



## Application of Electronic Learning and Educators' Challenges In The 21<sup>st</sup> Century

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### Abstract

The scientific object of learning technology is learning and learning. Learning and learning have undergone extraordinary changes and transformations recently, especially at the turn of the millennium beginning in the 21st century. This research aims to develop information technology in the application of learning in the 21st century. In the process of transition from the industrialization century to the knowledge age, every field demands in life change very quickly and must be able to adapt quickly. Teachers and students, lecturers and students, educators and students are required to have the ability to teach and learn in the 21st century. This condition is a challenge and demands educators in the development of learning technology (PTP). This article uses library research. With data sources from journals, research reports, scientific magazines, newspapers, relevant books, seminar results, unpublished scientific articles, sources, bibliography, video graphics, and so on. The results of this study indicate that educators and prospective educators in the 21st century need to be prepared to be able to adapt to science and technology developments. Knowledge and skills for the development of electronic learning materials need to be mastered in advance by teachers/lecturers/instructors who will develop electronic learning materials. The Teacher Education Institute (LPTK) as an institution that produces prospective educators/teachers needs to equip teachers and prospective teachers to be skilled in using technology, especially ICT, because it challenges future teachers who are related to ICT.

Keywords: The application of electronics, the forefront of educators, the 21st century

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## Introduction

In 2019 there was an outbreak of the 2019 coronavirus (Covid-19). the situation brought outbreak of Covid-19 infection changes the world, especially in education, that due to the COVID-19 virus is highly contagious, and the education sector, organizations, and culture of the United Nations or UNESCO have monitored and various policies implemented in Indonesia to break the chain of spreading the COVID-19 virus (Khasanah, Pramudibyanto, & Widuroyekti, 2020), (Trisnawati & Sugito, 2020), (Siahaan, 2020). The Indonesian government's policy towards the outbreak that occurred in the application of the principle of social distancing throughout society, also applies in Provinces and Regions developing education, temporarily removing face-to-face learning we often hear online and through E-Learning, this is a challenge for all elements of education and education levels to keep classes active even after school is closed (Herliandry et al., 2020, Pujilestari, 2020, (Setyorini, 2020) (Winata, 2021) argues that online learning is a learning process that takes place with the help of an internet network, in which there are also various online materials related to learning, where there are features regarding questions and materials to fill in the presence therein, so there is an interaction between students and teachers in the learning process so that they can actively participate in learning and get good results (Nasrah, 2020). According to (Nasrah, 2020) Learning motivation is the internal motivation of students in learning activities to achieve the desired goals. Active learning has a positive impact on students in learning activities proving students' curiosity and serious learning. With high learning motivation, it is expected that students will obtain satisfactory learning outcomes, (Winata, 2021). This research is different from previous research. The difference lies in the objectives and research methods. The purpose of this study is to analyze the effect of student learning motivation on social studies-based PKN learning and online learning, while the previous study identified student motivation in learning geography online at home. The research method used in this work is a qualitative literature study, while the previous research was descriptive qualitative. The subject of this research is also different, namely the previous research on students, while the current research on students. Therefore, this article will discuss in detail the impact of social studies & civics learning design analysis on E-Learning learning on a more effective learning process.

## Methodology

This research uses a literature review by analyzing several scientific articles or journals carried out accordingly. Data collection is done online, i.e. browsing articles and journals using Google Scholar. The results obtained from the analysis of various magazines show that the principles of evaluation must be applied so that learning objectives can be achieved properly. Qualitative research was chosen in this study, which is library research that uses various sources such as books, magazines, and other sources. This type of research is qualitative. A research stage that includes descriptive data (Mutiamamses, S, and Murni 2021). Meanwhile, according to Fauzi, O.D & Sartika (2020). Qualitative Research is an organized study to find knowledge and show the meaning of the problem. Participants in this study are teachers who must pay attention to giving assessments to students, remember the basic principles of assessment, and be able to apply them in assessment. Data were collected from several journals that continue the discussion of this research. Then find and obtain relevant information that may be needed to achieve the correct results. Then proceed with the interpretation to find the results that match the purpose of this research. With this literature review based on information that is easy to collect and take into account, it can be justified that the information included is valid and meets the research criteria. After the necessary information was collected, the next step was to collect information related to the basic principles of evaluation from journals so that teachers can conduct evaluations using existing principles. This data collection is based on the theory under study, so that the data

collected is focused, directed, and relevant. analysis of related topics is then carried out to draw conclusions that are consistent with the objectives of this study. The researcher collected data This research uses a literature review by analyzing several scientific articles or journals carried out accordingly. Data collection is done online, i.e. browsing articles and journals using Google Scholar. The results obtained from the analysis of various magazines show that the principles of evaluation must be applied so that learning objectives can be achieved properly. Qualitative research was chosen in this study, which is library research that uses various sources such as books, magazines, and other sources. This type of research is qualitative. A research stage that includes descriptive data (Mutiaramses, S, and Murni 2021). Meanwhile, according to Fauzi, O.D & Sartika (2020). Qualitative Research is an organized study to find knowledge and show the meaning of the problem. Participants in this study are teachers who must pay attention to giving assessments to students, remember the basic principles of assessment, and be able to apply them in assessment. Data were collected from several journals that continue the discussion of this research. Then find and obtain relevant information that may be needed to achieve the correct results. Then proceed with the interpretation to find the results that match the purpose of this research. With this literature review based on information that is easy to collect and take into account, it can be justified that the information included is valid and meets the research criteria. After the necessary information was collected, the next step was to collect information related to the basic principles of evaluation from journals so that teachers can conduct evaluations using existing principles. This data collection is based on the theory under study so that the data collected is focused, directed, and relevant. analysis of related topics is then carried out to draw conclusions that are consistent with the objectives of this study. The researcher collected data using the Google search engine by typing in relevant keywords, namely; Basic principles of assessment, and assessment limitations in primary grades. Entering keywords correctly and following the issues is important to obtain appropriate data for research (Andayani, 2020). The validity of the data can be trusted because the researcher uses data that leads to elements and characters in conditions related to the matter under study.

## Results and Discussion

Learning Design Learning design comes from two syllables, namely design, and learning, each of which has its meaning. Design means planning while learning means the interaction of components (teachers, students, goals, materials, media, methods, and assessments) so that behavioral changes occur. Therefore, instructional design is a practice that integrates media content and communication technology to support the effective transfer of information between learning components such as teachers and students. Learning planning is also learning to achieve learning needs and goals, a system that minimizes students' difficulties in understanding learning and creates new and effective learning for comparison in the implementation of learning. (Noviandi, S, & F, 2020) (Pane and Dasopang, 2017, (Sukarno, Lestari, Yulianti, & Sularmi, 2013) (Khoerunnisa & Aqwal, 2020) Based on the above understanding, it can be concluded that learning planning is a systematic and reflective process of teaching and learning principles into a plan that is used as learning materials, learning activities, learning resources, and learning assessments. IPS and Civics Learning Social studies humans in various fields of social life systems (Kuntari, 2019). Social studies also study the movement and needs of people's lives. It is also often said that social studies are a science that studies scientifically various social science disciplines, humans, and basic human activities that provide informative knowledge and can be understood strongly / deeply by students, especially at the elementary school level (Jannah, M. 2019). That is why social studies all human activities. Social studies or social sciences can develop knowledge/experience, develop skills/skills relevant to each person, and empathetic activities to create knowledge/experience. The purpose of social studies is to provide information and understanding of facts and materials that must be remembered and used to increase responsibility in society, nation, and state (Jumriani,

Syahrudin, & Mutiani, 2021). On the other hand, social studies objectives are based on student behavior, namely: (1) knowledge and understanding, (2) life learning attitudes, (3) social values and attitudes, and skills. The essence of civic education is a conscious and organized effort to educate the nation's life to its citizens, using the nation's identity and morality in exercising rights and responsibilities for the protection, survival, and prosperity of the nation and state (Farhan Nurdiansyah & Anggraeni Dewi, 2021) The purpose of civic education means that every citizen becomes a good citizen (Yogi Nugraha', 2016) and can also be interpreted as a citizen who has intellectual, social, emotional intelligence and spiritual intelligence. Another opinion also explains that the purpose of civic education is to form good students/citizens or residents whose character is by the values contained in Pancasila (Dwi & Zati, 2018) Elearning E-learning is a learning media as teaching material provided by teachers to their students, using internet media that is directly connected to computers and cellphones, using advanced technology this remote media has a supporting menu feature for students in the teaching and learning process, which is flexible can be done anywhere not fixated in space and time (Fadillah, 2021)(Sundayana, 2015. (Aminatun, 2020). Based on the above opinion, e-learning is an electronic media that does not need to meet face to face and can be done anywhere. The advantages of online learning are as follows:

1. Interaction; students and teachers allow more interactive communication both directly and indirectly.
2. Independence; teachers become flexible about place and time.
3. Accessibility; thanks to technology, many resources are available.
4. Adaptability; easy to adapt to the environment. Free, you can take a break.
5. Enrichment/awakening; teaching enrichment in presentations allows the use of video streams, simulations, and animations. Internal learning motivation of learners can direct the process of learning activities of learners and achieve the learning goals of learners.

Where active learners will have a positive impact on student learning (Nasrah, 2020) Students' learning activities will be seen in students' learning motivation students have more serious learning. By having serious learning, the results obtained by students are good and increase. In online learning based on E-Learning (Winata, 2021). Motivation To Learn The motivation that encourages learners to behave in actions for absolute conditions to increase learner learning where a change is characterized by the emergence of affective (feelings) and reactions to achieve learner learning activities, motivation is also closely related to the desire to learn learners and is affected by the learning outcomes of learners both from outside and from within. (B.Uno, 2013) Purwanto, 2017, Djamarah, 2017) According to Djamarah (2015) there are several kinds of motivation: 1) Intrinsic motivation is a learner who is active from within the learner, where he can learn, is active, and no longer needs to be encouraged, the goal he is pursuing is increasingly educating on his knowledge, getting rewards or recognition for his efforts (Sardiman, 2018). Gunners, 2008. Djamarah, 2015) 2) Extrinsic Motivation is an external encouragement that can be from the teacher to stimulate students to learn for learning situation factors such as giving gifts to improve the learning process. (Prayitno, 2011. Djamarah, 2015. Gunners, 2008) (Supriadi, 2017) (Sardiman, 2018) The functions of motivation according to Sadirman (2018) are as follows: (1) encouraging students, so that learning activities are achieved, (2) directing students in the learning goals achieved, (3) distinguishing between good and bad actions, being smart in sorting out those that are not beneficial to learning goals.

## Conclusion

Based on research conducted by researchers by applying a qualitative approach that is literature research, it can be concluded that students' understanding of online learning is alternative learning because it is easily accessible to everyone. Concerning this learning objective, online students can focus on material, and attendance, practice questions for creativity and facilitate the work of teachers and students.

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