



Online and Distance Education in the Modern Era

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ABSTRACT Online and distance education have become important topics in the modern era, especially during the COVID-19 pandemic. Regulations on online education and PJJ vary across countries and regions, but in most cases, government agencies and educational institutions have issued guidelines and policies to ensure that online learning and PJJ are effective and safe. The mechanisms and types of learning in online education and PJJ also vary. .. The approach used is descriptive qualitative, namely research that does not use mathematical, statistical or computer models. The analytical method is library research, namely library-based research. The results of the discussion show that online and distance education in the modern era in learning is carried out using several methods that are quite effective. The suggestions put forward by researchers are that distance learning has several obstacles, one of which is not all parents can guide learning at home because of work matters, so it needs to be coordinated properly between teachers and parents, when learning or material is given to students so that students later ready to work with the guidance of his parents at home. Online learning has great potential to expand access to education and increase learning efficiency. However, keep in mind that online learning is not a one-size-fits-all solution. Keywords: Long Distance, Modern Era, Online Education			

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INTRODUCTION

Nowadays, science and technology are developing rapidly (Nadya dkk., 2022). This development has an impact on the openness and spread of information and knowledge from and to all over the world through the limits of distance, place, space and time. Its influence also extends to various lives, including the field of education (Rahmah dkk., 2022). Education is an academic process whose purpose is to improve social, cultural, moral, and religious values, as well as prepare learners to face challenges and experiences in real life.

For this reason, education requires an effective and efficient learning process that makes learners absorb the information and knowledge and technology they learn as part of themselves (Dianovi dkk., 2022). Geographically and socio-economically in Indonesia (Rohmalimna dkk., 2022), the application of distance learning will be a solution in equalizing education (Najeed dkk., 2022). The controversy of whether or not distance learning can be

implemented will not be able to discourage people from learning, because learning is a human right that will be carried out throughout life.

The online learning process or E-Learning has actually existed in the previous era, it's just that its application is less maximized, because its existence is not the same as now, which requires using technology to carry out the learning process. The role of technology at this time greatly facilitates the learning process (Nopiana dkk., 2022). Therefore, the competence of educators is needed in this era, because various problems will be faced in the learning process. Every educator must have teaching skills because then it will be easy to see the needs of students during the learning process.

Limitations in terms of educators, students, and educational support facilities are problems that always arise and must be faced by Indonesia (Hartini dkk., 2022). Literature has shown that the problem of modern education during this pandemic is a paradigm shift in education to a distance learning model or often called online learning or e-Learning (Safitri dkk., 2022). This distance learning, raises various problems both in terms of educators, students, and in terms of learning support facilities (Ilham dkk., 2022). A change or innovation is needed to solve these educational problems.

The rapid development of technology, communication and information, especially the internet, has become a demand for teachers in Indonesia to be able to utilize it as a source of positive learning media in supporting the teaching and learning process, especially during the Covid-19 pandemic and post-pandemic (Firman dkk., 2022). The use of technological media provides benefits for teachers and students to access teaching materials and interact not only in the classroom face-to-face, but also outside the classroom online, and technological media also brings students to learning activities anywhere or called the "ubiquitous learning environment" (Zainuddin et al., 2021). One of the positive values of Internet technology media, for example, allows students to discuss and collaborate to solve a problem both in class and outside of learning hours (Anoum dkk., 2022), especially during the Covid-19 Pandemic which is limited by face-to-face learning. The use of technological media in the era of the Industrial Revolution 4.0 and the Covid-19 Pandemic has become a demand and necessity for every teacher to encourage students to learn independently, collaboratively, creatively and critically in solving problems outside the classroom.

In addition, during the current Covid-19 Pandemic, technological media also makes it easy for students and lecturers to easily access learning materials anytime and anywhere through various sites provided free of charge by several institutions in the world (Demina dkk., 2022). Facing the Pandemic era today, various learning resources have been provided by many world institutions through their websites, and can be used as sources and media for active and interactive learning (Hikmah dkk., 2022). These learning resources and media are also called Open Courseware or Open Educational Resources (OER).

RESEARCH METHODOLOGY

The study reviewed in this article is a literature review that seeks to present descriptive qualitative and library research, namely literature-based research, in the process of collecting data researchers examine and analyze literature obtained from theories from books, research

results of other scientific works related to Online and Distance Education in the Modern Era. The data analysis used is using descriptive critical analysis.

The author analyzes the existing literature put forward by experts and creates new conclusions or discussions that are in accordance with the author's discussion (Dewi S dkk., 2022). The author uses data validation to ensure their claims are accurate by checking several sources for information on this topic.

RESULTS DISCUSSION

Various opinions explain that online learning, distance learning or e-learning is a way of learning that uses information and communication technology (ICT) as the main medium to access learning materials. Online learning can be synchronous or asynchronous, depending on how teachers and students access and process information.

Online learning has great potential to expand access to education and improve learning efficiency (Keshav dkk., 2022). However, it is important to remember that online learning is not a one-size-fits-all solution and needs to be carefully considered before it is widely implemented. Online and distance education has become an important topic in the modern era, especially during the COVID-19 pandemic (Kartel dkk., 2022). The regulation of online and distance education varies across countries and regions, but in most cases, government bodies and educational institutions have issued guidelines and policies to ensure that online and distance learning are effective and safe. Some educational institutions choose to offer fully online programs, while others combine online learning with face-to-face sessions.

Distance Learning (PJJ) is learning by using a medium that allows interaction between teachers and learners. In distance learning, teachers and learners do not meet face to face, in other words, through distance learning it is possible for teachers and learners to be in different places, even separated by great distances (Gabriela dkk., 2022). Distance learning (also called distance education) is training provided to participants or students who do not gather together in one place regularly to receive lessons directly from the instructor (Qureshi dkk., 2022). Specialized materials and detailed instructions are sent or provided to participants who then perform tasks that are evaluated by the instructor. In reality, it is possible for the instructor and participants to be separated not only geographically but also in time.¹

Distance education has been stated in the Law of the Republic of Indonesia Number 20 of 2003 concerning the "National Education System", which is formulated in detail in CHAPTER VI Pathways, Levels and Types of Education in the Tenth Section of Distance Education in Article 31, which reads (Pather dkk., 2020): Distance education is organized in all pathways, levels, and types of education, Distance education functions to provide educational services to community groups who cannot attend face-to-face or regular education (Kim, 2020), Distance education is organized in various forms, modes, and scopes supported by learning facilities and services as well as an assessment system that guarantees the quality of education. quality of graduates in accordance with national education standards;, Provisions regarding the implementation of distance education as referred to in paragraph (1), paragraph

(2) and paragraph (3) shall be further regulated by government regulation.

Regulation of Online Education and Distance Learning: Governments and educational institutions around the world have developed rules and regulations relating to online education and PJJ (Teslya dkk., 2020). Some of the things that are regulated include learning standards, copyright, privacy, and the use of technology. In Indonesia, the regulation of online and distance learning education is regulated in Permendikbud No. 44/2020 on the Implementation of Learning Activities in the 2020/2021 Academic Year during the COVID-19 Pandemic.

Learning Mechanisms and Types (Asamoah dkk., 2020): Online and distance education allows students to learn remotely, using technology to access subject matter and interact with teachers and classmates.

There are several types of learning in online and distance learning education, namely:

Synchronous Learning: Synchronous learning is learning that occurs in real-time where the instructor and course participants interact at the same time (Ruiz-Montero dkk., 2020). This is often done through video conferencing platforms or other online communication tools. In synchronous learning, course participants can participate in live lectures, group discussions, or Q&A sessions. Examples of platforms used for synchronous learning are Zoom, Microsoft Teams, or Google Meet.

Asynchronous Learning: Asynchronous learning is learning that does not happen in real-time. Learning materials and assignments are provided to course participants to access and complete according to their own schedule and pace (Abuhassna dkk., 2020). Course participants can access learning materials, watch recorded lectures, read materials, and complete assignments at any time they want. Communication between course participants and instructors is usually done through discussion forums, emails, or messages within the LMS platform. Examples of LMS platforms that support asynchronous learning are Moodle, Canvas, or Blackboard.

Hybrid Learning: Hybrid learning, also known as blended or flexible learning, combines elements of both synchronous and asynchronous learning. In hybrid learning, some learning materials are delivered online, either in the form of recorded videos or reading materials, which can be accessed asynchronously (Gloeckl dkk., 2021). Then, there are also scheduled synchronous sessions where course participants can interact directly with instructors or classmates through video conferencing or face-to-face meetings (Lobo dkk., 2020). The hybrid approach provides flexibility to course participants while still facilitating in-person interaction and discussion.

LMS is short for "Learning Management System" which in Indonesian can be translated as "Learning Management System" (Yang dkk., 2020). LMS is a software or platform used in educational context to manage and deliver learning materials online. LMS has various features that allow users, such as teachers or instructors, to create, organize, and deliver learning content to students or course participants.

The phenomenon of distance restriction and the enactment of working from home affect the situation of the implementation of the learning process in education starting from early childhood to higher education.

This is marked by the birth of a circular letter from the Ministry of Education and

Culture regarding the implementation of policies during the emergency period. With the aim that citizens of education carry out learning from home. However, the problem that arises is that teachers are not fully prepared to deal with this phenomenon.

Among them is the learning process from face-to-face to online. The use of technology is one of the obstacles.

Basically, online learning is part of fulfilling the rights and obligations of schools in psychosocial fulfillment for students, teachers, and parents (Utanto & Dewanti, 2020). The online learning process raises a new trend, namely where technology becomes a means or container, a place to achieve educational goals. Readiness for the use of learning applications in the learning process is an inseparable part.

Advantages of Online Education and PJJ: Flexibility of time and place, students can learn anywhere and anytime, which makes it possible to access learning anywhere as long as there is an internet connection. Lower costs, online education and distance learning can provide lower costs compared to traditional education, as no transportation or accommodation costs are required. Variety of choices, access to a wider range of learning materials using digital technology, students can choose learning programs that suit their interests and needs, and are not limited by geographical location.

Weaknesses of Online Education and Distance Learning: Limited social interaction, students may feel less social interaction with classmates and teachers, which may affect learning engagement and motivation. Lack of supervision: students may require more guidance and supervision during online learning, to ensure they are actively engaged in learning. Not suitable for all subjects, some subjects may be more difficult to learn online and require direct interaction with teachers and fellow students. Requires higher discipline, Online education also requires higher discipline from students. Students must be able to complete assignments and meet deadlines without direct supervision from the teacher. Requires good technology and internet access, Online education also depends on good technology and internet access. If students do not have sufficient internet access or the right technological devices, then they may have difficulty following online learning. Effective regulations and mechanisms for online education and PJJ need to consider the advantages and disadvantages of these learning methods, as well as ensure fair access and adequate supervision for students engaged in online learning and PJJ. Digital business transformation is organizational change through the use of digital technology to improve organizational performance.

In the field of education, utilization in daily life in society, software technology with widely used video-based communication platforms, namely Zoom, WebEx, facebook Messenger, Google Meet and Google Hangouts, which are useful as teaching and working assistants that encourage conferences to be carried out digitally safely and effectively or bridges built to maintain social interaction for daily life during the Covid-19 Pandemic. Online learning requires students to use online learning platforms as a support for learning outside the classroom, causing its users to increase. In addition to some of the platforms that have been reviewed earlier, there are also learning models: Coursera, edX, and Khan Academy.

Coursera, edX and Khan Academy are popular and internationally recognized online learning platforms. They offer a wide range of online courses and lessons that can be accessed

by anyone with an internet connection. Coursera is an online learning platform that offers a wide range of courses from leading universities and institutions around the world. The courses cover a wide range of topics such as data science, information technology, business, arts, and humanities. Each course comes with learning materials, video lectures, exams and assignments, as well as online consultations with teachers and classmates. edX is also an online learning platform that offers free and paid courses from more than 120 leading academic institutions around the world.

The courses offered cover a wide range of fields, including computer science, finance, business, and social sciences. Like Coursera, edX also offers various online learning features such as video lectures, online discussions, exams and assignments, and online consultations with teachers. Khan Academy is an online learning platform that focuses on learning math, science, and history. Khan Academy offers free learning videos developed by leading experts and lecturers. In addition to learning videos, Khan Academy also offers math exercises and online practice tests to help students strengthen their understanding.

Many problems occur in the distance learning system, some of the main factors are: power outage when accessing online learning, internet instability, lack of engagement between parents and learners, learners who are slow learners, learners' inconsistency to the lesson schedule.

The implementation of distance learning, educators must innovate and make various alternative breakthroughs in relation to the implementation of the main task of teaching so that the learning process becomes effective and efficient. Although students do distance learning, the main task of educators must run, even educators are expected to be more creative and innovative in designing distance learning and skillfully utilizing online media. The effectiveness of learner development during distance learning, teachers can change teaching methods when distance learning, namely by providing active, creative, and innovative learning for students so that learning does not seem monotonous or boring. Learning methods play a very important role in the learning process because methods are the initial foundation in determining a learning objective.

Fun learning methods are the teacher's efforts to create a pleasant atmosphere so that learning becomes more effective with the following steps in organizing the class: organize the classroom environment so that it can properly influence students' ability to focus and absorb information, improving students' understanding through pictures as affirmation posters that are funny and contain humor, animated videos, learning aids in various forms such as cartoons and caricatures that bring abstract ideas to life, other styles that can be used during learning breaks such as quizzes.

From the description that has been presented above, researchers try to examine the effectiveness of distance learning. Given that for now the internet, social media, digital communication technology is part of education, this can support the effectiveness of the learning process. The Ministry of Education and Culture enacted circular No. 4 of 2020 concerning the Implementation of Educational Policies in the Emergency Period of the Spread of Corona Virus Disease (Covid-19). Based on the circular, the education unit decided to work from home so that the learning process was carried out online or distance learning. Online

learning is expected to be able to foster the abilities, knowledge and potential of students like learning in the classroom.

To support this, it requires the utilization of learning media that is dynamic and able to explain concept material and apply it to facts. The use of online learning will be very effective if it fulfills the essential components of learning, namely discursive, adaptive, interactive and reflective with elements that will be very good if integrated with the learner's environment so that it can become online learning that is integrated with the environment or fulfills the digital learning ecosystem component because it can accommodate the learning style, flexibility and learning experience of students so that it can bring positive feelings Risky and Riantina in (Nuriansyah, 2020).

Information and communication technology (ICT) has a very important position in education and has been felt by various parties for its benefits to improve the quality of learning which can be realized by opening wide the window of knowledge with technology. Learning is the most important activity in education which means that educational goals can be achieved depending on how educators design, design, and implement them professionally. In learning, problems are often found in the implementation of learning that lacks the quality and quantity of teachers who have not maximized the learning system which in learning still uses a conventional learning system.

CONCLUSION

Regulation of Online Education and Distance Learning: Governments and educational institutions around the world have developed rules and regulations relating to online education and PJJ. Some of the things regulated include learning standards, copyright, privacy, and the use of technology. In Indonesia, the regulation of online and distance learning education is regulated in Permendikbud No. 44/2020 on the Implementation of Learning Activities in the 2020/2021 Academic Year during the COVID-19 Pandemic

Learning Mechanisms and Types: Online and distance education allows students to learn remotely, using technology to access subject matter and interact with teachers and classmates. There are several types of learning in online and distance learning education, including: Asynchronous: Learning where students can access course materials and assignments whenever they want. Synchronous: Learning where students need to connect with teachers and classmates at the same time to get live teaching. Hybrid/Blended: Learning that combines both asynchronous and synchronous elements.

Advantages of Online Education and Distance Learning: Time and place flexibility, students can learn anywhere and anytime. Online and distance learning education can provide lower costs as no transportation or accommodation costs are required. Wide range of options, access to a wider range of learning materials using digital technology.

Weaknesses of Online Education and Distance Learning: Limitations on social interaction, Not suitable for all subjects, some subjects may be more difficult to learn online and require direct interaction with teachers and fellow students. Requires higher discipline, must be able to complete assignments and meet deadlines without direct supervision from the teacher. Requires good technology and internet access

From the results of research conducted by researchers on Online and Distance Education in the Modern Era, it can be concluded that distance learning implemented with several methods is quite effective.

The suggestions submitted by researchers are that this distance learning has several obstacles, one of which is that not all parents can guide learning at home due to work matters, so it needs to be well coordinated between teachers and parents, when the learning or material is given to students so that students will be ready to work with the guidance of their parents at home. Online learning has great potential to expand access to education and improve learning efficiency. However, keep in mind that online learning is not a solution for all types of learning.

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