Revolutionary of Curriculum and Its Challenges in the 21st Century

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Article Info	Abstract
	Every area of life, including the learning process, has been impacted by the growth of the 21st-century world, which is characterized by the use of information and communication technology in all facets of daily life. Every field of work requires changes in competence and skills as a result of developments. Critical thinking, problem-solving, and teamwork are crucial skills for success in the twenty-first century. Schools must be equipped to prepare kids for life in the twenty-first century. 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.
Artikel Info	Abstrak
	Setiap bidang kehidupan, termasuk proses pembelajaran, telah dipengaruhi oleh pertumbuhan dunia abad ke-21 yang ditandai dengan penggunaan teknologi informasi dan komunikasi dalam segala aspek kehidupan sehari-hari. Setiap bidang pekerjaan memerlukan perubahan kompetensi dan keterampilan sebagai akibat dari perkembangan. Pemikiran kritis, pemecahan masalah, dan kerja tim adalah keterampilan penting untuk sukses di abad kedua puluh satu. Sekolah harus diperlengkapi untuk mempersiapkan anak-anak menghadapi kehidupan di abad kedua puluh satu. 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. Kurikulum adalah segala sesuatu yang akan dipelajari siswa untuk mencapai tujuan tertentu. Untuk mengakomodasi semua keterampilan dan hambatan yang ada, perubahan kurikulum diterapkan. Menanggapi tuntutan abad kedua puluh satu menghadirkan masalah kurikulum yang sangat rumit. Kurikulum dimodifikasi secara tepat untuk memenuhi persyaratan dan tantangan ini. Tantangan sebenarnya adalah tetap sejalan dengan visi, misi, dan tujuan pendidikan nasional. Konsekuensinya, diperlukan kurikulum yang secara internal dan eksternal menjawab kebutuhan abad ke-21.

I. INTRODUCTION

There are several difficulties facing the educational sector in the twenty-first century. Indonesian education in the twenty-first century must be able to prepare future generations to embrace social advancements in ICT (Ardiya & Syahfutra, 2021). Apart from that, education has indeed become the main need of society. With the presence of various kinds of challenges, the role of education is increasing. In addition, education

is an investment to improve individual quality (Nafukho et al., 2004). Given that education is a good experience, its success can be measured by evaluating its effect on users (students) (Kan & Murat, 2020). The majority of people who use education in educational institutions are students. The implementation of the educational process must therefore be focused on enhancing students' capacities. The fundamental to every effort to raise the standard of living for people is education, which serves the purpose of humanizing people. Because of this, education places a strong emphasis on the development of a superior personality through the maturation of the virtues of reason, heart, morals, and religion. The goal of education is to improve one's quality of life to its highest level (Rawung et al., 2021).

The growth of society occasionally has implications for 21st-century learning. As is well known, civilization has evolved from a prehistoric one to an agrarian one, then to an industrial one, and is currently transitioning to an information one. The advancement of digitization defines the information society. The use of computers, the internet, and mobile phones has increased significantly since 1960. Online communities have replaced offline ones as the norm in society. In case you were wondering, there were 88.1 million internet users in Indonesia in 2015, and as of right now, there are 196.7 million, or 73.7% of the country's population. Whether you like it or not, Indonesian education must keep up with the society's increasingly rapid digitization because of this. As a result, it is clear that we need to be digitally literate and capable of using a variety of ICT-based teaching strategies or models (Nuswantoro et al., 2023) so that we can keep up with current developments in 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 technologically advanced day entails having access to a vast amount of knowledge that has never before been possible. There are children who have never had to wait more than a few seconds for the answers to their questions because everything is readily available online. Without even leaving their bedroom, kids can educate themselves on any subject they are interested in. 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 technological technology as a given (Umar et al., 2023). They

were born into the digital world and are as at ease with applications and programming as their grandparents were with reading books. Additionally, generations Z and alpha are the most globally linked in history. They can easily make pals on the opposite side of the planet before they have even left their native country since they come into contact with people from all over the world online. Schools and parents are giving kids and teenagers more opportunities to travel, fostering a genuinely global educational experience. The pupils in our classrooms nowadays are exceptionally capable, clever, and autonomous. They are adept at using technology and in communicating across national and cultural boundaries. Future generations will likely have even greater expertise in these areas, so we can anticipate that.

Curriculum development that is appropriate and in accordance with needs will be able to increase the effectiveness of future needs in accordance with the knowledge age 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 the phases of student development in their living environment, which is increasingly widespread during the knowledge age, also requires an effective and efficient education and training plan, all of which must be accommodated in the curriculum taught to students. In this regard, curriculum development in accordance with the challenges of the times is a must, as is the determination and effort to further improve the skills of students. Therefore, how big is the role of education in building an individual who is skilled and has both soft 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. Achievement of 21st-century skills is carried out by understanding the characteristics, achievement techniques, and learning strategies (Purwanto, 2023) that are included in the curriculum. Therefore, the purpose of writing this article is to describe the curriculum and its challenges in the 21st century.

II. METHOD

This study employs a systematic review methodology because it is based on a number of references, including books, articles, and online scientific journals. A descriptive qualitative approach is used in this study. As a result, the actions taken are intended to illustrate significant issues that are pertinent to how the curriculum actually operates and its difficulties in meeting 21st-century needs. Utilizing data integration techniques, the systematic review method used is to synthesize, which compiles various types of expert opinions from articles and other scientific publications. to learn new, deeper, and more thorough theories, concepts, or degrees of understanding (National & Pillars, 2012). These are the steps taken in this study: Formulating review questions, conducting systematic literature searches, filtering and choosing 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)

III. RESULT AND DISCUSSION

A. Curriculum

In all existing societies in the world, children are initiated into certain modes of acquiring experiences, a set of norms, knowledge, and skills needed for their survival in the future. In most societies, almost all the time, one of the symptoms-or maybe conditions-of pluralism is conflict and arguments about what should be contained in the curriculum. However, today's conflicts and disagreements are even more pervasive and inhibit logical conversations about the subjects that ought to be covered in the curriculum. Today, a lot of debate in the professional world of curriculum centers on the fundamental question of what 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 the curriculum cannot ever be reduced to individual behaviors, convictions, or motives (Egan, 2003).

The 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 seek to achieve certain goals (Simanjuntak et al., 2022). Etymologically, the term curriculum comes from the Greek, namely curir, which means "runner" and curere, which means "place to race". In French, the term curriculum comes from the word courier, which means to run. Furthermore, the curriculum can be interpreted as a distance that must be traveled by a runner from the start line to the finish line to get a medal or award (Taba, 1962). Then, in meaning, the curriculum is defined as "a plan of learning", namely 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 the curriculum "as a constraint 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 for objectives, content, and the implementation of learning activities to attain specific educational goals. The curriculum is a learning plan that outlines objectives, material, and how learning activities will be carried out in order to accomplish educational objectives. In essence, the curriculum is specialized information that has been structured to be passed down from generation to generation. Everything that can be taught and learned by pupils at different ages and stages is also included in the definition of the curriculum (Dewey, 2013).

B. Curriculum Challenges During the Covid-19 Pandemic

We currently live in the twenty-first century. We've only been a part of the 21st century for ten years. Nevertheless, a vast range of impacts can be felt in every aspect of life. The philosophy, direction, and objectives of education have undergone a shift, if not a fundamental overhaul. It is not hyperbole to claim that the development of science and computer technology was the catalyst for scientific advancement. 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 designated as the 21st century's defining fields of science. The world of knowledge is becoming more interconnected, which is one of the most notable 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 imperative to rethink the relationship of the curriculum, its aims, and its forms, with the social and economic environment in the future. This circumstance offers some evidence of such changes and their causes, even today, and raises questions about the important characteristics of the educational agenda in the near future (Marcotte & Gruppen, 2022) that should be included in curriculum planning.

In the 21st century, many challenges are faced. People require high-level skills and competencies in addition to fundamental ones to stay up with changes, utilize technology, choose, analyze, and evaluate information created swiftly, learn from it, and apply it to their daily lives. daily and transform them into products. The capabilities that people need to have in this digital culture are known as 21st-century talents (Young, 2014). Skills and knowledge alone do not constitute 21st-century competencies. Comprehending and performing are examples of 21st-century talents. To put it another way, it combines knowledge and abilities (Richards, 2001). A framework for learning in the twenty-first century is being developed by P21 (Partnership for 21st Century Learning). He contends that students must possess knowledge, expertise, and talents in the areas of technology, media, and information, as well as learning and innovation abilities, as well as life and job skills, in order to succeed in the twenty-first century. The framework also outlines the many information, abilities, and domains of competence that students must acquire in order to succeed in school and in the workplace. 21 places a focus on students' capacity to learn from a variety of sources, formulate issues, think critically, and cooperate and communicate when resolving issues.

The justification for the BSNP's assessment of the 21st century learning paradigm as provided by (Chuntala, 2019) is as follows: Critical-Thinking and Problem-Solving Skills (a): The capacity to think critically, laterally, and systemically, particularly in the context of problem solving; (b) Communication and Collaboration Skills (c): The capacity to interact and work cooperatively with a variety of people; (d) Critical-Thinking and Problem-Solving Skills (e): The capacity to interact critically, laterally, and systemically; (f) Information and Communications Technology Literacy, which refers to the ability to use ICT to enhance daily activities and performance. (Nurgiyantoro, 2019); (h) Information skills and media literacy, the ability to comprehend and use various communication media to convey various ideas and carry out activities collaboration and interaction with various parties, and (g) Contextual Learning Skills, the ability to undergo contextual independent learning activities as part of personal development. The Partnership for 21st Century talents has identified the 21st century talents that graduates must possess in order to succeed and compete in the modern world (Faturohman & Afriansyah, 2020).

These skills can increase marketability, employability, and readiness to become good citizens (De Raeve et al., 2012). Taking into account the various kinds of challenges and skills required in 21st-century learning above, it becomes a necessity 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. Curriculum changes have been made by the government. At the lower secondary 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 the skills (Stoll, 2009) that are needed in the 21st century that are the challenges that must be developed in the curriculum.

C. The Challenge of Free Learning on an Independent Campus in Higher Education

University curriculum development in the era of industry 4.0 has the issue of producing graduates with new literacy skills, including data literacy, technological literacy, and human literacy, which foster the development of honorable character. The creation of a policy on the right to learn for students outside of the study program (Permendikbud Number 3 of 2020 about Higher Education Standards) is one effort to address this difficulty. Popularly known as Merdeka Belajar Kampus Merdeka, the policy (Saleh, 2020), is intended to create an autonomous and flexible learning process in tertiary institutions in order to create a learning

culture that is innovative, not restrictive, in accordance with students' needs, and encourages students to master various knowledge that is helpful for entering the world of work. It also gives students the opportunity to choose which courses to take. Additionally, this policy aims to improve connections and matches with business and the working world (IDUKA) and to start preparing students for it (Trilling & Fadel, 2009), This policy will likely result in increased pressure on postsecondary institutions (PT) to develop novel curricula and teaching methods that would help students achieve the best possible learning outcomes. In one higher education institution (PT), outside of PT, or not at all, students are free to accept study load (SKS) outside of the study program. In other words, students are helped to learn a variety of knowledge that is beneficial in the workplace.

IV. CONCLUSION AND SUGGESTION
A. 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 characters. There are various 21st-century learning innovations that can be applied to learning in Indonesia. One of them is the application of the blended learning model, which is very suitable for facing the challenges of Indonesia in the 21st century and preparing a learning environment for achieving 21st-century competencies. In addition, the changes that are occurring in world society towards digitalization force the learning process in schools to keep up with current technological developments. Teachers and students must have a working knowledge of digital technology in the twenty-first century. In this situation, students might be encouraged to investigate different learning resources via the internet and other learning media in addition to their teacher. The implementation of digital technologies will dramatically change the learning model. To attain the desired results, ICT literacy must be more widely dispersed throughout Indonesian schools.

B. Suggestions

Discussion regarding this research is still very limited and requires a lot of input. Suggestions for future authors are to study more deeply and comprehensively about Revolutionary of Curriculum and Its Challenges in the 21st Century.

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