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PROBLEMS IN THE UTILIZATION OF EDUCATIONAL TECHNOLOGY IN REMOTE SCHOOLS

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ABSTRACT

Background: Education has always been a common conversation that we hear almost every day. The whole world considers education to be a problem that never ends. Because education feels less satisfactory, both in terms of learning and from the way of teaching. Even in developed countries, the problem of disding becomes a very complicated problem.
Aim: The purpose of our research is to be able to find out the Problems of Using Educational Technology in Remote Schools, we want to provide an overview of how this educational technology can be used in every circle and during a pandemic that some schools implement online schools using digital media.
Method: In this study, we used qualitative methods and library research from several journals and articles.
Findings: The results of this study that the Problems of Using Educational Technology in Remote Schools, are still very less than optimal with various obstacles and current conditions. There are still many parents and even teachers complain about the lack of internet network, internet quotas that do not match their needs, and also the parents' lack of understanding with technology.

KEYWORDS *Problematics, education, technology*

INTRODUCTION

Education has always been a common conversation that we hear almost every day. The whole world considers education to be a problem that never ends. Because education feels less satisfactory, both in terms of learning and from the way of teaching. Even in developed countries, the problem of disding becomes a very complicated problem. Various countries continue to try to provide criticism and advice in Education, but the results remain nil. Various ways have been done both in terms of Engineering and in terms of social. It is not easy for us to improve a system that has become a good in education. Because education is very important for everyone like, do not like us in the education system we still need education both that we do directly and not done directly.

The problem of education will be a problem that we must face together, because everyone has an interest in education. If asked why education is never over for us to discuss? Maybe the answer is not all schools do the education system in accordance with the government. Many problems that often occur in schools such as teachers committing crimes, or what we often hear is sexual harassment. And from here more and more people condemn education, ridicule, and even some report schools to the authorities. But whatever the problems in education still parents trust school as the next child's education in addition to education in the family (Tholani, 2013, p. 65)

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Since 2020 the whole world has been horrified by the coronavirus / Covid-19 outbreak. Covid-19 is not an ordinary virus, because if a person is exposed to this virus the chances of recovery or survival are very small. Spreading covid-19 is very fast can be through the air or objects in our circles. The whole world is preoccupied with policy in an effort to reduce high mortality and quickly break the chain of spread of covid-19 even more. Various ways are done by the government in preventing covid-19, namely by maintaining distance, washing hands every time they finish doing activities, and lockdown systems. In Indonesia itself also conducts a policy of system lockdown and Large-Scale Social Restrictions or PSBB in various regions. With this policy brings a very large impact on various aspects of life both economic, social, health, and very influential aspects, namely education.

One of the biggest things is the world of education. The government that works through the Ministry of Education and Culture in ensuring that the personnel in educators can continue to carry out the learning process even online. The government or Kemendikbud determines if education is still carried out even with a different system that is learning at home. This system is explained in the Circular Letter of the Ministry of Education and Culture of the Republic of Indonesia Number 3 of 2020 concerning the Prevention of Coronavirus Disease (COVID19) in Educational Institutions and a Letter from the Secretary General of the Ministry of Education. 35492/A.A5/HK/2020 on March 12, 2020 on how to prevent the coronavirus (Astini, 2020). The government establishes teaching and learning through the home using communication tools (online).

Learning in pandemic times is not easy, there are many challenges that we have to face. Not only the learners but also the teachers of parents who have trusted the school as their companion educator. In times like this, the father / mother of the teacher is also required to still be able to deliver the material well so that students remain comfortable and receive the material well. Teachers must also be able to create online learning conditions that students are not easily bored and can maintain the child's mental learning. It is not easy for students to receive online learning. Because it needs good mental readiness in learning is how we can maintain their mood, give the spirit to stay in school, and most importantly how parents can harbor children in this online learning. The task of parents is not only to provide the best educator, but can be bonding when the child is in trouble. Parents can create bonds in strong emotions in children that we often call emotional bonding. Because when children are in difficulty during this pandemic, it is necessary to emotional bonding parents and children in controlling their emotions. Emotional bonding is if often parents do very impact for children in the future. Maybe parents are not always able to harbor children, but children already have provisions in managing their emotions (Jaisyurrohman, 2021).

Technology becomes the main advice in the world of education during the pandemic, all teaching activities using technology. To carry out online learning, of course, we cannot be far from technology. A need that must exist in the current period is technology that can facilitate learners in learning to teach. Technology used such as gadgets, laptops, and notebooks, but in online learning technology that is often used by learners or fathers / mothers of teachers is a gadget. This gadget is one of the technologies designed in the form of small devices, since online learning is increasingly widespread. Communication and information activities through gadgets that have become the main need in the covid-19 period. This learning system does not use the learning system face-to-face, but by utilizing technological developments for example

by utilizing the internet network. Usually, teachers and students use several Google Meet, Zoom Meeting, Google Classroom, Whatsapp, and various other applications that can be used in online learning (Gunawan, 2021). But there are some obstacles at this time is that there are still many learners and teachers who do not have Android, cannot afford data packages, and the problem of the absence of internet networks.

In research related to the problem of the use of educational technology in rural schools, we think not many have done this research. But some studies that have done obsevartion (Patonah, 2021) that education in the pandemic of schools do it online using digital media.

METHOD

In this study we used qualitative research methods or libray research, this method we use in looking for information from some previous studies that have been observed to several schools in rural areas. Here are some data sources that we have managed to take in research, namely Journals, Articles, Books and some other literature. This method allows us to use in obtaining information related to the research we are conducting. Although we can not make observations to the schools in the process, but we can look at some journals that have done research in related schools.

RESULTS AND DISCUSSION

The Movement of Educational Technology

Technology-based education according to the instructive framework in which the cycle of education and learning occurs by utilizing data and correspondence innovation. It is within this framework that the relationship between educators and students does not need to meet in person or is manifestly related within the framework of traditional learning models, but they are shared within a data innovation space (web) that uses media usually called a PC. Related to the learning situation in ICT, there is a change in the example of association between teachers and learners, which in indigenous lessons educators have a role as learning assets must move information, but in the learning model based on Communication Information Technology (ICT) educators have the role of facilitating and inspiring the student learning spirit.(Badry, 2014)

Actual issues regarding learning materials, books, in the framework of regular lessons, with ICT-based training (Information Communication Technology) changing to advanced data types. There are changes so that they do not need to meet each other in person, so at that time, how to show educators with the way students learn must be changed. ICT training will change the attitudes of instructors and students by organizing educational learning systems. Educators and students must equally dominate the data of mechanical tools used in realizing the learning of teaching systems. Based on the exposure, so that at that time, the obstacles in the implementation of learning models using ICT felt very heavy. In addition to replacing the ways and learning systems that show educators and students, putting resources into the type of framework of providing adequate ICT will also stabilize a problem. In such a situation, ICT-based schools then take on an easier structure to reduce the weight of ICT-based training implementation requirements, such as using (intranet) is a local PC network that is smaller than expected web type) and using Disk media ROM. Cycle learning in intranet environments is of

almost the same quality as learning systems in web organizations, only done in one room or in a structure or in a confined space.

In a CDROM-based framework the learning material is carried by students on a ROM Compact disc, then, then examined on their PC. One thing to keep in mind, whatever structure is gained from ICT-based teaching, however, must be guided by the thing that will be achieved from the beginning is to work on the nature of learning and learning and further develop mechanical capability data. There are 2 ict-based learning framework models, namely uncoordinated learning (Nonconcurrent learning) and simultaneous learning (Simultaneous learning).

Offbeat Learning Dalam model nonconcurrent

Iwitness where learning occurs between educators and members of learning is carried out on various occasions. A student can take learning materials on a variety of occasions and educators deliver the taught material. Until now, *offbeat* learning is increasingly widely used, with the reason: first, members do not need to relate to time, members are able to get learning materials flexibly, in addition, it is quite simple and will be easy when implementing, and at the end, with the needs of assets, especially the foundation of cheap web relatig. The disadvantage of this learning method is that the real 2-way communication time between educators and learning members cannot take place even though it is not sustainable, this learning model can be equipped with meeting rooms, to maintain intelligence between students and educators, or between students with different students, in talking about different learning theme materials.

Simultaneous Learning in a coordinated model

Thecycle is carried out together, there is a cooperation of 2 objectives between educators and learning members. This method is compared to the traditional learning process in the study room, thus this simultaneous learning method is commonly called a virtual classroom guardian. Ongoing two-way associations between educators and learning members should be made possible by leveraging distance coordination and visitation innovation. Synchronization on the web is the best structure of schools through ICT (Information and Communication Technology), because this model a teacher can clarify learning materials with students scattered everywhere. However, this model requires tremendous resources, especially providing a web framework of high-limit transmission capacity. Therefore obstacles until further notice This can be overcome by using the nearest intranet network as an effective decision.

Benefits and Media of ICT-Based Learning

Opinion says that there are 2 kinds of learning tools or media, more specifically: basic learning media and learning media today. Basic Learning Media is like a whiteboard, while today's learning tools such as: PC and also web. For that, door based SMS learning media can be grouped into today's learning media, because utilizing one of the Data Innovation and Correspondence (ICT) gadgets is a mobile phone.(Munir, 2008)

Learning media based on Information and Communication Technology (ICT) has its own advantages when compared to other learning media. I think that ICT-based learning media has advantages including:(Munir, 2008)

1) It can encourage easier understanding of the illustration material that is being researched because it can clarify ideas that are bothered or chaotic turns out to be simple or not too difficult.
2) Can clarify learning materials or conceptual articles (imitationor not original,can not be seen directly) into real (can be original) seen, felt, or felt, for example clarifying the circulation of blood and human organs in the eyes illustration of science.
3) Helping educators in selecting learning materials becomes easier and faster, so that students can learn easily, long remembered and easy to rewrite.
4) Attract and foster the interest, inspiration, action, and imagination of students learning, and can engage students.
5) Empower students' interest in learning systems and build deep relationships in students' personalities.
6) Learning materials that have been learned can be repeated (playback). For example using a ribbon, a small circle (strong plate), a recording device or a TV.
7) Can frame a typical assessment and correct view of an article, but in the original structure using the medium of learning.
8) Build a helpful learning climate, so that students can instill and cooperate with the learning climate, thus providing a real and hands-on experience. For example, students find out about the type of plant. They quickly see holding, or sensing the plant.
9) Shaping the student's perspective (the soulful part), more developed abilities (psychomotor).
10) Students understand appropriate attributes, needs, interests, and talents, whether exclusively, gathered, or exemplary.
11) Cost, time, and effort.

Use of Technology in Education

The universe, according to Hatasuhud, (2017) benefits technology that is commonly done in the process of education, namely:

Media Tutorial

Teachers use video media, advanced sound and digital books to create instructional exercises. Implied instructional exercises are not only related to material such as programming utilization. Illustration material is also clarified by using representational material in the form of video, sound and images(Picture). Learning media can certainly be disseminated through electronic media such as PCs and props. Instructional exercises made into advanced items can replace the regular performance strategy that the instructor explains in front of the class and makes the whiteboard a "prop". With the innovation of learning media, the teacher's need for a viewing system can be more fulfilled and help students in capturing the substance of the material more easily. This is on the grounds that the practice learning medium can utilize the help of PC programming to create models, images, reenactment topics so that it is clearer and more complete.

Information Technology

The utilization of correspondence innovation is one of the important elements for working with correspondence between people in a training system. Correspondence innovation models include phones, devices and web in which there are applications that work for visits, SMS, video meetings, correspondence, etc. Web-based media is essential for correspondence innovation where individuals can deliver straightforwardly and online. Computerized training materials are also distributed periodically through correspondence media.

Information Media

Information such as exercises, topics and thoughts related to training delivered is generally the utilization of innovation sites, online journals, video blogs, wikis, online gatherings, etc. Through the web of innovation, all data can be conveyed precisely, completely and quickly.

E-learning

Learning online is a great alternative in terms of limited time and location. e-learning typically uses web innovation through the development of training applications. In e-learning this is also called Learning The Board Frameworks (LMSs). LMS is an innovation for complete evaluation, investigation and careful progress reports, can be on line just as disconnected. Generally LMS already remembers for e-learning programs. E-learning innovation is used to move illustrations of materials and perform test or exam activities.

1. Simulation

   To display examples of simulation materials used web innovations. Reenactment of the topic is done by the instructor with the help of a web designer or developer. In computerized reproductive innovation, a topic is delivered in detail and is generally intuitive. Thus, it is believed that students can study more vigorously and concentrate on everything more easily.

2. Computerized Administration

   Most exercise organizations are created with a computerized framework. Web innovation is also used to consider establishing a financial statement disclosure framework for government organizations so that the public as a whole can also evaluate

Factors Supporting Technology-Based Education

Supporting factors in order to build a technology-based education system include(Hatasuhud, 2017)

a. Spending plan, it takes a truck full of money to put together a comprehensive innovation-based framework and be evenly distributed throughout the region.
b. HR, in addition to teachers who dominate the development of innovation also requires an engineer or developer of a reliable program. No less important is the mental and moral improvement and all components in the Instruction not to give up defilements.

c. Adequate innovative hardware. Complete, up-to-date and cutting-edge technological equipment is one of the elements that greatly contributes to assembling a technology-based training framework.

Role of Technology in Education (E-education)

Data Innovation Improvement and Correspondence (ICT) essentially leads to the further development of government assistance to the public. ICT unscripted TV dramas have achieved significant changes in the development of world civilization, especially the economy. Even the 21st century is accepted to be transformed into another century called the time data economy (computerized financial) with the characteristics of exchanges that utilize electronic equipment (electronic trade). The current state of things brings a key change in the progress of the local worldview from modern times to data.

Of the various ICT jobs, one of them is data innovation and correspondence work in the field of training (instruction) is inevitable. For example, it is now impossible to check out students who join illustrations each year with minutes in the yearbook. Patterns in the field of schooling in Indonesia in the future are stopped by the progress of ICT as follows:

a) Improved open learning through distance learning). Open and distance teaching becomes important including as a remote school primary system by utilizing web innovations can provide the best time adequacy, even working on the nature of training.
b) The event of wealth (sharing) of wealth between school agencies and preparation.
c) Libraries and other school devices, such as educators and laboratories Capacity as facilitators are not data sources.
d) Gadgets use intuitive data such as ROM Compact disc mixed media which will gradually replace whiteboard work.

The advantages of the web for the field of training in Indonesia include being able to enter library access, school enrollment, experts can conduct online talks, online education foundation scholastic data office settings can conduct coordination efforts with other agencies through the web only. such as doing advertising and development exploration work more proficiently. In addition, we can plan man-made awareness projects to create educational model settings.

ICT advances in the field of schooling enable distance-taking frameworks using web media to interface between students and their teachers. See self-esteem students on the web, look at finances, check class plans, submit teacher-allocated assignment documents. ICT instruction frameworks have been shown to be successful in reducing dropout rates and improving normal test scores. There seem to be many benefits of innovation in our daily lives. For example, in the field of schooling. With schools it is possible to spread Data Innovation and change information for instruction areas. Students sit in school and students are greatly helped by the internet in completing daily schedule school assignment exams. Students can see through postulate material on the web or students search for paper assignments on the Web. With data illustration and correspondence innovation in schools, students can learn and utilize ICT in their lives on a regular basis well.

We must recognize, in particular, that web ICT is only a tool and not an answer in the world of instruction, formal and non-formal. After all, quality teaching is obtained from qualified instructors as well as government support with an education plan that suits the needs of students that are implemented validly and creatively.

Barriers to Technology-Based Education

Advances in technological innovation led to shorter distances and boundaries between one individual and another, one meeting with another, as well as between countries and other countries. Correspondence between countries happens very quickly and simply. Likewise, the increase in data around the world can be easily available through innovation data, for example, over theweb. According to (Sukmarna, 2015) the combination of innovation inhibitors in learning, it can be solved by two meetings, namely:

1. Physically

   In fact, this may be an inadequate method and framework especially for schools located in remote areas. Regardless of whether there are offices and foundations, but at the same time very small both in terms of the amount and quality of the hardware. This gadget is still used interactive media used in organizational training in provincial spaces. Using vision and sound gadgets of course uses outdated details nowadays. Until its utilization is unable to remain wary of the speed of such mechanical progress.
2. Non Actual

   The courage of instructors is less than top to bottom utilizing innovation in conducting PBM interactions. The concerns of educators who neglect to teach through the utilization of innovation are currently highly recommended. Though the use of ICT in the learning process is highly recommended by experts. The absence of instructor ability, which is meant here is the absence of educator skills in coordinating innovation into educational practices, for example lacking information and ability to utilize pCs and not energetic in terms of change and reconciliation by utilizing a PC in his group.

   The teacher's behavior is in line with the change. The behavior of teachers in changing the use of new ways is like uniting technology in the learning process.

Positive and Negative Impacts of Technology-Based Education

Some of the causes of the many benefits of information and communication technology in the scope of education according to the (Sudibyo, 2011) positive impact of information technology in the world of education are:

1. The data needed will be faster and more accessible for learning purposes.
2. Advances in learning are growing rapidly with the development of e-learning that makes the learning cycle easier.
3. Thefunnel of data and correspondence innovation will also be an imaginable advancement of virtual classes or classes that rely on video chat that does not require teachers and students to be in one room, the organizational framework on an educative foundation will be easier and smoother due to the utilization of data and communication innovation frameworks.

According to(Sudibyo, 2011) can be seen some of the negative impacts of the use of information technology in the world of education, among others:

a. Students become someone who is addicted to the presence of the internet unnecessarily. This can happen when students have no basic disposition and are hesitant about something completely new. Especially regarding the virtual world (web) they indirectly entered an over free world, then, at that time, had the above two perspectives to become a fortress or channel of all accessible data sources. In addition, no less important is the consideration of guardians also plays an important role in instilling values about strict standards as a foundation of life.
b. Criminal demonstration (Digital Crime). In the world of education this can happen, for example the break-in of archives or important sources about the original private school (reports on final or state exams) with Web media.
c. Making the lack of care of everyone, useful for students / students / students only as teachers / educators / speakers. This is seen for example in virtual learning frameworks such as e-learning. Where the framework of discovery is not mutually met between students and educators, then at that time there can be less dynamic students in the learning framework and the results are not ideal.

Advantages and Disadvantages of Technology-Based Education

According to Gunantari in 2013, theflagship of technology-based education is as follows:

1. The data needed will become faster and more accessible for learning purposes.
2. Progress in learning is the development of creation with the development of e-learning that facilitates instructive interaction.
3. Advances in ICT will also allow for the enhancement of virtual classes or video chat-based classes that require teachers and students to be in one room.
4. Organizational frameworks in educational institutions will be easier and smoother due to the use of ICT frameworks.

While the weaknesses of technology-based education include:

1. The growth of technology can increase employment with the violation of the Licensed Innovation Rights (HAKI) because the easier it is to obtain information causes counterfeiting individuals to commit extortion.
2. Although the official arrangement of educational institutions as a framework without loopholes, but if there is a mistake in running the system it will result in fatal

CONCLUSION

Education has become a necessity for all citizens, Education has always been a common talk that almost every day we hear. The whole world considers education to be a problem that never ends. Because education feels less satisfactory, both in terms of learning and from the way of teaching. Even in developed countries, the problem of disding becomes a very complicated problem. Various countries continue to try to provide criticism and advice in Education, but the results remain nil. Various ways have been done both in terms of Engineering and in terms of social. It is not easy for us to improve a system that has become a

good in education. Because education is very important for everyone like, do not like us in the education system we still need education both that we do directly and not done directly.

Education technology is a very complex need in solving problems in the world of education and learning process. Technology becomes the main advice in the world of education during the pandemic, all teaching activities using technology. To carry out online learning, of course, we cannot be far from technology. A need that must exist in the current period is technology that can facilitate learners in learning to teach. Technology used such as gadgets, laptops, and notebooks, but in online learning technology that is often used by learners or fathers / mothers of teachers is a gadget.

REFERENCES

Astini, S. K. (2020). 3. *Tantangan Dan Peluang Pemanfaatan Teknologi Informasi Dalam Pembelajaran Online Masa Covid-19*, 243.

Badry. (2014, 04 Minggu). *http://badry7.blogspot.com/2014/04/mak*. Retrieved from http://badry7.blogspot.com/2014/04/mak: http://badry7.blogspot.com/2014/04/mak

Gunantari, l. (2013, 11 06). *Kelebihan dan Kekurangan Teknologi*. Retrieved from Kelebihan dan Kekurangan Teknologi: http://gunantarilinda.blogspot.com/2013/

Hatasuhud, r. (2017, 11 07). *sistem pendidikan berbasis teknologi*. Retrieved from sistem pendidikan berbasis teknologi: https://www.kompasiana.com/ronaldhut

Jaisyurrohman, b. (2021, Oktober 8). *Bonding Akan Bantu Anak Ketika Masa Sulit.* Jakarta: Talkparenting.

Munir. (2008, 04 17). *Dampak Teknologi* . Retrieved from Dampak Teknologi : https://geanindy.wordpress.com/2018/0

Patonah, I. (2021). JAMAIKA: Jurnal Abdi Masyarakat . *FAKTOR KURANG OPTIMAL PEMBELAJARAN DARING PADA MASA PANDEMI DI DESA ROWOLAKU KAJEN PEKALONGAN*, 115.

Rahayu, T. e. (2019, September Senin). *Teknik Menulis Review Literatur Dalam Sebuah Artikel Ilmiah*. Retrieved from Teknik Menulis Review Literatur Dalam Sebuah Artikel Ilmiah: https://doi.org/10.31227/osf.io/z6m2y

Sudibyo, l. (2011, 11 07). *Peranan dan dampak Teknologi Informasi dalam Dunia Pendidikan di Indonesia*. Retrieved from Peranan dan dampak Teknologi Informasi dalam Dunia Pendidikan di Indonesia: https://www.kompasiana.com/tutinamak

Sukmarna, u. (2015, 02 10). *kendala implementasitik dalam dunia pendidikan di indonesia*. Retrieved from kendala implementasitik dalam dunia pendidikan di indonesia: https://kelompoklim5mpb.wordpress.co