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**THE ROLE EDUCATIONAL TECHNOLOGY IN THE MILLENNIAL ERA IN
BUILDING THE CAPABILITIES OF ELEMENTARY SCHOOL CHILDREN**

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ABSTRACT

This research aims to determine the role of educational technology for the elementary school millennial generation. This research uses a qualitative method by collecting data from opinion articles and direct research to describe phenomena that occur in the field with the aim of obtaining data carried out in research with types and sources of primary data obtained directly from direct sources to find out details of the problem while the data secondary is used to obtain data in the form of research supporting documents, with data analysis techniques to determine the extent of the role of technology in learning. Based on the research results, it was found that the role of educational technology in the millennial generation is; 1) technology as a medium for obtaining information on subject matter, 2) technology as a medium for exploring knowledge, 3) technology as an intermediary between teachers and students, 4) technology as a catalyst for educational quality.

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INTRODUCTION

Technology brings changes in various fields, both trade and education. Interaction systems are also impacted by technological advances. Technology has a positive impact on daily activities and work. There are many technological facilities that can be used for various purposes. Easy access to communication and information technology has a very good impact on the world of education because it can help schools and teachers to make the learning process easier (Syarifuddin et al., 2022)

Millennials, also called Gen M, Gen Net, or Digital Natives, are the first generation to mature in the digital era where they are constantly connected to family and friends via cell phones, text messages, emails, and social media such as FaceBook and Twitter. Gen Ms not only utilizes technology to communicate but they also search for information, buy and sell products, and download music. One might ask: what would today's world be like for Millennials without Google, Amazon.com, Ebay, or iTunes (Rodriguez & Honeycutt, 2014).

Anticipating the latter, the role of parents and teachers as supervisors and directors so that the younger generation uses the internet as they should is not enough. More than that, there is a need to revitalize educational elements that are able to ward off and filter out bad influences that have the potential to enter the younger generation.

Therefore, in building the nation's competitiveness in the millennial era, the role of educational technology is very important in helping schools to instill moral values in their students so they can compete, and are not easily influenced by the outside world and also always maintain national identity.

RESEARCH METHODS

The approach in this research uses qualitative methods by collecting data from opinion articles and direct research to describe phenomena that occur in the field with the aim of obtaining data conducted in research with types and sources of primary data obtained directly from direct sources to find out details of the problem. while secondary data is used to obtain data in the form of research supporting documents, with data analysis techniques to determine the extent of the role of technology in learning.

RESEARCH RESULTS AND DISCUSSION

Technology is an integral element in today's world. Technology in today's world touches, influences and shapes every aspect of human life. Technology plays a vital role in the workplace, education, entertainment and enduring way of life. Technology acts as a catalyst for environmental change easily and exchanges information, teaching processes and methods,

learning approaches, research arenas and in using knowledge, information (Ahmad & Nisa, 2016).

Educational Technology is sometimes shortened to Edutech or Edtech is a field wise. Educational technology is a design science, a club of various types of research fields that deal with basic, fundamental and key issues of learning, teaching and social organization. It is a process where modern technology is used in an organized and systematic manner for the enhancement, improvement and enhancement of the quality of education. Technology means the systematic, organized application of scientific or other people's knowledge to practical work. Therefore, educational technology relies on theatrical knowledge from various disciplines (Communication, psychology, sociology, philosophy, artificial intelligence, computer science, etc.) plus experiential knowledge from educational practice. Educational technology aims to increase the efficiency, effectiveness of current practices and simultaneously aims to bring pedagogical changes for the improvement of education. It is considered a design science that addresses fundamental, fundamental, important issues of learning, teaching and social organization and thus harnesses the full fury of modern social science and life Science methodology (Ahmad & Nisa, 2016).

Educational Technology is defined differently by different authors depending on their needs due to diversity and different perceptions (Ahmad & Nisa, 2016).

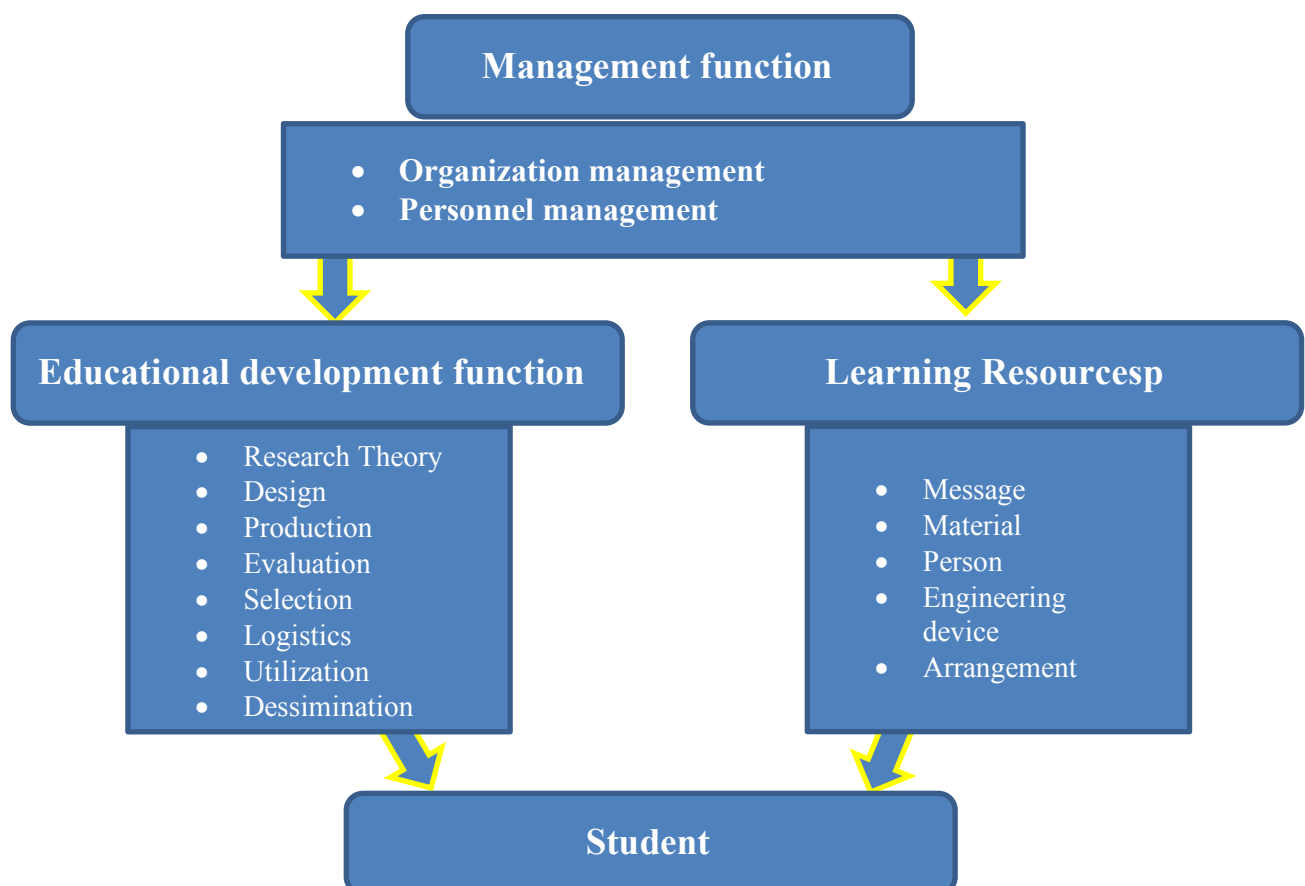
1. Educational technology is the use of technology to improve education. It is a systematic, iterative process for designing instruction or training used to improve performance. Educational technology is sometimes also known as instructional technology or learning technology.
2. Ethical study and practice facilitates learning and improves performance by creating, using, and managing appropriate technological processes and resources.
3. Its process-centered definition: "Complex, integrated processes involving people, procedures, ideas, devices, and organizations, to analyze problems, and design, implement, evaluate and manage solutions to those problems, involved in all aspects of learning man"
4. Lachance et al. (1980: 183) also focuses on the idea of process: la technologie éducative en tant que processus systématique intégrant les diverses fonctions du processus éducatif. Elle vise, specific parts, and analytical tools used by companies that function as part of, important parts, solutions, solutions and appropriate solutions to develop and improve resources (cited by Lapointe, 1991) in (Ginanjari, 2015)

5. Educational Technology (Information Technology) according to the International Technology Education Association

- a. Teaching with technology (using technology as a tool)
- b. Primarily concerned with a narrow spectrum of information and communications technologies
- c. Main objective: To improve the learning and teaching process despite the fact that educational technology has enormous benefits, uses and implications in the field of education, it is still not fully implemented in schools, due to lack of equipment, resources, infrastructure required for its implementation. A very famous definition of Educational Technology is definition

Issued by AECT 1977 in (Mujiono Sang Putra et al., 2022), which states: Educational Technology is a complex, integrated process involving people, procedures, ideas, devices, and organization, for analyzing problems and devising, implementing, evaluating, and managing solutions to those problems, involved, in all aspects of human learning (Sofia et al., 2022) Meaning: Educational Technology is defined as a complex and integrated process, which involves people, procedures, ideas, tools and organizations to analyze problems related to all aspects of human learning, designing, implementing, evaluating and managing these solutions.

The following is the Education Technology domain scheme as stated by the following:



Meanwhile, the latest definition of Educational Technology is the 2008 definition as a result of development from the previous area. The 2008 definition is more specific because it emphasizes study and practice. The definition of Educational Technology from AECT in 2008 is: "Educational Technology is the study and ethical practice of facilitating learning and improving performance by creating, using, and managing appropriate technological processes and resources". This means that Educational Technology is the study and ethics of practice in order to facilitate learning and improve performance through the creation, use and management of processes and resources adequately (Syamratulangi et al., 2021)

From the definition above, it can be identified that the Educational Technology area consists of:

- 1) Studies,
- 2) Ethical,
- 3) Learning/Learning Facilitation,
- 4) Performance Improvement,
- 5) Creation, use and management of learning processes with adequate technology, and
- 6) Creation, use and management of processes in technologically adequate learning resources.

Principles of Educational Technology

- 1) System approach (system-approach)
- 2) Learner-oriented (learner/student-oriented)
- 3) Utilize learning resources as widely and maximally as possible.

Millennial Generation

Millennials, the current generation of students, were born between 1980 and 2000. Although some millennials have dropped out of school or graduated from academia and entered the workforce, the majority are still in the school system. On average, Millennials spend 6.5 hours every day bored in print, electronic, media, digital, broadcast and news. They listen to and record music; view, create, and publish Internet content; play video games; watching television; talking on cell phones and instant messaging every day (Chang, 2017).

Generally, this millennial generation has the following characteristics (Chang, 2017):

- a. They like to be in control. Millennials don't want to be tied to a traditional schedule, and they don't always want to sit in a classroom to study or in an office to work. Instead, they prefer to use technology to study at any time of the day or night, telecommute from anywhere in the world and define "balance" in their own way.
- b. They like choice. In a project-based environment, Millennials use technology to complete tasks in new and creative ways. Their need for alternative methods to complete tasks presents a challenge when using traditional measurements to determine productivity.

- c. They are group and social oriented. Relentlessly exposed to the world through media, Millennials are constantly making social connections. In private, they travel in packs, shopping and playing together. Online, they seek opportunities to identify with other individuals on a smaller scale, join communities and mingle with peers around the world. They are very collaborative; sharing what they learn with others actually helps them create their own personal identity.
- d. They are inclusive. Millennials have been taught to be tolerant of all races, religions, and sexual orientations. They are not limited by the information available in their local library or by linear searches in encyclopedias on topics. Instead, they use the Internet to search for information around the world and use hypertext links to divert from the original search and learn about new subjects.
- e. They are practiced users of digital technology. Millennials were the first to be surrounded by digital media. ICT has always been a part of their lives, and because of this access, Millennials are naturally drawn to it. They expect it to support their learning and do what they need it to do. Indeed, Millennials can perform more functions with cell phones, handheld devices and other wireless devices than they can with traditional computers. In addition to using the calendar functions of these devices to prioritize and schedule their lives, they often prefer computer-mediated communication and have developed their own language, consisting of acronyms such as “LOL” (“Laugh out loud”), “ATM” (“When this ”), “BTW” (“ By the way ”) and other Internet slang. Today's technology allows Millennials to voice their opinions in ways that were not available in the past.
- f. They think differently. Technology itself is not extraordinary for Millennials. While the first generation tried to understand how new technology worked, this generation did not admire it; Millennials just accept technology, adapt to it and use it. For example, when researching a topic, Millennials just “Google” it. What Google™ is and how it works doesn't matter to Millennials; they use these tools to find the information they need.
- g. They are more likely to take risks iii. The dot-com boom of the late 1990s resulted when early millennials shared a common mentality: “If this doesn't work, we'll try again.” Some people find wealth as a result; others try and try again. Their parents don't think like this and are unlikely to take repeated and similar risks.
- h. They value downtime because they view life as uncertain. Millennials watched events such as the 1999 massacre at Columbine High School and the terrorist attacks on September 11, 2001, live on television. As a result of this tragedy, they view life differently. They observe their parents working hard in anticipation of gaining a certain status or level of achievement before

taking a break. In response, Millennials want their own time and when it is free to be dictated on their own terms.

The millennial era as it is currently happening, apart from having the characteristics of the post-modern era as mentioned above, also still has the characteristics of the globalization era which include, among other things, intense competition as a result of the free market; demands for fairer, more egalitarian, humane and democratic treatment, as a result of political fragmentation; political hegemony as a result of interdependence; having to relearn as a result of advances in science and technology; as well as the existence of moral decline (moral decadence) as a result of the entry of a new culture that is not in line with the values of religious teachings (Bell, 2001, 27-33) in (Nata, 2018).

Currently, the word millennial generation is no longer foreign to our ears. Those who are said to belong to the millennial generation are people born in 1980-2000. This generation is also known as generation Y, digital generation or generation N. The millennial generation is known as the first generation where there is a computer in almost every home. Someone who falls into the millennial generation group is a generation that cannot be separated from computers/gadgets/the internet every day. It could be said that their need to access the internet can trump their need to eat, sleep or play. Several things below can differentiate the millennial generation from its predecessors, namely:

- a. Always connected to social media
- b. Can't be away from gadgets
- c. A generation that is open to accepting change
- d. Access more information through digital media, not print outs
- e. Pay more attention to images, graphics, colors and music than text (writing)
- f. Feeling enjoy doing several jobs at once (multi-tasking)

By reading the explanation above, it can be concluded that the millennial generation is a generation where the existence of computers and the internet has a big influence on every aspect of their lives.

The Role of Educational Technology in the Millennial Generation

The following are some of the roles of educational technology in the millennial generation:

Technology as a medium for obtaining information on subject matter

Nowadays, it can be said that almost all the information we need is available we get it via the internet. With the keywords we want to know, we only need to type the keywords into the search engine and a few seconds later we can get many alternative sites/webs/blogs that provide this information. This also applies to the world of education. By browsing we can find a lot of

information on subject matter from elementary schools to universities. This fact allows students to know in advance about their teaching material before the teacher explains it at school.

Technology as a medium for exploring knowledge

As something new, the existence of technology should be treated with a positive outlook. Currently, many schools have implemented new teaching and learning patterns to adapt to the characteristics of the millennial generation. The teaching and learning process which initially only took place in one direction, namely the teacher explaining the lesson material from AZ and the students just listening and taking notes, has now changed to a two-way learning system. In this case, the teacher not only acts as a teacher, but also as a facilitator so that he can fulfill students' expectations of knowing more deeply and in detail about the material being studied.

In a learning process like this, teachers can create a learning system where students are previously required to look for material or subject matter to be taught, understand the material at home and then have a small discussion in class. Methods like this can make students better understand the real conditions of each material taught and the implications for life. (Sumarsono, 2016)

Technology as an intermediary between teachers and students

Currently, in exchanging information, humans cannot only rely on face-to-face conditions, meaning they have to meet first before they can communicate. We can communicate via various media, such as email, SMS, Instant Messenger or even exchange information via social media such as Facebook, Twitter, Instagram and Path. Millennials like this. This can be utilized by educational institutions in distributing teaching materials or assignments that must be carried out by their students. (Mulyanto & Indriayu, 2018)

The development of the internet has also resulted in the proliferation of free learning forums that can be used as a learning tool. Technology has made everything easier, with forums or sites like this, everyone can learn anywhere and anytime (provided there is an internet network).

Technology as a catalyst for educational quality

Basically, the quality of an institution's education is not only determined by the availability of educational facilities, such as computers/laptops and internet access. However, the existence of technological facilities in an educational institution can encourage students there to be active in searching for various information related to the teaching materials they are studying. By actively exploring existing subject matter, their knowledge and way of thinking become broader. (Samsirin, 2015)

When studying using a one-way learning method, students only receive information or knowledge from one source, namely their teacher. However, when they search for this on the

internet, they will find hundreds or even thousands of sources to broaden their horizons.

It is hoped that the various positive roles presented by technology can create a conducive teaching and learning environment. Especially for the millennial generation who are very dependent on and love the existence of computers and the internet in all their activities, changes in teaching patterns and systems that utilize these two technologies are highly expected.

CONCLUSION

In building the nation's competitiveness in the millennial era, the role of educational technology is very important in helping schools to instill moral values in their students so that they can compete and are not easily influenced by the outside world and also always maintain national identity.

From the explanation above it can be concluded that the Educational Technology area consists of; studies, ethics, facilitation of learning/learning, performance improvement, creation, use and management of learning processes with adequate technology, and creation, use and management of processes in learning resources with adequate technology and the principles of educational technology, namely; systems approach, learning-oriented, and maximum possible use of learning resources and the millennial generation is a generation where the existence of computers and the internet has a big influence on every aspect of their lives, apart from that it can also build the nation's competitiveness.

The following are some of the roles of educational technology in the millennial generation, namely; 1) technology as a medium for obtaining information on subject matter, 2) technology as a medium for exploring knowledge, 3) technology as an intermediary between teachers and students, 4) technology as a catalyst for educational quality.

REFERENCES

- Ahmad, SR, & Nisa, MU (2016). Pentingnya Teknologi Pendidikan dalam Proses Belajar Mengajar. 4(1).
- Chang, MC (2017). Reformasi Guru di Indonesia.
- Ginanjari, MH (2015). Reformasi pendidikan dan strategi pembaharuan sistem pendidikan nasional di era global. 1–26.
- Mujiono Sang Putra, Sofyan Syamratulangi, & Kamaluddin. (2022). Peran kepala sekolah sebagai pemimpin pembelajaran ditinjau dari Peraturan Menteri Pendidikan Nasional Nomor 28 Tahun 2010 di SMP IT An-Nisa Dompur. Jurnal LENTERA: Jurnal Kajian Pendidikan, 4(1). <https://doi.org/10.51518/lantera.v4i1.64>
- Mulyanto, H., & Indriayu, M. (2018). Pengaruh Model Problem Based Learning Terhadap Hasil Belajar Matematika Siswa Ditinjau dari Keterampilan Berpikir Kritis. Jurnal Internasional Tinjauan Penelitian Pendidikan, 3(2), 37–45.
- Nata, A. (2018). Pendidikan Islam di Era Milenial.
- Rodriguez, M., & Honeycutt, E. (2014). Menggunakan Teknologi untuk Melibatkan dan

- Meningkatkan Kinerja Presentasi Siswa Milenial Menggunakan Teknologi untuk Melibatkan dan Meningkatkan. 3(2).
- Samsirin. (2015). Konsep Kualitas dan Kepuasan Pelanggan Pendidikan Islam. *At-Ta'dib*, 10(1).
- Sofia, SS, Siama, & Hajar, Q. (2022). Penerapan Metode Mind Mapping pada Meningkatkan Prestasi Belajar Siswa pada Mata Pelajaran Geografi. *Jurnal LENTERA: Jurnal Kajian Pendidikan*, 4(1). <https://doi.org/10.51518/lantera.v4i1.61>
- Sumarsono, P. (2016). Pengembangan Profesi Dosen EFL Pemula: Kebijakan dan Praktik di Universitas Muhammadiyah Malang. 1, 780–787.
- Syamratulangi, S., Putra, IS, & Setiyadi, MW (2021). Pemanfaatan Media E-Learning Shcoology dan Edmodo untuk Meningkatkan Hasil Belajar Siswa. *Vygotsky*, 3(1), 37. <https://doi.org/10.30736/voj.v3i1.368>
- Syarifuddin, S., Aisyah, S., & Triana, Y. (2022). Meningkatkan Motivasi Belajar Peserta Didik pada Pembelajaran Tatap Muka Usai Belajar Online Akibat Pandemi Covid-19. *Edukatif: Jurnal Ilmu Pendidikan*, 4(1), 278–288.
- Wartomo. (2016). The Role of Teachers in Digital Era Learning. November.