

Quality Management of Distance Learning Higher Education



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ABSTRACT: This article aims to describe the implementation of distance learning necessitates a quality management system for higher education. The method is qualitative, which can be explained by the reality of quality management in distance learning higher education. Literature related to quality management of distance learning in higher education, including problems and constraints of distance learning, management models in distance learning, distance learning systems approaches, roles in distance learning, online learning design components, and long-distance higher education quality assurance systems, serves as a data source. The results of the discussion can indicate actions for maintaining quality levels, such as (a) quality management, management so that there is still quality control for graduates who are expected to meet nationally accepted competency standards (quality control), and (b) higher education with distance learning is able to respond to any situation. Changes in learning include the development of distance education, and (c) distance education is the development of the concept of a cyber university or what is commonly known as distance learning in Indonesia.

KEYWORDS: quality management, higher education, distance learning

I. INTRODUCTION

Implementing distance education requires a quality management and accreditation system. Quality management is controlling the quality of graduates in order to meet the competency standards set nationally or quality control. While accreditation focuses on the management of educational service quality or quality assurance. Quality management entails determining the competence of graduates and the competence of the learning materials, which includes a variety of employment and life opportunities. The government hopes that every educational institution is of high quality because, with a high-quality education, it will be able to produce high-quality human resources that will contribute to the success of the country's development. Graduate users such as business and industry also expect a good quality education so that the workforce or human resources recruited are truly productive.

In accordance with (1), education is administered through a national education system whose purpose is to shape the character and culture of a dignified nation within the context of its intellectual life. Among the significant ramifications of the enactment of this law is that the administration of education on the territory of the Republic of Indonesia must adhere to the country's standards. Regarding the quality of education, the implementation of education must meet quality standards that should be achieved in accordance with national education standards, so that the output of any educational institution, regardless of level or region, meets these quality standards at a minimum (2).

The implementation of Law No. 22/1999 on regional autonomy had an effect on the education management in the regions. On the one hand, educational autonomy will have a good impact on the growth of schools as educational institutions, based on the demands and challenges faced by schools and the region in concern. In addition, the diversity of regional capabilities and resources might result in extremely varying school output quality. Therefore, efforts to standardize quality and ensure that the implementation of education satisfies these quality criteria must be the focus of efforts to preserve and enhance the quality of education on a national scale. Continuously analyzing the viability and performance of schools allows for the improvement and expansion of the education system. This is done in order to identify existing strengths and flaws in order to improve them. Continual evaluation of feasibility and performance for the purpose of continuous school quality improvement and enhancement cannot be separated from management, particularly quality management. The development of the Cyber University concept with a lecture-at-a-distance model need particular quality assurance so that the implementation of Cyber University does not compromise the essence of real learning.

Kementerian Pendidikan dan Kebudayaan Republik Indonesia (2018) the licensing system, supervision, etc., a ministerial regulation will be issued and willing to adopt a more innovative learning system in higher education, such as modifying the learning curriculum and enhancing student capabilities in terms of Information Technology (IT), Operational Technology (OT),

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Internet of Things (IoT), and Big Data Analytics, integrating physical, digital, and human objects in order to produce competitive and skilled university graduates, particularly in the areas of data literacy, technological literacy, and human literacy (4)

Human resources (HR), particularly lecturers and researchers who are ready to implement the Cyber University model, must be among the many elements that require preparation. In this age of the 4.0 industrial revolution, the expansion of technological knowledge and higher education need imaginative and adaptable engineers. This type of development encourages the Indonesian government to advance the notion of Cyber University, often known as distance education. As being able to respond to any changes, including in terms of learning, one of which is the development of distance education through the concept of Cyber University, it must be carefully guided so as not to harm the learning process at the higher education level, particularly how to make it easier for students to learn. (5) distance learning has pedagogical components. Distance learning cannot merely transmit information in the form of Power Point slides it must also incorporate pedagogy.

Due to the fact that this method of education has been created since the 1970s, the necessity to guarantee distant learning is not something new in the world of education. Clear analysis reveals that distance learning is a type of learning system in which the learning process is independent and remote from the center of education. Distance education is a learning style that allows students to learn unrestricted by distance and time with as little assistance from others as feasible (6). In this learning approach, communication is indirect, meaning that the learning process is conducted through media in the form of specially designed print and multimedia. Even if there is direct contact, it is not a learning process, but rather a tutorial activity to guarantee that the media-delivered learning material achieves the intended learning objectives.

Muhammad dan Azhar (2008) distance education has a number of advantages, including the following: (1) it can accelerate efforts to meet the needs of the community and the job market; (2) it can attract a large number of potential participants; (3) it does not interfere with life activities because of its flexible pattern of learning schedules; and (4) the expectation of increased collaboration and support from graduates or outputs users.

II. RESEARCH METHOD

The literature review research is based on an analysis of conceptual knowledge and qualitative data extracted from previously published scientific literature. Aini & Asror (2022) notes that the methodology employed in this study is a literature review that acts as a guide for analyzing a research problem (review of research). In this literature study, international and national journals have been summarized and assessed for research purposes.

The research design serves as a guide for conducting research in order to accomplish research objectives. Literature review research begins with the identification of problems, followed by the collection of literature and screening of the obtained literatures. Finally, the data obtained will be presented in the form of data tabulations and analyzed in the form of theories pertinent to distance learning higher education quality management research problems. In this area, thoughts and theories are evaluated based on the available literature, particularly pieces published in a variety of scientific journals. The purpose of a literature review is to construct concepts or theories that serve as the basis for research studies (9)

Literature review or literature study is an essential activity in research, particularly academic research whose primary objective is to develop both theoretical and practical benefits (10). Consequently, by employing this research method, the author can quickly solve the topic being investigated.

Based on the type of research, the type of research employed in this study is library research, i.e., research conducted by collecting data or scientific writings pertaining to the object of research or data collection that is literatures in nature, or studies conducted to solve a problem that are primarily focused on a critical and in-depth examination of relevant literatures materials. Before undertaking a review of literature materials, researchers must be certain about the source from which they will gather scientific data. Textbooks, scientific publications, statistical references, research results in the form of undergraduate theses, theses, and dissertations, as well as the Internet and other relevant sources are utilized.

Based on its nature, this study involves descriptive research. Descriptive research focuses on providing a systematic explanation of the information gathered during the research process (11). This study's data collection technique was derived from the data source. In research, data sources refer to the subject from which data can be collected. If the researcher employs documentation, the document or note serves as the data source, while the record's contents serve as the study subject or variable (12)

The major source that the researcher will utilize to write this essay is the data source. Primary sources are those that contain information obtained directly from the source or are original sources (13). In this instance, the obtained data cannot be separated from the literature pertaining to the quality management of distance learning in higher education, including problems and constraints of distance learning, management models in distance learning, distance learning systems approaches, roles in distance learning, components of online learning design, and distance higher education quality assurance system.

Then, secondary sources are data collected from sources other than primary sources. In this essay, the significance and essence of the sources are derived from the viewpoints of these scholars regarding the quality management of distance education in higher education. As for the strategic steps in content analysis research, such as the search for basic data or primary data,

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namely the text itself as content analysis, the text is the primary object, even the primary object and the search for contextual knowledge so that the research is not conducted in a vacuum, but appears to be related to other factors.

III. DISCUSSION

A. Distance College

As was previously understood, there are both conventional learning and distance learning. Moreover, there is a belief among some individuals that remote learning colleges do not offer many advantages in comparison to the well-established and commonly practiced face-to-face learning approach (14). This assumption could be correct or incorrect. If the learning design is accurate and appropriate, distance learning colleges can be executed more efficiently and deliver more benefits than traditional face-to-face education. In addition, colleges offering distant learning can develop the physical and social face-to-face learning that has been applied to date.

In the distance learning universities, learners can access tools or media that will allow them to repeat learning materials and interact with other learners even though their places are different and far apart (15). There is considerable potential in tools or media such as computers and modules to increase the quality of the learning process. Through the use of media in the learning process, learners can play an active and engaged role, as opposed to the time-limited face-to-face learning approach. By utilizing this media, the learning system is also able to monitor the activities of learners, then conduct a review of the activities performed by the learners as a report to the teacher to determine how the learners are learning (learning how to learn), thereby increasing the teachers' awareness of the learners' abilities in the learning process (16).

Suparman (1989) conducted an experiment comparing the effectiveness of face-to-face and distance learning. Using standard measures such as tests and grading, the results of this experiment demonstrated that distance learning can be just as effective as face-to-face learning. The experiment revealed various advantages of computer-mediated distance learning, including the consideration of social pressure, in which students tend to pay greater attention to how other students view the quality of their work. They are significantly more motivated to participate in a meaningful way when their friends can see their contribution.

Munir (2009) demonstrated that the existence of distance learning is more focused on the individual system, as it prepares students to submit the results of their studies and examinations administered by the educational institution. The network that is built is wider regarding cooperation with other countries. The growth of social values in countries will lead to the culture of other countries, thereby eroding the nature of culture in countries that follow the distant learning process. Cultural factors color the evolution of distant education. In the process of delegating media-based duties, the interaction between individuals and groups facilitates the transfer of knowledge.

After various preparations related to the use of the internet for learning activities, educational institutions conduct pioneering. Certainly, beginning with a number of subjects or courses whose instructors have demonstrated their sincerity and desire to pioneer the use of the Internet for learning. Student performance, student satisfaction, student retention, and social interaction issues resulting from the two learning styles are the primary contrasts and similarities between traditional learning and distant learning. The table below displays some of the findings of the study that attempted to compare conventional learning universities with distance learning based on e-learning.

Table 1. Compare Conventional Learning with Distance Learning Based

No.	Ability under studied	Conventional Learning	Distance Learning
1	Participation		Better
2	Socialization		Better
3	Satisfied	Better	
4	Satisfaction	Better	
5	Attitudes	Better	

Source: Authors, 2022

In addition to attempting to compare the two types of learning models, the results of research related to distance learning offer several recommendations, one of which was proposed by (19), who suggested that e-learning-based learning should pay more attention to the social context of learning. In accordance with this description, (20) believes that computer-based learning should facilitate more intense social connections. Govindasamy (2001) coined the phrase social informatics to indicate that the issue of social contact has become an inherent aspect of the usage of Internet technology, just as the term social interaction is well recognized in the field of education. Govindasamy (2001) reaffirmed that social presence or social awareness is an essential variable for student satisfaction in computer-based learning environments.

Although there are studies claiming that there is no significant difference between traditional learning and distance learning (22), which can be found on the website Tele Education), in general the results of research distinguish the two learning

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models quite significantly. The findings of these research correspond to what Rahmat, Edy (2011) described. He said that online learners have a better involvement rate than students in traditional classes.

There are several factors that cause distance learning to make learner performance worse than conventional learning. According to regulations issued by the Indonesian Ministry of Education and Culture in 2013, distance learning gives opportunity for students to cheat and plagiarize. Due to the restricted opportunities to engage and speak with other students directly, distance learning increases the likelihood that students will experience anxiety and stress (23). Furthermore, the stress in the distance learning is caused by two factors. The first factor is the learner's fear of failing to perform adequately. The second factor is the fear of not being able to "perform" as well as other fellow learners in the same group (24).

There are contrasts and parallels between conventional learning and distance learning, according to a number of research. The performance scores of students in the distance learning class are lower than those of students in the traditional learning class. There are at least the following two arguments to consider: (1) the test process in distance learning uses more impersonal power within the available time constraints, for example learners in distance learning classes may feel that more time is needed and the available time is relatively insufficient to complete the test, and (2) the distance learning environment provides learners with a group or community to analyze their performance, although distance learning provides opportunities for low perceived performance.

B. Problems and Constraints of Distance Learning

Several issues arise with the implementation of distance education, including:

- a. Lack of available infrastructure and supporting resources, such as unprepared human resources (teachers, learners, or technicians)
- b. There are growing issues, attitudes, and misperceptions in the community regarding distant learning, such as the low or lack of quality of graduates from distance learning in comparison to conventional face-to-face learning. Even if the government has recognized distant learning and its results are not inferior to those of conventional education. Another problem is the assumption that it is expensive, or that it is not accredited by the government.
- c. Lack or absence of support from the community, policies from the government or interested parties (stakeholders).
- d. The learning is considered unattractive because there is no or lack of interaction between the teacher and the learner or the learner with other learners.
- e. The method of delivery that does not pay attention to distance learning rules.
- f. The difficulty of choosing effective and interactive learning media in accordance with the wishes and interests of learners.
- g. Distance education is a learning method that provides opportunities for learners to learn separately from the teaching activities, so that communication between learners and teachers must be carried out with the help of media, such as electronic media or print media. Due to this isolation, a problem develops. The difficulty is that pupils do not receive constant direct supervision from teachers or tutors who are present in the classroom or school environment as they engage in learning activities.

Educational institutions that govern or control remote education provide learners with planning, direction, and oversight throughout the learning process (25). In certain educational contexts, distance learning in which the full learning process is conducted via e-learning or online learning is uncommon. To address this issue, hybrid remote learning is implemented (a mixture of online e-course and face-to-face). In blended distance learning, it is not necessary to establish your own educational institution, such as an open university; rather, it is sufficient to establish a unit that manages blended distance learning (26). Thus, online learning can only be conducted once or several times: only the tutorial, only one study program, etc.

The implementation of online distance learning has obstacles that must be faced. The implementation of online distance learning faces a number of obstacles, such as: (1) the comparison of the number of customers and internet service users to a very large population, such as in Indonesia, where the number of customers and internet service users is increasing but is still relatively small in comparison to the very large population. (2) The number of Internet service provider firms is insufficient to support a significant number of customers, users, or residents, especially given that the bandwidth is already at its full capacity, which would hinder online distance learning. Changing people's ideas of the traditional face-to-face education system in the classroom to learning without face-to-face procedure or independent study using computer technology is a difficult task. Lastly, (4) from a technical standpoint, the price of computer equipment is still quite expensive, making it difficult for individuals to purchase, possess, or freely use computers.

C. Management Model for Distance Learning

Due to the management model in distance learning, management should ideally be focused on the contribution to the communication and learning process, with the expected activeness and intelligence-building characteristics as listed below:

- a. The Internet-based Online Distance Learning Model is ideally suited for implementation in Indonesia. Given the size and population of Indonesia, which runs from Sabang to Merauke, it is impossible for the existing schools and colleges to

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accommodate all of the students. With such educational facilities, it is possible to create an equitable distribution of education across the country.

- b. Online Web-Based Distance Learning Model. If web-based distance learning is the only option, users, in this example professors and students, must have access to the internet to retain connectivity with the distance education process. The capacity of students to maintain connectivity is crucial to the viability of a distance-learning system. If we consider web-based distance education to be a community, it must facilitate the meeting or interaction of students and instructors. It is challenging to translate what professors typically perform in front of the class into a website that requires the involvement of multiple components. The existence of this system compels teachers and students to adopt a new mindset. The difference in the characteristics of teachers in teaching is not visible in this method. Web-based distance education must include the following components, among others: (1) A learning activity center as a community web-based distance learning must be able to make this facility a place for student activities where students can increase their abilities, read learning materials, seek information, etc.; and (2) Interaction in learning that can be used for students' and teachers' interaction with each other to discuss the provided material.
- c. Model of distance learning module teaching materials. In this case, teaching materials module are the only teaching materials used by students to teach themselves. Therefore, comprehensive instructional materials are required. Educating pupils through items that represent the figure of lecturers or teachers. Thus, the presentation of teaching materials must be tailored toward learning participants, which includes not only teaching materials but also diverse modes of learning that motivate, challenge, and provoke students to learn and self-evaluate their learning progress. Due to its significance, the design of teaching materials must be based on psychological theory, particularly adult learning theory, socio-cultural learning of participants, learning design, and research on typographical features of printed instructional materials that can assist students in learning to use them independently. Due to the significance of teaching materials, the production of Distance Education teaching materials requires a five-member teaching materials team. (1) material experts who write and review the substance of the material; (2) specialization in materials that produce media that supports or complements printed teaching materials such as audio, video, and computer-based learning; (3) educational technology experts who assist in structuring content structure, goal classification, media selection, and learning participant activities and evaluation; (4) editors who edit texts; and (5) course development managers who keep the production schedule on track.

D. Distance Learning System Approach

Distance learning systems require a different approach in terms of planning, design, course delivery and communication (8). Self-motivation is essential for participants to engage in self-directed activities and develop persistence and competence (27). Instructors will develop and apply innovative ways and learning styles ranging from instructing students directly to managing learning strategies, assisting students, facilitating remote discussion, and disseminating knowledge and perspectives. The distance learning process shares characteristics with the assisted and individualized learning procedures.

E. Roles in Distance Learning

Interaction between instructors and students plays a crucial role in distance education. Teachers and students engage in two-way communication during the interactive learning process. Interaction is a crucial aspect in supporting educational activities. Below is a summary of the primary roles in distance education. The following are:

1. Students. The primary role of students is to acquire knowledge. Good conditions, motivation, planning, and the ability to analyze learning materials, tasks, and examinations offered by the teacher are required for this remote learning process. The capacity for interaction between professors and students is primarily reliant on technological connections that bridge the gap between physically separated classes and student engagement. Students must be able to communicate with teachers and with one another through technology. When students want to ask questions or contribute to a discussion, they must be able to interact via technology.
2. Campus (Faculty) (Faculty). Campus has a significant impact on the performance of this remote learning system. The typical role of a teacher in the classroom is to provide students with materials and meet their needs. Remote teaching ability adjustment is an intriguing aspect. A teacher must be able to construct an easy-to-understand system by adapting standard classroom teaching approaches to technology-based distance learning platforms.
3. Facilitator, as a bridge between students and teachers. To be effective, the facilitator must be able to analyze the needs between students and teachers
4. Support staff. Individually, this section is not particularly notable, but in the distance learning system as a whole, the function of support services is crucial to the success of distance learning. This includes the student registration system, duplication and distribution of materials, scheduling, processing of assessment reports (grades), setting up technical matters, etc. And (5) administrator, whose function is extremely influential in the initial planning of the distance learning system, and who also serves as a decision maker. Administrators are always accountable for the maintenance of the system and are responsible for ensuring that existing resources and technology function properly and efficiently.

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F. Online Learning Design Components

Designing is one of the primary steps in the development of online learning (27). It is not possible to create designs without first doing a full analysis and investigation. For this, we require design process concepts. The designs created will benefit all parties involved in the online learning process, including teachers, students, developers, and policymakers tasked with creating rules and enhancing existing designs. The design of online learning consists of five components. The following are:

1. The syllabus is a tangible form of both traditional and online learning planning. Several components of completeness are included in the syllabus, including competency standards, basic competencies, learning materials, learner learning experiences, time allocation, and sources of materials/tools. The syllabus is used as a reference for further learning development, including the development of lesson plans, the management of learning activities, and the development of assessments.
2. Online Learning Orientation. The orientation of online learning consists of a number of components, including biographies of lecturers and program support staff, learners' expectations and wishes, as well as their opinions and characteristics as program participants. In addition, there is a brief description of the program and an introduction to the next program, as well as instructions for users on how to use the software. There is additional information for easy access to the program, available facilities, links that can enhance this program, and download options for program-related publications.
3. Learning Materials in this component are presented with basic learning materials that can be accessed by learners, both in the form of core learning materials and additional learning materials (supplements) or enrichment materials. The material is presented as full text or learning material that is presented in its entirety, as well as learning material that is presented as key points. This learning content may be packaged using additional applications, such as PowerPoint. This program presents simply the most fundamental learning resources, with the attention on the presenter and the learner's interpretation.
4. The educational calendar provides teachers and students with vital information. It includes effective days for studying, exam dates, registration schedules for new students who have recently joined the program, and holiday time. Learners and instructors can use the calendar to determine when this online learning or program begins and concludes.
5. A program map is a site map. If the learners want to explore this online program, the program map can be previewed. The position of the model or learning material is depicted on a map. What the learner is required to learn, including the chronology and scope of the required learning content. This facilitates students' capacity to study more effectively and efficiently. Site maps can also be presented visually, as flowcharts, to facilitate comprehension. Meanwhile, Lance J. Richards et al. recommend numerous components in online learning design that can be implemented in web-based or online distance learning, namely online learning applications in distance education.

G. Distance Higher Education Quality Assurance System

Quality is something good, beautiful, and valuable that must be determined based on evaluations carried out by related experts. Some people define quality with an emphasis on standardization. While some people define quality as conformance with the objectives of a process or product, this definition is not universal. Hence, the concept of quality is a standardization that must be followed as a guide to ensure consumer satisfaction. ISO 8042 defines quality as the entirety of a product or service's qualities that can satisfy or fulfill demands. To clarify the concept of quality, the authors identify eight (8) dimensions of quality that can be used as a reference for considering the fundamental elements of quality: 1). Performance, 2). Nature, 3). Reliability, 4). Compatibility, 5). Endurance, 6). Service, 7). Aesthetics, and 8). Acceptable quality.

Quality in higher education is closely related to the objectives of institutions of higher education in achieving their goals efficiently. Furthermore, the quality of an educational institution can be determined by the clarity with which it articulates its mission and objectives, as well as its capacity to achieve these objectives effectively and efficiently (28). Quality in educational institutions is fundamentally associated with a process that includes two important questions, namely: (1) Is the educational process satisfactory from the students' perspective and in terms of the achievement of expected predetermined program objectives? (2) What evidence exists for the process of education that contributes to the production of superior output? The Council for Higher Education Accreditation (CHEC) defines the standard definition as the level of certain requirements and conditions that an institution or program must meet in order to obtain accreditation or quality assurance. These conditions include quality, achievement, effectiveness, output, and ability to survive.

A quality assurance system is a preventative effort against failure that emphasizes a proactive procedure. Consequently, it is defined as a production or service process that must be executed consistently in accordance with predetermined standards. The author synthesizes the concept of quality assurance by defining it as the process of selecting and enhancing the quality of a program or service in a sustainable, proactive, and integrated manner.

In higher education, a quality assurance system is essentially a standardized procedure for monitoring and enhancing quality. In addition, quality assurance is interpreted as an effort to provide guarantees to higher education institutions and graduates that they will meet specific standards. Quality assurance is the systematic planning and review of an institution or program to determine if the established standards for education, scholarships, and infrastructure can be maintained and improved. The implementation of an effective assurance system must include three interrelated components: monitoring, measuring, and

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quality improvement. The success of a quality assurance system is largely dependent on the execution of each phase of the quality assurance cycle (29).

The quality assurance cycle has five stages: the first is the stage of determining the choice regarding the implementation of the evaluation, the second is the determination of objectives, the determination of quality indicators and variables, the third in the quality assurance process is the collection of activity data through monitoring, assessment, and formulation of monitoring and assessment reports in the form of recommendations, the fourth is the formulation of the results of the analysis that can show the strengths or weaknesses of the institution, program or course, and the fifth is the quality assurance process. Asian Association of Open Universities (AAOU) - 2001 has also developed Quality Assurance (QA) Framework as an effort to determine quality standards and improve the quality of Distance Learning Higher Education organized by AAOU members. AAOU's Distance Learning Higher Education quality assurance system is generic and universal, allowing it to be implemented by any Distance Learning Higher Education institution.

The Distance Learning Higher Education quality assurance system at AAOU is comprised of nine integrated components. as follows: 1) policy and planning; 2) procurement and development of human resources (HR); 3) management and administration; 4) students; 5) program design and development; 6) subject design and development; 7) learning assistance for students; 8) student assessment; 9) learning media. Each component focuses on specific aspects, such as the first component, policy and planning; This is a very important component because it becomes the main guideline for the management of the implementation of Distance Learning Higher Education, so its quality must be evaluated.

CONCLUSION

1. Education providers must have started to rethink the content in the online distance learning process appropriately. The implementation of education must meet quality standards that should be attained in accordance with national education standards, so that the output of every educational institution, regardless of level or region, meets these quality standards at a minimum. With the implementation of this online distance learning method, the objective of educating the nation's life while simultaneously elevating the nation's dignity can be realized. So that wherever the Indonesian people exist, they continue to be of superior quality, tough, creative, and highly competitive.
2. Indonesia has the potential to become a great nation, not only because of its population, but also because of its quality educational system. Distance learning is the process of transferring knowledge to students who are physically or temporally separated from their instructor, and social awareness is a crucial variable for student satisfaction in a computer-based learning environment.
3. Although some research indicates that there is no significant distinction between conventional learning and distance learning. The purpose of online learning consists of several components, including the biographies of lecturers and program support staff, the expectations and wishes of learners, including their opinions and characteristics as program participants.

REFERENCES

- 1) Kementerian Pendidikan dan Kebudayaan Republik Indonesia. Undang-Undang Republik Indonesia Nomor 20 Tahun 2003 Tentang Sistem Pendidikan Nasional. Indonesia; 2003.
- 2) Riyana C. Strategi implementasi Teknologi Informasi dan Komunikasi dengan menerapkan Konsep Instructional Technology. Edutech. 2004;
- 3) Kementerian Pendidikan dan Kebudayaan Republik Indonesia. Permendikbud No. 20 tahun 2018 tentang Penguatan Pendidikan Karakter pada Satuan Pendidikan Formal. Jakarta: Mendikbud; 2018.
- 4) Suyanto AH. Mengenal E-Learning. <http://www.asep-hs.web.ugm.ac.id>. 2005.
- 5) Supriyatno T, Kurniawan F. A New Pedagogy and Online Learning System on Pandemic COVID 19 Era at Islamic Higher Education. Proc - 2020 6th Int Conf Educ Technol ICET 2020. 2020;97–101.
- 6) Wahyuningtyas, Soplantila, Mamangkey J. Prolife. Pro-Life. 2022;9(1):316–29.
- 7) Muhammad dan Azhar. Pengembangan Paket Multimedia Interaktif Sebagai Sarana Belajar Pengembangan Model Pembelajaran Mandiri. Makalah disampaikan dalam Seminar nasional Kontribusi Pendidikan Jarak Jauh (PJJ) dalam Pencapaian Milenium Development Goals (MDGs). 2008.
- 8) Aini N, Asror M. Implementasi Penguatan Pendidikan Karakter Di Masa Pembelajaran Jarak Jauh (Pjj) Pada Jenjang Sd/Mi. J Rev Pendidik Dasar J Kaji Pendidik dan Has Penelit. 2022;8(1):16–24.
- 9) Sujarweni VW. Metodologi Penelitian. Yogyakarta: Pustaka Baru Press; 2015.
- 10) Sukardi. Metodologi Penelitian Pendidikan Kompetensi dan Praktiknya. Jakarta : PT Bumi Aksara; 2013. 33 p.
- 11) Sanusi A. Metodologi Penelitian Bisnis. Jakarta: Salemba Empat; 2016. 325 p.
- 12) Arikunto S. Prosedur Penelitian Suatu Pendekatan Praktik-Revisi Ke X. 2010.
- 13) Fithri Dzakiyyah Ayuni Azahra Dwi. Jenis Penelitian. 2017.
- 14) Rifqi A. Implementasi Total Quality Management Pada Pendidikan Jarak Jauh. Al-Tanzim J Manaj Pendidik Islam.

2018;2(2):167–76.

- 15) Arsyad A. *Media Pengajaran*. 1st ed. Jakarta: PT. Raja Grafindo Persada; 2003.
- 16) Crane E. *Book Central Takes a Classic Approach to Handheld Literature*. *Education in hand*. December 2. 2000. 22–23 p.
- 17) Suparman A. *Pendidikan Jarak Jauh: Konsep dan Peranannya dalam Memecahkan Masalah Pendidikan (Pidato ilmiah disampaikan dalam rapat Senat terbuka pada upacara lustrum I dan wisuda Universitas Terbuka)*. Indonesia; 1989.
- 18) Munir. *Pembelajaran Jarak Jauh berbasis Teknologi Informasi dan Komunikasi*. Bandung: Alfabeta; 2009.
- 19) Cohen S. *Distance bezic Learning and the Future of Education*. 2012.
- 20) Johsons DS. *Internet Based Learning in Postsecondary Career and Technical Education*. *J Vocat Educ Res*. 2004;29.
- 21) Govindasamy T. *Successful Implementation of e-Learning Pedagogical Considerations*. *Internet High Educ*. 2001;4(3):287–99.
- 22) Hartanto AA, Purbo OW. *E-Learning berbasis PHP dan MySQL*. Jakarta: Elex Media Komputindo; 2002.
- 23) Surjono HD. *Adaptive and Engaging E-learning: Inovasi Pemanfaatan Teknologi Informasi dalam Pendidikan Jarak Jauh (Pidato Ilmiah disampaikan dalam rangka Pengukuhan Guru Besar Fakultas Teknik Universitas Negeri Yogyakarta)*. Yogyakarta., Indonesia; 2015. p. 1–30.
- 24) Mackintosh W, Daniel J. *Leading ODL Futures In the Eternal Triangle: The Mega-University Response to the Greatest Moral Challenge of Our Age*. Michael Gr. United States: Lawrence Erlbaum Associates; 2003.
- 25) Widyanto IP, Wahyuni ET. *Menejemen Proses Pembelajaran Jarak Jauh Dimasa Pandemi Covid-19*. *J Satya Sastraharing*. 2020;04(02):16–35.
- 26) Rokhmawanto S, Syafii AA, Agus SC. *Total Quality Management Dalam Pembelajaran Jarak Jauh Di Smkn 1 Karanggayam*. *An Nidzam [Internet]*. 2019;6(2):14–20. Available from: <http://www.ejournal.iainu-kebumen.ac.id/index.php/An-Nidzam/article/view/337/304>
- 27) Kurniawati I, B.S AW. *Manajemen Pembelajaran Jarak Jauh pada Mata Pelajaran PAI dan BP SMP di Kota Tegal*. *Quality*. 2021;9(1):23.
- 28) Maria M, Hadiwidjaja RD, Mulyana A. *Pengaruh Faktor Kualitas Jasa Perguruan Tinggi Jarak Jauh (PTJJ) terhadap Kepuasan Mahasiswa dan Niat Menyelesaikan Kuliah (Studi Kasus Mahasiswa Fakultas Ekonomi Universitas Terbuka)*. *J Manaj dan Organ*. 2016;6(2):117.
- 29) Syaputra A, Hasanah E. *Manajemen Kurikulum dalam Pembelajaran Jarak Jauh di Masa Pandemi COVID-19*. *J Manaj Pendidik*. 2021;8(2):208–24.



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