Indonesia was centralized in urban areas of Java island with 55.7%, while rural area such as Kalimantan held only 6.6%. Moreover, APJII in 2018 also reported that internet in East Kalimantan only covered 67.8% of the area, which was ranked the third among other four provinces, while 32.2% of its population declared as non-internet users (Haryanto, 2019). This situation confirms what Castells (2004) stated that any subject whom cut off from the arrangement will be automatically excluded from the universe. We can say that this pandemic unintendedly creates a digital divide where many people like in this study are not fortunate enough to enjoy the benefits of technology and then become isolated from the reality.

In terms of time, referring to "the sequencing of practices" (Castells, 2009, p.34) of the network society, many are entangled with technology to use information and communication relentlessly. This was what came up in the result of this study where 85.9% of respondents accessed the internet almost every day for online teaching-learning. However, 82.1% of respondents disagreed if the online teaching-learning is implemented in the future even after the pandemic is over. It may relate to their satisfaction and the effectiveness of the online system for education was relatively low. Only 20.5% of respondents agreed and 7.7% strongly agreed that the online education system was effective, while only 30.8% in total felt satisfied and very satisfied.

Discussion

At this point, this novel corona virus (Covid-19) becomes another flow in the concept of 'Network Society' by Manuel Castells which has circulated around the world and appears to crash our living system. It also caused around US$8.8 trillion economic losses as predicted by Asian Development Bank (Laucereno, 2020). This pandemic has intensified online activities in various forms, including Skype, Zoom, email, WhatsApp calls and so on. Given the risk of physical proximity involved even if the severity of its effect decreases, the current expansion of online practices will likely to remain so to a significant degree.

Universities and campuses are where students live and study in close proximity to one another. They are also a vibrant cultural centre where many students are gathered from different places. Recently, the foundations of this unique ecosystem have been significantly affected by the rapid spread of the coronavirus outbreak, creating uncertainty about its implications for higher education. This pandemic has forced the education system to shift from face-to-face meetings in the classroom to fully virtual. It happens everywhere, and there is no exception in Indonesia. When developed countries have settled with online learning, Indonesia must suffer from a complex challenge for its education. Its geographical condition and communication infrastructure are two among other big problems for online education in this country. From the perspective of the network society, Indonesia is only one node of complicated networks of the network society. Furthermore, the uneven internet penetration and geographical problems have split Indonesia to several nodes of micro-network society.

Over the past few months, education officials have been forced to cancel classes and close doors on campuses in response to the growing coronavirus outbreak. HEIs have shifted classes to online learning, cancelled industrial visits, and encouraged all students and lecturers to return home. While class closings, lower enrolments at the start of the new semester, and cancellations may be temporary, it is difficult to predict what the new coronavirus will result in long-term disruption to the higher education system.

Therefore, for this moment, the most effective tool in maintaining student retention and maintaining access to learning is online courses. Although most colleges and universities have integrated some form of online education into their work, moving all programs online may prove challenging. While some universities may already have strong online systems, other universities are struggling to cope with the demand load. Particularly are higher educations in rural Indonesia where internet penetration is still considered as a luxury thing (Satriawan, 2020), not only for students but also for the lecturers and staff (Murdaningsih, 2020).

Conclusion

As we unravelled the shift of teaching-learning program into online platform in higher educations by the concepts of space of flows and timeless time as described above, it becomes clear that many are becoming the victims of this digital migration based on the network society theory. Although various platforms are used to facilitate this hybrid teaching-learning process, the low internet penetration in many areas in rural Indonesia cannot be ignored as Castells termed it as networking power. Some people might have used the tools and integrated those fluently in their lives long before the outbreak. In addition, because we live in a network society it also makes sense to use all available tools to move forward our academic life in this pandemic. However, it does not mean that it would be easy and helpful for some others (network power), as this study found that the internet fully integration in their Work From Home/School From Home during this

pandemic created a dynamic situation. Although many of them may carry out all their tasks online, but the spotty internet connection and pricey internet quota are some issues to be considered for the relevant stakeholders. Furthermore, in measuring the effect of online learning use on teaching-learning success we also need to emphasize the infrastructure equality in all area. In other words, apart from this outbreak, the government and higher education institutions should start to focus on building equal infrastructure for all citizen. In this case, many HEI's planned programs have been cancelled to subsidise internet quota so the online classes can run as it should be (networked power).

In the case of online integration in educational setting, this shift seems to create an opportunity to implement what the Indonesian ministry of education and culture termed as Merdeka Campus Policy. Indonesian HEIs may collaborate with global universities without being worry of travel expenses. Various digital platform can be used to facilitate the work and so. In the future, this pandemic situation may come in different form, so it doesn't matter to go online, as long as we have enough support to connect, work, and study whether we are the haves or the don'ts. However, on the other hand, the rising of MOOCs and other certified programs during this pandemic have weaken HEIs in rural areas because they lack of resources and knowledge on e-learning infrastructure and development. Thus, not a few people opt for such program due to financial reason (*network-making power*). Hence, the analysis brings out an undeniable cohesion gap of higher education in Indonesia among those in urban and rural areas who experience development injustice for years.

To sum up, based on the situation discussed above, some suggestions are proposed for the future situation. First, it is important for the HEIs to simplify the curriculum along with Kampus Merdeka program to adapt to this emergency situation. Every department in HEIs must reduce its basic competencies by sorting and selecting essential materials which suit to current issues. Second, the government through the Ministry of Communication and Information and local government has to immediately make free internet policies, or at least provide subsidised quota on a regular basis. Hence, it is still important to understand that the online integrating activities would never replace the real-life interaction but just reinforce the structure and connections.

References

Adnan, M., & Anwar, K. (2020). Online learning amid the COVID-19 pandemic : Students ' perspectives. ***Journal of Pedagogical Sociology and Psychology***, ***2***(1), 2–8.

APJII. (2019). Penetrasi & Profil Perilaku Pengguna Internet Indonesia Tahun 2018. In ***Asosiasi Penyelenggara Jasa Internet Indonesia (APJII)***. Retrieved from www.apjii.or.id

Bank Indonesia. (2018). ***Kantor Perwakilan Bank Indonesia Provinsi Kalimantan Timur***. (November). Retrieved from file:///C:/Users/user/Documents/21st Brave Girl/SEMESTER PENDEK 2019/Metodologi Penelitian/SUMBER 9.pdf

Basilaia, G., & Kvavadze, D. (2020). Transition to Online Education in Schools during a SARS-CoV-2 Coronavirus (COVID-19) Pandemic in Georgia. ***Pedagogical Research***, ***5***(4), 1-9. https://doi.org/10.29333/pr/7937

Berliyanto, & Santoso, H. B. (2016). Indonesian Perspective on Massive Open Online Courses: Opportunities and Challenges. ***Journal of Educators Online***, ***15***(1).

Castells, M. (2000). Toward a Sociology of the Network Society. ***Contemporary Sociology***, ***29***(5), 693-699.

Castells, M. (Ed.). (2004). ***The Network Society: A Cross-Cultural Perspective***. Cheltenham and Northampton, MA: Edward Elgar Pub.

Castells, M. (2005). The Network Society: From Knowledge to Policy. In M. Castells & G. Cardoso (Eds.), ***The Network Society: From Knowledge to Policy*** (pp. 3–21). Washington DC: Johns Hopkins Center for Transatlantic Relations.

Castells, M. (2007). Communication, Power and Counter-power in the Network Society. ***International Journal of Communication, 1***, 238–266.

Castells, M. (2009). ***Communication Power***. Oxford: Oxford University Press. https://doi.org/10.1017/CBO9781107415324.004

Castells, M. (2010). ***The Rise of the Network Society Second Edition With a new preface***. West Sussex: John Wiley & Sons Ltd.

Firman, F., & Rahayu, S. (2020). Pembelajaran Online di Tengah Pandemi Covid-19. ***Indonesian Journal of Educational Science (IJES)***, ***2***(2), 81–89. https://doi.org/10.31605/ijes.v2i2.659

Giddens, A. (1984). ***The Constitution of Society: Outline of the Theory of Structuration***. Oxford: Polite Press.

Graham, S., & Marvin, S. (2001). ***Splintering Urbanism: Networked Infrastructures,Technological Mobilities and the Urban Condition*** (1st Ed.). London: Routledge.

Hall, S. P., & Pain, K. (2006). ***The Polycentric Metropolis: Learning from Mega-City Regions in Europe.*** London: Routledge.

Hartman, K. (2020). ***Coronavirus: My Warning to Colleges 14 Years Ago and My Advice Today***. Retrieved July 7, 2020, from The Evollution: A Destiny Solutions Illumination website: https://www.kenhartman.com/uploads/1/1/0/3/110325429/evollution-coronavirus-_my_warning_to_colleges_14_years_ago_and_my_advice_today_.pdf

Haryanto, A. (2019). ***32,2% Penduduk Kaltim Belum Tersentuh Internet***. Retrieved August 22, 2020, from Detik.com: https://inet.detik.com/telecommunication/d-4685492/322-penduduk-kaltim-belum-tersentuh-internet

Humas Ditjen Dikti. (2020). ***Siaran Pers Nomor: 68/Sipers/V/2020. Ditjen Dikti Apresiasi Dukungan Perguruan Tinggi Pada Mahasiswa Semasa Pandemi COVID-19***. Direktorat Jenderal Pendidikan Tinggi Kementerian Pendidikan dan Kebudayaan RI. Retrieved from http://dikti.kemdikbud.go.id/kabar/bantuan-ditjen-dikti-pada-mahasiswa-di-masa-pandemi-covid-19/

Ihsanuddin. (2020). J***okowi: Kuliah Daring Sudah Jadi "New Normal", bahkan "Next Normal".*** Retrieved July 29, 2020, from KOMPAS.com: https://nasional.kompas.com/read/2020/07/04/10593421/jokowi-kuliah-daring-sudah-jadi-new-normal-bahkan-next-normal

ITU Telecommunication Development Bureau. (2019). Measuring Digital Development: Facts and Figures 2019. Retrieved from ITU-Publications: https://www.itu.int/en/ITU-D/Statistics/Documents/facts/FactsFigures2019.pdf

Kasih, A. P. (2020). ***Mendikbud: Perguruan Tinggi di Semua Zona Dilarang Kuliah Tatap Muka***. Retrieved July 7, 2020, from KOMPAS.com: https://www.kompas.com/edu/read/2020/06/16/103917571/mendikbud-perguruan-tinggi-di-semua-zona-dilarang-kuliah-tatap-muka

Khasanah, D. R. A. U., Pramudibyanto, H., & Widuroyekti, B. (2020). Pendidikan Dalam Masa Pandemi Covid-19. ***Jurnal Sinestesia***, ***10***(1), 41–48. Retrieved from https://sinestesia.pustaka.my.id/journal/article/view/44

Kurshan, B. (2020). ***The Pandemic & Higher Education: Old Problems, New Opportunities***. Retrieved July 7, 2020, from Forbes: https://www.forbes.com/sites/barbarakurshan/2020/06/15/the-pandemic--higher-education-old-problems-new-opportunities/#fea87a86d676

Lash, S., & Urry, J. (1994). ***Economies of Signs and Space***. London: Sage Publications.

Laucereno, S. F. (2020). ***Fantastis! Kerugian Ekonomi Akibat Corona Bisa Tembus US$ 8,8 T***. Retrieved from https://finance.detik.com/berita-ekonomi-bisnis/d-5015698/fantastis-kerugian-ekonomi-akibat-corona-bisa-tembus-us-88-t

Marinoni, G., Land, H. Van, & Jensen, T. (2020). ***The Impact of COVID-19 on Higher Education Around the World IAU Global Survey Report***. Retrieved from https://www.iau-aiu.net/IMG/pdf/iau_covid19_and_he_survey_report_final_may_2020.pdf

Media Indonesia. (2020). Revolusi Pendidikan Tinggi di Tengah Pandemi Covid-19. Retrieved August 2, 2020, from mediaindonesia.com: https://mediaindonesia.com/read/detail/313911-revolusi-pendidikan-tinggi-di-tengah-pandemi-covid-19

Mitchell, K. (2003). Educating the National Citizen in Neoliberal Times from the Multicultural Self to the Strategic Cosmopolitan. ***Transactions of the Institute of British Geographers***, ***28***(4). 387-403

Mohsin, N., Prakash, S., & Sahu, N. (2016). Internet Usage in Urban–Rural area with e-Commerce and e-Banking. ***International Journal of Computer Applications***, ***144***(2), 28–30. https://doi.org/10.5120/ijca2016910122

Murdaningsih, D. (2020). ***Tantangan Kuliah Online Bagi Dosen***. Retrieved August 28, 2020, from Republika: https://republika.co.id/berita/qbv37d368/tantangan-kuliah-online-bagi-dosen

Nadeak, B. (2020). The effectiveness of distance learning using social media during the pandemic period of covid-19: A case in universitas kristen indonesia. ***International Journal of Advanced Science and Technology***, ***29***(7), 1764–1772.

Pakpahan, R., & Fitriani, Y. (2020). Analisa Pemanfaatan Teknologi Informasi dalam Pembelajaran Jarak Jauh di Tengah Pandemi Virus Corona Covid-19. ***Journal of Information System, Applied, Management, Accounting and Research***, ***4***(2), 30–36.

Rachmawati, Y., Wilson, H., Dewi, F. W. R., Silviliyana, M., & Sulistyowati, R. (2018). ***Statistik Penunjang Pendidikan Hasil Susenas Modul Sosial Budaya dan Pendidikan 2018***. Jakarta.

Remenyi, D., Williams, B., Money, A., & Swartz, E. (1998). ***Doing Research in Business and Management***. Thousands Oaks, CA: Sage Publications.

Satriawan, Y. (2020). ***Wabah Corona Persulit Mahasiswa Penuhi Biaya Hidup dan Kuliah***. Retrieved August 28, 2020, from VOA Indonesia website: https://www.voaindonesia.com/a/wabah-corona-persulit-mahasiswa-penuhi-biaya-hidup-dan-kuliah/5408047.html

Sener, J. (2010). Why online education will attain full Scale. ***Journal of Asynchronous Learning Network***, ***14***(4), 3–16. https://doi.org/10.24059/olj.v14i4.152

Tabboni, S. (2006). ***Les temps sociaux (Sociologie)***. Paris: Armand Colin.

Veletsianos, G. (2016). The Defining Characteristics of Emerging Technologies and Emerging Practices in Digital Education. In G. Veletsianos (Ed.), ***Emergence and Innovation in Digital Learning: Foundations and Applications*** (pp. 3–16). Edmonton: Athabasca University Press.

Warschauer, M., Knobel, M., & Stone, L. (2004). Technology and Equity in Schooling: Deconstructing the Digital Divide. ***Educational Policy***, ***118***(4), 562–588.

Yadav, L. S. (2017). Usage of Internet in the Teaching and Learning Process of Education in the Rural and Urban Areas. ***International Journal of Advance Research, Ideas, and Innovation in Technology***, ***3***(6), 870–875.