The most important skill in the 21st Teaching and Learning

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Abstract
Teaching and learning are very essential in life. These skills should be well mastered. However, there are only a few people who know how to teach and learn well. The paper aims to describe the most important skill in the 21st teaching and learning. This paper is a narrative literature review. Literature was taken from Science Direct and Google Scholar. It is recommended to master creative thinking skills in the problem-solving method of teaching. This method is essential in learning and teaching. The teacher can learn to be more creative in explaining any subjects to the students in different ways. On the other side, the students can be trained how to think creatively by using the given theory. In this way, the students will not only memorize the subject but also practice creatively. This skill is long-lasting. It can be implemented in any subject, including English, medicine, arts, science, etc. Conclusion: The most important skill in the 21st teaching and learning is mastering creative thinking skills in the problem-solving method of teaching. This skill is essential for teachers and students. It is long-lasting.

Keywords: creative thinking skills; the 21st teaching and learning; learning; problem-solving method

INTRODUCTION

Teaching and learning are very essential in life. These skills should be well mastered. However, there are only a few people who know how to teach and learn well. A country whose citizens do not want to learn will be underdeveloped and left behind. Therefore, the teaching and learning strategies are very critical to develop critical thinking for the new generation (Septikasari & Frasandy, 2018).

The 21st century skills give the students ability to enhance their competitiveness in the globalization era. Having the skills in competitiveness area will be very helpful for their academic performance and career in the future. It is important to incorporate creative thinking skill into science education. The 21st thinking skills consist of four aspects, i.e. digital age literacy, effective communication, inventive thinking, and high productivity (Turiman et al., 2012).

One of the important skills for digital age literacy is scientific literacy. Scientific literacy comprises knowledge and understanding of scientific processes and concept. This kind of literacy is critical in personal decision-making. Scientific literacy is related to science and technology. The skills of observing, classifying, making inferences, and communicating are very essential in digital age literacy. Meanwhile, the integrated science process skills comprise interpreting, defining
operational and control variables, constructing hypotheses, also experimenting. Scientific literacy and skills involve critical thinking. Those skills are very essential in the 21st-century skills (Turiman et al., 2012).

Education in the 21st-century needs a combination of globalization and internationalization. The educational system should meet these requirements. The hardware and software, including the curricula, should be well designed to make students engaged in the learning process. The ability to evaluate and link the scenario of the real world with the requirement of the working industry is very valuable (Boholano, 2017). In this condition, teachers must consider developing themselves to promote 21st-century skills education. Training should be given to increase the knowledge and skills of teachers and students (Haug & Mork, 2021). Based on the background above, this paper aims to describe the most important skill in the 21st teaching and learning.

METHOD

Literature was taken from Science Direct and Google Scholar. There were 8 articles which consists of review and research articles. Un-peer-reviewed articles and unavailable full text were excluded. Articles were read twice to reduce bias. Articles were selected within 10 years of publication date. The selected articles should contain at least 3 keywords in the title, abstract, or text. The selected keywords are 21st-century skill/learning, thinking skill, also learning/teaching method.

FINDINGS AND DISCUSSION

It is recommended to master creative thinking skills in the problem-solving method of teaching. This method is essential in learning and teaching. The teacher can learn to be more creative in explaining any subjects to the students in different ways. On the other side, the students can be trained how to think creatively by using the given theory. In this way, the students will not only memorize the subject but also practice creatively. This skill is long-lasting. It can be implemented in any subject, including English, medicine, arts, science, etc. Therefore, everyone should have creative thinking, critical thinking in problem-solving, communication skills, and collaboration. It is also known as 4C. These skills are important in formal and informal education. The roles of teachers and parents are very important in training the children. Positive education in a learning atmosphere should be maintained to gain maximum achievement for the future (Septikasari & Frasandy, 2018; Taar & Palojoki, 2022).

Due to changes in information technology for workplaces and classrooms, the need for education shifted from focusing on static skills to the ability to learn in a dynamic environment. Teaching practices is needed in higher education for meeting the challenge in the 21st century. The teaching and learning process should prepare the students to achieve a good career in the future. Therefore, the teaching skills should be up to date to catch up with the requirement of the 21st-century skills (Fitriati & Prayudi, 2021).

Approximately 85% of jobs are online-based during the COVID-19 pandemic. However, only a small percentage of graduated students can cope with the requirement during this period. Critical thinking skills for the 21st are very important to increase the students’ ability. Teachers need to make sure that the skills given are appropriate to face the changes in the learning process.
Fitriati & Prayudi studied that most of the students showed difficulties in applying the 21st-century critical thinking skills (Fitriati & Prayudi, 2021).

The 21st-century skill is also known as noncognitive skill (Stehle & Peters-burton, 2019). Deep learning term is also closely connected with the term of 21st-century learning (Haug & Mork, 2021). The 21st-century learning is created to fulfill the need of job market. An introductory and advanced level are prepared for grades 11 and 12 to make students more adapted in the next education level (Stehle & Peters-burton, 2019). The 21st-century skills comprise of three broad domains, namely the cognitive domain (related to cognitive processes and strategies, knowledge, critical thinking, and argumentation), the intrapersonal domain (motivation, belief, self-regulated learning), and the interpersonal domain (collaboration and leadership). Those skills will help students to prepare for future lives and careers (Haug & Mork, 2021).

By incorporating the 21st-century skills in education system, it is hoped that productive graduates are ready to face the job market, especially in the era of competitive job worldwide. The theory of maximization in education emphasizes some critical factors such as learner personalities, learning style, program of study, technology, learning content, evaluation method, including flexible assessment. Those factors will help students to gain their competitiveness in the future (Embarak, 2021).

CONCLUSION

The most important skill in the 21st teaching and learning is mastering creative thinking skills in the problem-solving method of teaching. This skill is essential for teachers and students. It is long-lasting. The 21st century skills comprise of three broad domains, namely the cognitive domain (related to cognitive processes and strategies, knowledge, critical thinking, and argumentation), the intrapersonal domain (motivation, belief, self-regulated learning), and the interpersonal domain (collaboration and leadership). Those skills will help students to prepare for future lives and careers.

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