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Digitalization of Education During the COVID-19 Pandemic: A View From The Functional Structural Theory Perspective

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ABSTRACT

The Covid-19 pandemic is affecting education as well. The purpose of this research is to investigate the digitalization of education from Talcott Parsons' Structural Functional Sociology theory. A literature review approach is combined with qualitative research in this study. The study's findings demonstrate that the AGIL function of Talcott Parsons' structural functional theory is used to examine changes in the pandemic's learning system:1) Modification:Face-toface learning systems are transferred to homes via online or virtual meetings.2) Goal Attainment is an online learning system that lets students learn and teach even when the COVID-19 pandemic is going on. It is done so that students can still exercise their right to education and use it to the fullest.3) In order to integrate, governments, particularly the Ministry of Education and Culture, and relevant schools must work together to develop policies that can support students and online learners.4) Despite the fact that learning does not take place in classrooms or campuses, latency requires teachers and students to uphold the values of discipline that are determined.

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1. INTRODUCTION

As a result of human curiosity, technological advancements appear to never end. Technological advancements have had an impact on every facet of life, enabling technology to fulfill all human requirements, including housing, food, clothing, and even bureaucracy. Humans have entered the digital era, as evidenced by the constantly evolving innovations brought about by technological advancements. All aspects of human life have been made easier by technological sophistication in the form of a digital system in the digital era (Yusof et al., 2022).

Whether we are aware of it or not, the digital age has entered a new phase, causing every nation to advance in every sphere. The freedom to work and be creative in a wide range of settings is one of the many benefits of today's use of digital technology (Teece, 2018). From a sociological perspective, social change is seen as a process that eventually occurs in society. This demonstrates that social change will always occur from time to time given that society continues to move, develop, and change. Because every person and member of a community group has the capacity to grow from time to time, society changes for each individual or group. Things that must be done in order to have a better life in the future frequently lead to changes in society. This change is driven by a desire for improved living conditions. In addition, humans have an innate desire for change, and nature continues to produce new things. New developments continue to emerge over time until the current system is finally altered (Arif et al., 2021).

One area of life that uses a digital system is education. Digital technology is incorporated into every aspect of the curriculum, teaching methods, media, and even administrative systems in this digital learning system, which is referred to as education digitization (Kumar et al., 2019). Even though physical activity has been restricted as a result of the Covid-19 pandemic, face-to- face education at all levels of education still needs to be digitalized in Indonesia during this time.

Guidelines for implementing the curriculum in special education units were published in SK 719/P/2020 by the Ministry of Education and Culture. A curriculum that meets the needs of students in terms of learning can be used by special education units. The Minister of Education and Culture's Circular is an appeal to use home-based online learning. 4 of 2020, which deals with the emergency period for putting education policies into place to stop the spread of Covivirus-19. Therefore, all educational components must be involved before digitization can begin (Hamdani dan Priatna, 2020; Permal, 2022; Rhodes et al., 2020).

In education, technology is also used to make it easier for teachers and students to interact with one another during teaching and learning activities. Educators can quickly and easily develop innovative learning systems that engage students and make learning more interesting and less boring by utilizing various learning resources from Google or YouTube (Hussin, 2018). In fact, the digitization of education will greatly benefit Indonesia's educational system. Digitization of education has many benefits, including1) There is no time limit on learning, 2) the number of students in a class is unlimited, and 3) teaching and learning can be done anywhere and at any time (Azorín, 2020; Bak, 2019; Goradia, 2018).

The fact that the aforementioned efforts are made to maintain the learning process's continuity is evidence of education that cannot be ignored. Education can cultivate broad-mindedness, critical thinking skills, and excellent human resources. From a structurally functional point of view, education's goal is to socialize the nation's next generation so that they can become members of the community and learn values, acquire knowledge, improve behavior, and become productive citizens. Education must continue in the midst of the Covid-19 pandemic for people's well-being and the achievement of educational objectives.

In order for social systems to survive, according to Talcott Parson, the structure as a system must move and social systems must be mutually sustainable with other systems. In this concept, society is compared to biological organisms. Parsons' theory was influenced by Herbert Spencer and August Comte, who believed that the body's organs were interdependent. Parsons is led to believe that society is a system of interdependent parts as a result of this. His book "The Social System" which explains that a system must fulfill the functions or prerequisites of AGIL in order to continue functioning, describes the function of AGIL.

AGIL's function includes determining system requirements in relation to the environment, achieving goals or objectives, and the tools required to do so (Rusydiyah and Rohman, 2020). An explanation of AGIL's functions can be found below: (1) Adaptation is the process by which a system adapts to its environment in order to fulfill its requirements. In order to do this, a system must adapt to the conditions and environment that are currently in place. (2) Goal Attainment: A system must be capable of defining and achieving its objectives. (3) The ability of system to regulate the relationship between one component and other components that are connected to form a system is referred to as integration. The system's components must have relationships with one another in order for the system as a whole to work. In this instance, for the components to function properly, a certain level of solidarity is required. (4) The degree to which a system needs to increase, complement, and maintain both individual motivation and the cultural patterns that generate and maintain motivation is known as latency. A system needs to keep itself as balanced as possible (Ritzer, 2014).

Before this one, there were a few studies that looked at learning systems during the Covid-19 pandemic;The following are the main differences between these studies:a focus on changes in the motivation of students (Mufaridah et al., 2022). The effectiveness of e-book online learning media in social studies subjects (Aswad, 2019). Education policies in the midst of the Covid-19 pandemic , students' difficulties with online learning (Purnasari and Sadewo, 2021), innovations in online learning (Hidayat and Nisa, 2022). The primary focus of this research is the examination of the digitalization of education from the perspective of Talcott Parsons' structural functional sociology. Even though there are a lot of studies that look at learning systems during a pandemic, none of them have used Talcott Parsons' Structural Functional Theory, which prevents this study's theoretical novelty from being considered novel.

2. LITERATURE STUDY

2.1. Digitization in Education

The Covid-19 pandemic in Indonesia has necessitated that every facet of education adjust to the sudden shift toward online learning and homeschooling. In the learning process, it cannot be separated from technology. In the past year, education digitization has become a hot topic. This is in response to the rapid and significant change in education services. both from the culture and the educational system.

According to Law Number 20 of 2003 on the National Education System, education is "a conscious and planned effort to create a learning atmosphere and learning process so that students actively develop their potential to have spritual, religious, self control, personality, intelligence, noble character, as well as the skills needes by himself, society, nation, and state." This is because education is a conscious and planned effort to create a learning atmosphere and learning process.

According to the Big Indonesian Language Dictionary (KBBI) online (2021), education is the process of changing a person or group of people's attitudes and behaviors in an effort to mature humans through teaching and training efforts, processes, methods, and acts of education.

Education in the era of the industrial revolution is an adaptation of the needs of the industrial revolution for a curriculum that is relevant to the current situation (Maryanti et al., 2020). Experts contend that education in the 4.0 industrial revolution exemplifies the integration of technology into education. It is hoped that by optimizing internet network facilities, windows to the world of education and teaching will be opened more easily.

In addition to contributing to advancements in general information, technological advancements also have an impact on education. The needs of society, including education, are affected by the digital age. The Covid-19 pandemic has fully established the momentum for the digitalization of education in Indonesia. A person's maturation is aided by their education. Education must be carried out using all available resources and having more potential uses to accommodate education, even in limited circumstances.

So it very well may be reasoned that the digitalization of schooling is the most common way of involving computerized frameworks in the realm of training to understand an educational experience. Face-to-face learning can now take place alongside the search for learning resources thanks to the digitalization of education. So that students' or children's knowledge expands and becomes more in-depth.

2.2. The Theory of Functional Structural Sociology

According to Parson (Laurer, 1982), studying social structure must precede studying social change. The vertical or horizontal social order or arrangement, as well as the relationshipbased organization of a society, can be used to define social structure, relationships that can be predicted by patterns of behavior that are repeated between people and groups in society.

Certain requirements or functions must must be met for the system as a whole to function and exist. The two most important aspects of these needs are those that are related to internal systems or needs when they are related to their environment, as well as those that are related to achieving goals or objectives and the necessary means of doing so.

Parson infers four functional requirements from this presumption, namely:latent maintenance, integration, achievement of goals, and adaptation, or AGIL theory to us. The difficulty of ensuring that a system operates in accordance with certain social norms and rules is known as latent maintenance. The coordination or suitability of the system's components so that they all function together is called integration. Achieving goals involves meeting the objectives that are contingent on the prerequisites that are owned. The system's capacity to obtain the resources it requires from the environment and distribute them throughout the system is referred to as adaptation. To put it another way, the functional requirements include:

Adaptation A system must be able to deal with critical external situations. It must also be able to adapt to the environment and adapt the environment to needs or needs, whether they are simple or complex. It must be able to adapt to the physical, non-physical, and social environments. A system must be capable of explaining and achieving its primary goals. There is always a specific purpose behind every human action. However, social environment goals that go beyond individual interests frequently conflict with individual goals. Individual societies as well as group societies may be affected by this. Individual interests must align with the larger interests of the group in order to achieve the objective because a person must live in a social system. As a result, personal goals are still important; however, in order to be achieved, they must be adapted to the objectives of the social system in which individual actions are carried out.

Integration Without maintaining its unity, each system must maintain internal coordination among its components and establish communication with each division. The idea of integration demonstrates that, depending on their position and status, each of these components is shaped and influenced by a component of social solidarity. If each component of a system demonstrates or advances its own interests, the solidarity bond will break down. As a result, this phenomenon is constituted by the idea of the whole in this sense of integration. Latent maintenance Every system needs to be able to keep things as balanced as they can. By creating actors as a counterweight, mutual care maintains and enhances both individual motivation and cultural patterns that create and sustain motivation.

3. METHODS

This study employs a qualitative research approach. The qualitative method is a type of research that generates descriptive data by utilizing the spoken or written words of individuals and observed behavior. where the researcher wants to see how the Covid-19 pandemic, which has made education more digital, has changed learning. A literature review and analysis will be carried out by the author. In order to gather information from a variety of sources, including blogs, articles, books, and journals, a literature review was carried out. An analysis is conducted after the literature review to ascertain the precise meaning and provide feedback on the current digitalization of education. The sociological structural functionalism theory of Talcott Parson serves as the foundation for this study's analysis.

4. RESULTS AND DISCUSSION

3.1. Digitization in Education

Digitization is a category of noun that refers to actions that make use of digital systems. The capacity to digitalize all educational processes and components is referred to as Digitalization. Several educational processes are affected by digitization, particularly organizational change and transformational leadership. One strategy for dealing with the issues that will arise in education in the future is digitalization (Yusrizal et al., 2017).

Since the beginning of 2020, the Covid-19 pandemic has spread, providing more opportunities for education digitization. The Covid-18 pandemic helps Indonesia's education digitization. Circular Letter No. contains the regulation. 4 of 2020 issued by the Ministry of Education and Culture regarding the implementation of online learning and meetings between teachers and students.As previously stated, the pandemic had an impact on the education sector; in March 2020, 800 million children world wide used online learning.Online learning was used to avoid physical contact with students in order to avoid the Covid-19 outbreak. The education minister hopes that students will have a slightly different experience than in the past. The fact that traditional classes and extensive internet access are not required is one of the benefits of the online method. Due to social constraints, this method is regarded as quite effective. Even though there are advantages, there will eventually be disadvantages as well. As a result of these shifts, teachers and students faced numerous obstacles between the beginning of the pandemic and the writing of this article. During the pandemic, digitally focused concepts and strategies are developing at a rate that is too rapid to effect change. This pandemic requires adaptation on the part of all teachers. Teachers face a number of difficulties, some of which include: (1) acquiring new application techniques;(2) Uneven transformation is caused by differences in literacy skills;(3) A lack of internet access raises operating expenses (Basar, 2021).

There are a number of ways that digital education can be used in the classroom:1) Distance Learning (PJJ): According to Law Number 20 of 2003 Concerning the Market 1 National Education System's definition of PJJ, distance education is teaching in which students use a variety of learning resources, such as information, media, and communication technology, to attend classes with educators from different locations. In order to connect students and teachers in different locations, distance education is an institutional-based formal education.2) Blended learning is a teaching strategy that enables students to learn independently and acquire new knowledge by combining face-to-face and online instruction with a variety of media and technologies. The following are three crucial components of the blended learning learning model: (a) Online instruction; (b) instruction in person; (c) self-study Before implementing the blended learning model, it is essential to identify the appropriate learning activities, learning achievement objectives, and online and offline delivery options (Yetti and Ahyanuardi, 2020).

Innovation has a significant significance in education and must be implemented in accordance with current circumstances and developments. Digitalization, which is aided not only by internet services but also by the availability of facilities or infrastructure that is utilized, cannot be separated from the innovation applied in this setting. According to the context of this study, computers, smartphones, or tablets serve as the primary means of communication in addition to the internet.As a result, putting the idea of digitization into practice is a complicated issue that relates to the operational effectiveness of innovative learning activities that make use of various owned facilities. Digitalization in education faces a challenge from the rapidly expanding use of the internet.During the pandemic, various applications like WhatsApp groups, Google Classroom, YouTube, ebook, and Power Point are used to learn. Both of these applications have features that make learning easier. There is a mix of offline and online learning implementation. An alternative to online education is the use of Google products, particularly Google Classroom.A service called Google Classroom is included in the G Suite education products. It can be accessed online or downloaded using a mobile app.Because it is part of G Suite, Google Classroom will be able to integrate with Google Drive, Calendar, Jamboard, Forms, Hangouts Meet, Docs, Sheets, Slides, and Gmail support.Google Classroom will be integrated regardless of the presence or absence of the Covid-19 pandemic. In the future, it will be wiser to use the internet for educational purposes as a digitalization innovation in the education sector.

3.2. The Theory of Functional Structural Sociology

People's lives will always be different. The Covid-19 pandemic has altered the educational system. There must be a shift in the education industry, and learning systems must find ways to change with it. In the field of education, the utilization of online learning is a relatively recent development. In order for the components of education to continue functioning, they must. The following table provides an analysis of the AGIL learning system's function during the Covid-19 pandemic:

Adaptation A system must adapt to its environment in accordance with its requirements in order to survive. A student must be able to adjust to his or her surroundings. During the Covid-19 pandemic, students are expected to be able to adjust to changes in the rules and environmental systems. Students in rural areas are currently required to quickly adjust to a virtual environment without being sufficiently prepared for school. The technological effects of digitizing education and learning force it to adapt to the virtual learning method utilized by students with its numerous features and services. The internet and learning tools like smartphones, tablets, computers, and other devices should be used by teachers, students, and parents alike. A brand-new model of learning culture has led to this demand. In the past, students were not permitted to use Android tablets or smartphones at school. Schools are rethinking their policies regarding the use of technology in the classroom by students and teachers due to the difficulties of adapting to the pandemic and learning through digitization.As a result of the Covid-19 pandemic's acceleration of virtual mobilization, communication technology devices and the internet have emerged as the primary tools in the school learning ecosystem network. In today's society and digital culture, schools must promote and cultivate technology as an integral part of the learning process and media rather than just teaching. It will be beneficial for schools, teachers, and students to utilize technology rather than avoid it.adjusting and moving our learning activities online, to virtual meetings, or at home during the COVID-19 pandemic. The government has implemented a brand-new policy to address the Covid-19 pandemic.A Circular Number: issued by the Minister of Education and Culture was issued by the Ministry of Education and Culture (Kemendikbud). Regarding Online Learning and Working from Home in the Context of Preventing the Spread of Covid-19, see 36962/MPK/HK/2020. Activities for online learning make use of information technology and the internet. Additionally, students can use digital platforms like Google Indonesia, Microsoft, Quipper, Kelas Pintar, Sekolahmu, Ruangguru, and Zenius to adapt these online learning activities. Students can also benefit from online learning tools like Google Classroom, Google Meet, Zoom, WhatsApp, and YouTube.Hence, the showing part is able and capable in different applications emerging from the improvement of data innovation, particularly web based realizing which requires the production of dynamic and intuitive study halls.

A system called Goal Attainment must be able to identify a goal and ensure that it is achieved in accordance with the design. In addition to other learning activities, the government has objectives that must be achieved. The government wants to adjust adaptation during this Covid-19 pandemic by learning about what happened. For education to function efficiently and effectively, it is critical that all stakeholders support it. At the very least, education actors like principals, teachers, and students are a crucial component that needs to be able to adapt to changing circumstances and accomplish goals. In addition to the facilities and curriculum, the education service side must be developed in accordance with the education industry's requirements. As a result, it is necessary to develop all actors and services within an educational unit as a form of innovation in order to achieve the objective of technological development.In the midst of the Covid- 19 pandemic, which restricts community activities, online education is being implemented to ensure that the teaching and learning process can be sustained, ensuring that students retain their right to education and the opportunity to realize their full potential. This demonstrates that education is necessary for all individuals to consciously and purposefully develop their potential. Additionally, holding online learning is necessary to stop the Covid-19 virus from spreading. The introduction of an online learning platform aids in stopping the Covid-19 virus from spreading.

After reaching consensus on the values or norms of society, integration is the alignment of all social system members. Governments, students, and stakeholders must have relationships that are mutually controlling or adapting in order to remain in a system that serves a purpose. There is a connection between student integration and government agencies that provide assistance to students. Raising the standard of education, particularly in terms of learning itself, is difficult and difficult. From an educator's perspective, education innovation and change take time and should reflect the overall goal of improving education. Although

numerous innovations and modifications to education have improved education quality in our nation, not all of them are alike.Due to incompatibility with schools' potential, facilities, human resources (HR), and natural resources, schools frequently fail to implement central government innovation policies (SDA).In the meantime, the curriculum, facilities, schools, teachers, and students all need to be improved to maintain the quality of education.Digitalization must be used in conjunction with the primary factors of teachers, students, curriculum, and facilities in today's education.The government, particularly the Ministry of Education and Culture, and the school or campus must collaborate on the development of policies that can support students and online learners. One of the implemented policies is assistance with internet quotas for Indonesian students.The goal of Quota Assistance for Students and Students is to make it easier and simpler for students and students to learn online, allowing them to become productive, self-sufficient, skilled, and open-minded members of society in the future.

The process by which a system boosts both individual and cultural motivational patterns is known as latency. The field of education and learning has also benefited greatly from technological advancements. Experts have developed online learning tools, also known as distance learning, whereas previously, learning was only available in person in a classroom setting. Information technology advancements are extremely beneficial to the teaching and learning process during the Covid-19 pandemic. Teachers and students can communicate at any time and from any location thanks to this technology. Parents can actively participate in this interaction without meeting the teacher. This kind of technology really aids teachers in their education and enriches, diversifies, and makes learning more useful. As facilitators, teachers must be able to communicate effectively with students during online learning.He must then develop learning strategies that are appropriate for students in order to place students at the center of learning.Learning to communicate requires a communication pattern in order to foster positive relationships between teachers and students during the COVID-19 pandemic. It is hoped that the community will continue to uphold the values of discipline, even though there are no educational activities on campus or in the classroom during the Covid-19 pandemic.

4. CONCLUSION

Learning exercises can in any case happen despite the fact that amidst the Coronavirus infection pandemic, the learning framework has been changed to virtual gatherings at home. The Covid-19 pandemic brings about changes that require the education system to be flexible and creative. In order for educational systems to continue functioning, they must satisfy Talcott Parsons' four functional requirements of adaptation, goal attainment, integration, and latency. As part of the adaptation process, an online learning system is used at home to continue the teaching- learning process. The purpose of using this online learning system is to accomplish educational objectives. In order to run online learning and the learning process optimally, policies that can make it easier for students to participate in the process of online learning require integration between the government and various parties. In addition, in order for the learning process to run smoothly, students must uphold the rules of discipline.

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