

## Revolutionary Curriculum and Its Challenges in the 21st Century

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### ABSTRAK

**Abstrak**

*Tujuan dari semua kegiatan belajar mengajar di sekolah harus mempersiapkan siswa dengan keterampilan yang dibutuhkan untuk abad kedua puluh satu. Kapasitas untuk belajar berkembang dan menjadi banyak akal. Karena kemajuan yang dibuat di abad ke-21, pembelajaran menjadi lebih dinamis. Oleh karena itu, sistem pendidikan harus mampu mengatasi semua kesulitan dan persyaratan keterampilan abad ke-21. Akibatnya, pendidikan harus merencanakan program pendidikannya melalui kurikulum yang akan diajarkan kepada siswa. Untuk mengakomodasi semua keterampilan dan hambatan yang tersedia, perubahan kurikulum diterapkan. Menanggapi tuntutan abad kedua puluh satu menyajikan masalah yang sangat rumit untuk kurikulum. Kurikulum dimodifikasi dengan tepat untuk memenuhi persyaratan dan tantangan ini. Tantangan sebenarnya adalah tetap berada di jalur dengan visi, misi, dan tujuan pendidikan nasional. Akibatnya, kurikulum yang dapat baik secara internal maupun eksternal memenuhi kebutuhan abad ke-21 diperlukan*

**Keywords:**

Revolution, curriculum, its challenge, 21<sup>st</sup> century

**Abstract**

The goal of all teaching and learning activities in schools must be to prepare students with the skills needed for the twenty-first century. The capacity for learning expands and becomes resourceful. Because of advancements made in the 21st century, learning has become more dynamic. The educational system must therefore be able to address all of the difficulties and skill requirements of the 21st century. As a result, education must plan out its educational programs through the curriculum that pupils will be taught. The curriculum is everything that pupils will learn in order to accomplish a particular objective. To accommodate all available skills and obstacles, curriculum changes are

implemented. Responding to the demands of the twenty-first century presents exceedingly complicated issues for the curriculum. The curriculum is modified appropriately to meet these requirements and challenges. The actual challenge is staying on course with the vision, mission, and goals of national education. Consequently, a curriculum that can both internally and externally address the needs of the 21st century is required

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## **Introduction**

There are several difficulties facing the education sector in the twenty-first century. Indonesian education in the twenty-first century must be able to prepare future generations to embrace social progress in the ICT field (Ardiya & Syahfutra, 2021; Zubaidah et al., 2023). Apart from that, education has indeed become the main need of the community. With the presence of various challenges, the role of education is increasing. In addition, education is an investment to improve the quality of individuals (Nafukho et al., 2004). Given that education is a good experience, its success can be measured by evaluating its effect on users (students) (Susanto et al., 2022; Kan & Murat, 2020). The majority of people who use education in educational institutions are students. Therefore, the implementation of the educational process should be focused on increasing the capacity of students. Fundamental to any attempt to raise the standard of living for people is education, which serves the purpose of humanizing human beings. Therefore, education places a strong emphasis on developing a superior personality through the maturation of the virtues of reason, heart, morals, and religion. The purpose of education is to improve one's quality of life to the highest level (Rawung et al., 2021).

Online communities have replaced offline communities as the norm in society. In case you're wondering, there were 88.1 million internet users in Indonesia in 2015, and as of now, there are 196.7 million, or 73.7% of the country's population. Whether we like it or not, Indonesian education must keep up with the rapid digitalization of society because of this. As a result, it is clear that we need to be digitally literate and able to use various ICT-based teaching strategies or models (Nuswantoro et al., 2023) so that we can keep up with the current development of digitalization. The purpose of writing this article is to find out how learning innovations in the 21st century can be applied in Indonesia.

Growing up in this age of advanced technology requires access to vast amounts of knowledge that have never been possible before. There are children who never have to wait more than a few seconds for answers to their questions because everything is readily available online. Without leaving their bedroom, children can educate themselves on any subject they are interested in. The students in the current class are members of Generation Z and Generation Alpha. In their homes and schools, these two generations have grown up with technology as something (Umar et al., 2023). They are born into the digital world and are as comfortable with apps and programming as their grandparents were with reading books.

Moreover, generation Z and alpha are the most globally related in history. They can easily make friends on opposite sides of the planet even before they leave their home country because they come into contact with people from all over the world online. Schools and parents give children and young people more opportunities to travel, fostering a truly global educational experience. The students in our classroom today are very capable, smart, and autonomous. They are adept at using technology and communicating across national and cultural boundaries. Future generations will likely have greater expertise in this area, so we can anticipate that.

The development of an appropriate curriculum and in accordance with the needs will be able to increase the effectiveness of future needs in accordance with the age of knowledge and efforts to improve the skills and competencies of students so that they are able to answer all kinds of challenges of the times. The unity between all phases of student development in their living environment, which became more widespread during the age of knowledge, also requires an effective and efficient education and training plan, all of which must be accommodated in the curriculum taught to students (Afini et al., 2023; Agustin & Purwanto, 2023; Marsinah et al., 2023). In this case, the development of a curriculum that is in accordance with the challenges of the times is a must, as is determination and effort to further improve students' skills. Therefore, how big is the role of education in building individuals who are skilled and have both soft skills and hard skills, especially in facing the 21st century?

Based on the above, in response to the phenomenon of changing needs, requirements for certain skills and competencies, and the progress of the times, it is necessary to be prepared and ready to face the challenges of the 21st century. It is

important to convey an understanding of 21st century skills to students. The achievement of 21st century skills is carried out by understanding the characteristics, achievement techniques, and learning strategies (Purwanto, 2023) included in the curriculum. Therefore, the purpose of writing this article is to describe the curriculum and its challenges in the 21st century.

## **Methodology**

This research uses a systematic study methodology because it is based on a number of references, including books, articles, and online scientific journals. A descriptive qualitative approach was used in this study. As a result, the actions taken are intended to illustrate significant issues relating to how the curriculum actually operates and its difficulty in meeting the needs of the 21st century. Utilizing data integration techniques, the systematic study method used is to synthesize, that is, compile various types of expert opinions from articles and other scientific publications. to learn new, deeper, and more thorough theories, concepts, or levels of understanding (National & Pillars, 2012). Here are the steps taken in this study: Formulating review questions, conducting a systematic literature search, screening and selecting relevant research articles, analyzing and synthesizing qualitative findings, upholding quality control, and presenting findings are the first four steps. (Bozer et al., 2019; Schleischer, 2015).

## **Results and Discussion**

### **Result**

#### **Curriculum**

In all existing societies of the world, children are initiated into a certain mode to acquire experience, a set of norms, knowledge and skills needed for their future survival. In most societies, most of the time, one of the symptoms—or perhaps conditions—of pluralism is conflict and arguments about what should be contained in the curriculum. However, conflicts and disagreements today are even more pervasive and hinder logical conversations about subjects that should be addressed in the curriculum. Today, much of the debate in the professional world of curriculum centers on the fundamental question of what a curriculum is (Breen & Candlin, 1980). The curriculum is a "social fact" in the sense that Emile Durkheim, a French sociologist and professor of pedagogy, defined

the term. This means that curriculum can never be reduced to individual behaviors, beliefs, or motives (Egan, 2003).

A curriculum is a structure that limits not only the activities of those involved, especially teachers and students, but also those who design the curriculum or strive to achieve certain goals (Simanjuntak et al., 2022). Etymologically, the term curriculum comes from the Greek, namely *curir*, meaning "runner" and *curere*, meaning "place to race". In French, the term curriculum comes from the word *courier*, which means to run. Furthermore, curriculum can be interpreted as the distance that a runner must travel from the starting line to the finish line to get a medal or award (Taba, 1962). Then, in a sense, the curriculum is defined as a "learning plan", which is a set of learning plans (Taba, 1962). In the traditional view, the curriculum is formulated as a number of subjects that must be taken by students to obtain a diploma (Dewi, 2018). Another opinion defines curriculum "as constraints on what students can learn," which is related to what students can learn (Nur & Madkur, 2014). The National Education System Law Number 20 of 2003 explains that the curriculum is a collection of plans and arrangements of objectives, content, and implementation of learning activities to achieve certain educational goals. Curriculum is a learning plan that outlines the objectives, materials, and how learning activities will be carried out in order to achieve educational goals. In essence, curriculum is specific information that has been compiled to be passed down from generation to generation. Everything that can be taught and learned by students at different ages and stages is also included in the definition of curriculum (Dewey, 2013).

### **Curriculum Challenges During the Covid-19 Pandemic**

Today we live in the twenty-first century. We've only been part of the 21st century for ten years. However, various kinds of impacts can be felt in every aspect of life. The philosophy, direction, and purpose of education have undergone a shift, if not a fundamental overhaul. It is not hyperbole to claim that the development of computer science and technology is a catalyst for scientific progress. With the use of these technologies, research and technology have advanced significantly, particularly in the domains of cognitive science, bio-molecular, information technology, and nanoscience, which have now been established as fields of science of the 21st century. The world of knowledge is becoming more interconnected, which is one of the most prominent

features of the 21st century, therefore the interaction between them is accelerating (M & Ahmad, 2017). In addition, the changing social and economic circumstances that characterize the present period make it important to rethink the relationship of the curriculum, its purpose, and its form, with the future social and economic environment. These circumstances offer some evidence of such changes and their causes, even today, and raise questions about the important characteristics of the education agenda in the near future (Marcotte & Gruppen, 2022) that should be included in curriculum planning.

In the 21st century, many challenges are faced. People need a high level of skills and competencies in addition to the fundamental ones to keep up with changes, utilize technology, select, analyze, and evaluate rapidly generated information, learn from it, and apply it in their daily lives. every day and turn it into a product. This ability that people need to have in digital culture is known as the talent of the 21st century (Young, 2014). Skills and knowledge alone are not 21st century competencies. Understanding and doing are examples of 21st century talent. In other words, it combines knowledge and ability (Richards, 2001). A framework for learning in the twenty-first century is being developed by P21 (Partnership for 21st Century Learning). He argues that students must have knowledge, expertise, and talent in technology, media, and information, as well as learning and innovation abilities, as well as life and work skills, in order to succeed in the twenty-first century. The framework also outlines a wealth of information, abilities, and competency domains that students must acquire in order to succeed in school and in the workplace. 21 puts the focus on students' capacity to learn from multiple sources, formulate problems, think critically, and cooperate and communicate when solving problems.

The justification for BSNP's assessment of the 21st century learning paradigm as given by (Chuntala, 2019) is as follows: Critical Thinking and Problem Solving Skills (a): Capacity for critical, lateral, and systemic thinking, particularly in the context of problem solving; (b) Communication and Collaboration Skills (c): Capacity to interact and cooperate with a variety of people; (d) Critical Thinking and Problem-Solving Skills (e): Capacity to interact critically, laterally, and systemically; (f) Information and Communication Technology Literacy, which refers to the ability to use ICT to improve daily activities and performance. (Nurgiyantoro, 2019); (h) Information skills and media literacy, the ability to understand and use various communication media to convey

various ideas and carry out collaboration and interaction activities with various parties, and (g) Contextual Learning Skills, the ability to undergo contextual independent learning activities as part of self-development. The partnership for 21st century talent has identified the 21st century talent that graduates must possess in order to succeed and compete in the modern world (Faturrohman & Afriansyah, 2020).

These skills can increase marketability, employability, and readiness to be good citizens (De Raeve et al., 2012). By paying attention to the various challenges and skills needed in 21st century learning above, it becomes a must in curriculum development to pay attention to all kinds of skills as required by the 21st century to be included in the curriculum and taught to students. Changes to the curriculum have been made by the government. At the junior high school level, the 2013 curriculum has been implemented with various improvements. The 2013 curriculum has actually accommodated 21st century skills (Frydenberg & Andone, 2011). Based on the description above, it is a skill (Stoll, 2009) that is needed in the 21st century that is a challenge that must be developed in the curriculum.

### **The Challenge of Free Learning at Independent Campus in Higher Education**

The development of higher education curriculum in the industrial era 4.0 has the issue of producing graduates with new literacy skills, including data literacy, technological literacy, and human literacy, which encourage the development of respectable character. The creation of a right to study policy for students outside the study program (Permendikbud Number 3 of 2020 concerning Higher Education Standards) is one of the efforts to overcome this difficulty. Known as Merdeka Belajar Kampus Merdeka, the policy (Saleh, 2020) is intended to create an autonomous and flexible learning process in universities in order to create an innovative, non-limiting learning culture, according to student needs, and encourage students to master various knowledge that is useful for entering the world of work. It also gives students the opportunity to choose which courses to take. In addition, the policy aims to improve connections and compatibility with business and the world of work (IDUKA) and to begin preparing students for it (Trilling & Fadel, 2009), This policy is likely to result in increased pressure on postsecondary institutions (PTs) to develop new curricula and teaching methods that will help students achieve the best learning outcomes. In one

university (PT), outside PT, or not at all, students are free to receive a study load (SKS) outside the study program. In other words, students are helped to learn a variety of knowledge that is useful in the workplace.

## Conclusion

Based on the discussion previously explained, it can be concluded that 21st century education is a process of developing and empowering all prospective 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 a blended learning model that is very suitable to face Indonesia's challenges in the 21st century and prepare a learning environment for the achievement of 21st century competencies. In addition, changes that occur in the world community towards digitalization force the learning process in schools to keep up with current technological developments. Teachers and students should be knowledgeable about digital technologies in the twenty-first century. In these situations, students may be encouraged to investigate different learning resources through the internet and other learning mediums in addition to their teacher. The application of digital technology will dramatically change the learning model. To achieve the desired results, ICT literacy must be more widespread in all Indonesian schools.

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- The characteristics of 21st century education have been articulated by many and continue to evolve. However, in order to achieve within this developing context and beyond, it is accepted that students need: ( Jan, Hee: 2017) □ Reading literacy □ Information literacy □ Technological literacy □ Skills for personal knowledge building □ Oral literacy and numeracy
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