
The Impact of 21st Century in Education as a Learning Revolution

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Abstract

The study reveals to impact of 21st century education as a learning revolution. The research focus is directed at four sub variables; lesson planning; implementation of learning; learning assessment; and learning supervision. In this study, collecting data from various sources, the impact of 21st century education as a learning revolution are included in the category of several changes that must be made, such as: Planning the concept of conventional education; understanding education as an important part of efforts to create changes for better management of the life of the nation and state; Creating education that can adapt to the changing nature of globalization; Respond positively to the current changes in globalization and then direct them towards the concept of sustainable management, and create the concept of sustainable education. The results are expected to be input for other, regarding the real conditions in the field related to the impact of 21st century education as a learning revolution so that it can be taken into consideration in implementing the learning revolution in the 21st century. The impact of 21st century education in the learning revolution. This study is a literature review using a qualitative approach. Schools are part of the population in this study, and the sample uses a saturated sampling technique. Data were analyzed using a simple regression technique. The results of the study show that 90% of the impact of 21st century education influences the learning revolution. Positively changes in the flow of globalization then direct it to the concept of sustainable education management, thereby creating the concept of 21st century education.

Keywords: 21st Century, Education, Learning Revolution

1. INTRODUCTION

Education is a vehicle for forming young people who are smart, have character, the government continues to develop the quality of human resources, in Law Number 25 of 2000 concerning the National Development Program. The Indonesian government has created an educational innovation policy with the

aim of improving the quality of education in Indonesia, especially in learning in the 21st century as stipulated in the 1945 Constitution.

Curriculum development is periodically developed according to developments in science, information, technology and the needs of the times. In this 21st century, a teacher in carrying out the teaching and learning process or learning is expected to be able to carry out learning innovations, have skills teaching that is able to balance with current conditions, able to design interesting, fun and meaningful learning and others. Century learning- 21 is different from the previous century which was still conventional, traditional and classical (Ummi Inayati, 2022).

The 21st century has many differences from the 20th century in various ways, including in work, social life and self-actualization. The 21st century was marked by the rapid development of information technology and the development of automation where many routine and repetitive jobs began to be replaced by machines, both production machines and computers. As is well known, in the 21st century, both society and the world of education have completely changed. Schools that are understood to date have been formed since the 19th century in the context of developing children's education and also encouraging industrialization. So initially the school was formed to support the formation of civil society and also industrialization, but since 1989, when Germany was united, the era of globalization has suddenly started until now, as in North America, Europe and East America, globalization has occurred earlier.

In the innovation process, the government also applies national education standards as a minimum criterion regarding the education system in all jurisdictions of the Republic of Indonesia which is used in education organized by the central, regional and community governments in formal, non-formal and informal education channels. In the 21st Century learning is very popular by bringing about change, namely the rapid development of Science and Technology (IPTEK) which has resulted in a change in the learning paradigm which is marked by changes in curriculum, media and technology.

The positive influence of technological developments in the world of education for students is that education can be accessed anywhere and anytime, making it easier for someone to find the information they want, besides that the process of providing information does not have to always interact directly, because it can already be accessed via the internet. or by cell phone. However, there are negative things at this time, namely because of easy access to information, cheating often occurs in teaching and learning activities, students can usually access information during exams and even students often get leaks or already know what will be tested. I conclude that education nowadays is very easy in the process, but it is necessary to pay attention to the supervision of the process (Uci Dwi Cahya, 2023). 21st century learning

is required to apply technology-based methods to balance the demands of the millennial era with the aim that students will become accustomed to 21st century life skills. Therefore, the government designed 21st century learning through the 2013 curriculum based on students. Teachers as an extension of the government in schools implement 21st century learning.

Student social interaction will create a harmonious relationship. The forms of good social interaction can be seen by the existence of a cooperation, mutual respect and mutual respect. Cooperation will be created if in the learning process a problem is found, students will be happy to interact with each other by discussing and helping each other to solve problems that occur in the learning process. (Uci Dwi Cahya et al., 2021). In formal schools, learning is required to apply the skills of Critical Thinking, Communication, Collaboration, Creativity. This can be realized quickly, not only demands on teacher performance in changing teaching methods, but also the role and responsibility of non-formal educators in getting children to apply 4C in everyday life. (Lina Sugiyarti et al., 2018)

The world of education in the 21st century is facing enormous challenges. Learning in the 21st century must be able to prepare generations of Indonesian people to welcome advances in information and communication technology in social life. Apart from that education has indeed become the main need of society, with the presence of various kinds of challenges of the times, the role of education is increasing. In addition, education is an investment to improve individual quality. Given that education is a good experience, its success can be measured by evaluating its effect on users (students). In educational institutions, students are the main users of education. Therefore, the implementation of the educational process must be directed at developing student abilities. Education is the key word in every effort to improve the quality of human life, in which it has a role and object to humanize humans. That's why the focus of education is directed at the formation of a superior personality by focusing on the process of maturing the qualities of logic, heart, morals and faith. The pinnacle of education is achieving the point of perfection of quality of life.

Entering a competitive era, every individual must have 21st century skills such as asking questions, creative thinking, critical thinking, decision making and problem solving in order to be able to choose among the information they receive, interpret information and generate new knowledge. Educating individuals with these skills requires careful planning. In order for the development of student abilities to be carried out in a more directed manner and in accordance with the needs and challenges of the times, the development of student abilities must be carried out in a programmed manner through the curriculum that will be studied by students. The curriculum needs to be modified in line with these demands, with the aim of equipping individuals with 21st century skills. (Lina Sugiyarti et al., 2018)

In planning the lesson, there are several things that must be considered, namely: level of student development, student differences, absorption, atmosphere of learning activities, as well as facilities and available resources. In terms of planning the learning process the teacher must be guided by teacher and student books, then master and understand the material to be taught. After that, prepare a good and correct RPP about what will be done in the initial activities, activities core and closing activities. At the core stage or also called the implementation stage of learning is the implementation stage teacher's plan. At this stage, the teacher conducts teaching and learning interactions through application of various strategies of learning methods and techniques, as well as the use of a set of media. Model applied learning is an innovative learning models, innovative learning is more student-centered learning. Namely learning that provides more opportunities to students. (Ahmad Khawani & Jati Rahmadana, 2023)

The educational reform that is currently underway is actually to restore the role of education as it should be. Everyone longs for the birth of an education system that can elevate the dignity of the Indonesian people to high. With the will of various parties due to political will, it is believed that Reform will roll in the desired direction, not only stopping reform but also moving towards transformation. Since the reformation in mid-1998, there has been a wave of changes in all aspects of life, both social, national and state life. Fundamental changes in the life of society, nation and state today have implications for the government system of government, if all this time using a centralized paradigm oriented towards the decentralization (autonomy) paradigm. (Epi Supriyani Siregar, 2021).

In elementary school students who are currently in the learning process in the 21st century must be aligned with the teacher's competence both in terms of knowledge and understanding of technology, able to become a facilitator as the role of the teacher in independent learning, understanding student learning needs, so that e-learning learning as an implementation of independent learning for students in the 21st century will be able to help achieve the full learning objectives. (She Fira Azka Arifin, 2023)

According to Ayu (2019) there are three core subjects of 21st century education, namely: 1) Life and Career Skills, 2) Learning and innovation Skills – 4Cs, 3) Information, Median and Technology Skills. Life and Career skills (life and career skills). Specifically for aspects of learning and innovation skills (learning and innovation skills) include: (1) Critical thinking and problem solving: students are able to use various reasons (reasons) such as inductive or deductive for various situations; use systems thinking; make decisions and solve problems (2) Communication and collaboration: students are able to communicate clearly and collaborate with other group members. (3) Creativity and innovation: students are able to think creatively, work creatively.

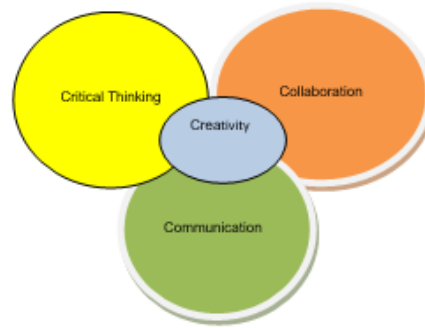


Figure 1. Students Skill in 21st Century

If the concept of Learning and innovation skills (learning and innovation skills) can be implemented in schools, Indonesian students will be equipped with these virtues, namely communication, collaboration, critical thinking and problem solving, as well as being creative and innovative, a good concept, then Indonesian students will be able to compete in the 21st century. Learning development should use a learner-centered approach. Learners as learning subjects who actively develop their interests and potential. Students are no longer required to listen to and memorize the subject matter given by the teacher, but try to construct their knowledge and skills, according to their capacity and level of development of thinking, while being invited to contribute to solving real problems that occur in society. In this 21st century, teachers should really become professional teachers, so they can face challenges.

The Problem Based Learning (PBL) learning model is an option that educators can use in learning because this learning model students must actively participate in solving problems that are scientifically recognized. The topics presented must be problems that are close to students' lives in the 21st century or contextual problems that are close to students' daily lives. In this learning model students will be formed in several small groups and educators start learning by providing contextual problems at the beginning, so students can be active in teaching and learning activities. through Problem Based Learning (PBL) learning it is hoped that it can foster students' motivation to learn mathematics, because by giving contextual math problems it is hoped that students will become more challenged in participating in learning mathematics in class. Of course, it can create student-centered learning, so that the negative paradigm of students towards mathematics can automatically change (Oslen Parulian Sijabat et al., 2023). Meanwhile, according to (Veronoca Elvina Montessori et al., 2023) in 21st century learning, teachers must apply 6C, namely critical thinking, collaboration, communication, creativity, culture and connectivity. The implementation of 21st century skills in the form of 6C skills begins with making planning. Implementation planning is carried out by preparing the RPS, which is in this RPS there are

subject matter, learning methods and assessments that will be used in the process delivery of material and learning media used.

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This is in line with the criteria for professional work which states that teachers are entitled to receive appropriate compensation, not only in the form of material, but also in the form of appreciation, respect, and community respect for teachers. Teachers are challenged to accelerate the development of information and communication. Classroom learning and classroom management, in this century must be adjusted to the standards of information and communication technology advances, but try to construct knowledge and skills, according to the capacity and level of development of thinking, while being invited to contribute to solving real problems that occur in society. In this 21st century, teachers should really become professional teachers, so they can face challenges (Agus Budi Hariyanto & Ukhti Raudhatul Jannah, 2020).

In the 21st century, education is becoming increasingly important to ensure students have learning and innovation skills, skills in using information technology and media, and can work and survive using life skills. The various competencies needed by students in the current era of globalization are often referred to as 21st Century Skills and the concept of education is better known as 21st Century Learning (Yusuf Andrian, 2019).

Seven competencies and skills that are important to master in the 21st century, namely:

1. Critical thinking in solving a problem;
2. Have a leadership and collaboration spirit;
3. Easily adaptable and has a high agility spirit;
4. Have a spirit of initiative and entrepreneurship;

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5. Have effective oral and written communication techniques;
 6. Know all access and analyze all information;
 7. Curiosity. (Muhtar et al., 2020)

The impacts of 21st century developments include: (1) the free and open flow of various physical and non-physical resources; (2) increasing collaboration and cooperation between nations in the process of creating highly competitive products and/or services; (3) the influx of products and services from foreign countries which are marketed domestically which influences the behavior of people's lives and mindsets; and (4) the booming of foreign workers from the level of workers to executives entering the labor market. Changes in this era cannot be avoided by anyone, so adequate human resources (HR) are needed to be ready to adapt and be able to compete on a global scale.

Differentiated learning is a very powerful way of thinking important for teaching and learning in the 21st century. Learning Differentiation is not a new thing in the world of education. Learning differentiation is also known as differential learning. Differential learning is a model of motor learning which is grafted on the importance of movement variability and rooted in theory dynamic system of human movement. The learning process in the classroom must also be supported by infrastructure facilities adequate, approaches, models, and learning methods used Teachers must be able to meet the needs of each student. Educators act as facilitators in the process of achieving educational goals. It is important for educators to have the ability to design learning, so that able to design and carry out learning according to the characteristics their students. (Dwi Putriana Naibaho, 2023)

Education in the 21st century aims to realize the ideals of the nation, namely the welfare of the Indonesian people through an honorable and equal position with other nations. Improving the quality of human resources through education is the key to being able to keep up with developments in the 21st century. Educational success is strongly influenced by the quality of educators such as teachers. Teacher skills in the 21st century is a very important topic in learning. Therefore, to develop learning in the 21st century, teachers must initiate a step of change to transform Indonesian education through changes in learning patterns, mastering skills, and the ability to adapt to new technologies and global challenges. 90% of the impact of 21st century education influences the learning revolution. Positively changes in the flow of globalization then direct it to the concept of sustainable education management, thereby creating the concept of 21st century education

2. RESEARCH METHOD

The design used in this research is Literature Review. Literature review is a method used to collect data or sources related to a particular topic which can be obtained from various sources such as journals, books, the internet and other literature. The population in this study is all MTs MUQ Langsa students in the 2022/2023 school year of 108 students. Meanwhile, the samples taken in this study used a saturated sampling technique or in other words the study population was used as the research sample. The sample in this study was 90 students at MTs MUQ Langsa. Meanwhile, the respondents who were selected as the data source were the administrative staff of the madrasah. The distribution of research respondents is presented in Table 1 below.

Table 1. Number of Research Respondents

No	Kelas	Jumlah Siswa
1	I Tahfidz Putri	28 Students
2	I Tahfidz Putra	25 Students
3	I Aisyah	26 Students
4	I Umar	29 Students
Total		108 Students

3. FINDINGS AND DISCUSSION

The 21st century is the era of globalization with the characteristics of mutual openness and interdependence between countries. Because of mutual openness and interdependence coupled with the very fast flow of information, competition between countries will be even tougher. For Indonesia, globalization does not only have a domestic dimension but also a global dimension. In terms of domestic globalization, this provides positive opportunities to adopt and implement innovations that come from outside to increase employment opportunities for the community. In addition to domestic benefits, the influence of globalization can educate people to have cosmopolitan mindsets and patterns of action, such as hard work, willingness to learn to improve skills and work performance. Globally, we live in an open world, a world without borders.

The influence of technology on 21st century education can be felt. Starting from the availability of various types of learning media to learning new models that take advantage of technological developments. The impact on students in the application of the learning revolution is the social impact on changes in child development. In addition, the following are some of the impacts or influences of technological developments on 21st century learning, namely:

1. Can get work done more easily and quickly.
2. Can communicate remotely with other people with e-mail, chat, and so on.

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3. It's easier to find the information you need.
 4. Another impact faced by students in 21st century learning is that students must apply the 4C method within themselves, namely students must have critical thinking and problem solving (Critical Thinking and Problem Solving).

Critical thinking and problem solving is the ability to critically analyze situations and problems, evaluate information and formulate appropriate solutions. This is considered very important in the world of education today, because the world of work always faces a variety of different situations and unpredictable problems. Then cooperation and the ability to work in teams (Collaboration and Teamwork), where cooperation and the ability to work in teams with others in an effective team.

This is considered important because a lot of work in the world of work is currently carried out in teams and requires good cooperation so as to increase the effectiveness and efficiency of work results and reduce internal conflicts within the team. Furthermore, communication is the ability to convey information, ideas, feelings and views to others effectively and efficiently.

This can include the ability to listen actively, communicate well orally and in writing, express oneself clearly and handle communication conflicts that may arise. This ability is considered important in today's world of work because many jobs require an individual to communicate with other people, both within the same organization and outside the organization. And finally, creativity and innovation is the ability to create innovative new ideas. Creativity can also be defined as an imaginative activity that manifests (embodiment) intelligence from thoughts that are efficient in producing a product or solving a problem in its own way. Innovation is an idea, notion, method that is felt or observed as something new for a person or group of people (society), whether it is the result of invention or discovery to solve a particular problem.

5. CONCLUSION

Based on the discussion that has been described previously, it can be concluded that 21st century education is a process of developing and empowering all potential students to form better character. There are various 21st century learning innovations that can be applied in learning in Indonesia. One of them is the application of student learning abilities that focus on C4 (Critical Thinking, Collaboration, Communication, and Creativity). This is very suitable for facing Indonesia's challenges in the 21st Century and preparing a learning environment to achieve 21st century competencies. In addition, the changes that are occurring in the world community towards digitalization force the learning process in

schools to keep up with current technological developments. In the 21st century teachers and students are required to be literate in digital technology.

In this case the impact of the 21st century learning revolution is that teachers are not the only source of learning for students, students can be directed to explore other learning resources through the internet and other learning media. The learning model will shift significantly towards the application of digital technology. ICT literacy in schools throughout Indonesia must be more evenly distributed so that it can achieve the expected goals. The influence of technology on 21st century education is felt by many people and students. Starting from the availability of various learning media to learning new models that take advantage of technological and information developments. So as a teacher it is expected to be able to master and open insights about the development of information technology. Data were analyzed using a simple regression technique. The results of the study show that 90% of the impact of 21st century education influences the learning revolution. Positively changes in the flow of globalization then direct it to the concept of sustainable education management, thereby creating the concept of 21st century education. As well as a teacher is also expected to be able to design and design light, innovative and effective learning, so that students can understand learning well.

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