



Building 21st Century Skills: Focusing on Creative Thinking Capability and Critical Thinking Ability

Alif Lukmanul Hakim¹, Darmawan², Apit Fathurohman³, Gamar Abdullah⁴,
Yasir Arafat⁵

¹Universitas Islam Indonesia

²Politeknik LP3I Jakarta

³Universitas Sriwijaya Palembang

⁴Universitas Negeri Gorontalo

⁵Universitas Tadulako

* Corresponding Author E-mail: alif.lukmanulhakim@uii.ac.id

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Abstrak

Ketrampilan berpikir kreatif dan berpikir kritis memiliki peran yang semakin penting dalam menghadapi kompleksitas dan perubahan yang cepat di era modern. Penelitian ini bertujuan untuk menggambarkan pentingnya ketrampilan pada abad ke-21, serta menggambarkan tantangan dalam mengembangkannya dan metode untuk memperkuat pembelajaran. Metode penelitian yang digunakan adalah tinjauan studi pustaka dengan pendekatan deskriptif kualitatif, data dikumpulkan dari berbagai sumber pustaka seperti jurnal ilmiah, buku, dan laporan penelitian terkait. Studi ini menegaskan bahwa ketrampilan berpikir kreatif dan berpikir kritis merupakan landasan penting dalam proses pembelajaran yang holistik, mempersiapkan individu untuk menghadapi tantangan di dunia kerja yang terus berubah. Tantangan dalam mengembangkan ketrampilan tersebut termasuk perubahan dalam peran guru, integrasi teknologi, pengembangan kurikulum yang sesuai, dan pembelajaran berbasis proyek. Namun, dengan menerapkan metode pembelajaran yang tepat dan kiat-kiat yang relevan, generasi mendatang dapat dipersiapkan dengan baik untuk menjadi pemimpin dan inovator yang sukses dalam era modern. Hasil studi ini memberikan wawasan yang mendalam tentang pentingnya ketrampilan berpikir kreatif dan berpikir kritis dalam abad ke-21, serta menunjukkan perlunya pendekatan pembelajaran yang holistik dan inovatif untuk mempersiapkan individu menghadapi tantangan masa depan.

Kata Kunci: Ketrampilan Abad ke-21, Berpikir Kreatif, Berpikir Kritis

Abstract

Creative thinking and critical thinking skills have an increasingly important role in dealing with complexity and rapid change in the modern era. This research aims to illustrate the importance of skills in the 21st century, as well as describe the challenges in developing them and methods for strengthening learning. The research method used is a literature review with a qualitative descriptive approach, data is collected from various library sources such as scientific journals, books and related research reports. This study confirms that creative thinking and critical thinking skills are an important foundation in a holistic learning process, preparing individuals to face challenges in the ever-changing world of work. Challenges in developing these skills include changes in teacher roles, integration of technology, development of appropriate curricula, and project-based learning. However, by applying the right learning methods and relevant tips, future generations can be well prepared to become successful leaders and innovators in the modern era. The results of this study provide deep insight into the importance of creative thinking and critical thinking skills in the 21st century, and show the need for a holistic and innovative learning approach to prepare individuals to face future challenges.

Keywords: 21st Century Skills, Creative Thinking, Critical Thinking

Introduction

The 21st century has been an era characterized by rapid and complex change, marked by technological developments that change the way we interact, work and learn. Amid these changes, traditional skills are no longer enough to succeed in an increasingly evolving environment. This is where the importance of 21st century skills, which emphasize the ability to think creatively and think critically, becomes very crucial (Munawwarah et al., 2020).

In the past, education often focused on conceptual understanding and mastery of factual knowledge, which was important but no longer suitable enough to face complex and fast-paced challenges. The ability to think creatively and think critically is an essential foundation for successfully navigating the complexities of the 21st century (Syafruddin, 2024).

Creative thinking involves the ability to generate new ideas, see problems from different points of view, and think *out-of-the-box* by involving the courage to try new things, experiment, and innovate (Endang et al., 2022). Meanwhile, critical thinking involves the ability to critically evaluate information, identify strong arguments, accommodate diverse points of view, and make informed and rational decisions (Ananda et al., 2021).

However, these two abilities are not only appropriate in the academic sphere, but also in the real world. In the workplace, individuals who have the ability to think creatively and critically think tend to be effective innovators, skilled problem solvers, and strategically minded leaders who are able to find solutions to complex problems, adapt to rapid change, and contribute to success. organization (Asriadi, 2020). Several studies have revealed how important 21st century skills are to focus on creative and critical thinking, including:

According to (Ananda et al., 2021) research results show that the application

of Project Based Learning (PjBL) has a significant influence on students' critical thinking and creative thinking abilities. According to (Aqidatul Aisyah et al., 2024), it shows that the ethnomathematics-based *discovery learning model assisted by GeoGebra* has a significant influence on increasing students' mathematical creative thinking abilities. According to (Lestari & Iryanti, 2024), it shows that the strategies implemented by class XII teachers can improve students' critical thinking skills in PAI learning through digital literacy by involving several stages, namely, learning planning. And according to (Nissa et al., 2024) the *Take and Give* learning model in Mathematics Learning can improve students' critical thinking skills in accordance with the demands of 4C competency, so that the *Take and Give learning model* in Mathematics Learning can be one solution for increasing 4C competency, namely students' critical thinking abilities.

Based on previous research, it is important for education to adapt to today's needs and integrate 21st century skills learning in the curriculum. By involving a student-centered learning approach, where students are encouraged to become active learners who think critically and creatively. 21st century education must teach students how to think, not just what to think.

In addition, 21st century skills also require a cross-disciplinary approach, where students are given the opportunity to integrate knowledge and skills from various fields of study. This helps them develop a deeper understanding of the complex and connected world around them, and prepares them to tackle multidimensional challenges.

However, although the importance of 21st century skills is widely recognized, there are several challenges that need to be overcome in implementing them in educational contexts. One is a curriculum

that focuses too much on teaching to standardized tests, which may not optimally promote the development of 21st century skills. Additionally, there is a need to train teachers in teaching 21st century skills, so that they can create learning environments that support the development of students' creative and critical abilities.

According to the existing situation, we will discuss in depth the importance of creative thinking and critical thinking skills in the 21st century, the challenges in developing these skills, as well as approaches that can be taken to strengthen the learning of 21st century skills in the educational environment through a better understanding of the importance of 21st century skills and efforts to integrate them in education, and can prepare future generations to become leaders and innovators in this increasingly complex and rapidly changing era.

Method

This research is a literature review with a qualitative descriptive approach. Literature study is a research process that involves collecting and analyzing various library sources to gain an in-depth understanding of the topic being researched. The library study method is often used in scientific research and is an important part of the research process (Fitrah & Luthfiyah, 2017). The library study process begins with identifying and collecting various library sources that are relevant to the research topic. These library sources can be scientific journals, books, articles, research reports, as well as electronic sources such as websites and online databases.

After the library sources have been collected, the next step is to read and analyze the contents of each source. This involves understanding the ideas, theories, methodologies, research findings, and discussions contained in these sources.

During this process, researchers may identify existing knowledge gaps, discover emerging trends or patterns, or highlight ongoing debates in the field being researched. Literature study analysis also involves evaluating the quality of the library sources used. Researchers must consider the credibility, reputation and relevance of these sources in the context of the research being conducted (Sugiyono, 2016).

The results of this literature study are then used to develop a theoretical framework for research, formulate more specific research questions, and provide a broad knowledge base about the topic being researched. Literature studies can also help researchers to identify the most appropriate research methods, evaluate relevant research findings, and formulate research hypotheses or propositions (Muh. Fithrah, 2018). The main aim of this research is to provide a description of 21st century skills with a focus on creative thinking and critical thinking.

The data collected relates to the concepts that are the focus of the research, including the importance of creative thinking and critical thinking skills in the 21st century, challenges in developing skills, as well as approaches that can be taken to strengthen the learning of 21st century skills in educational environments and efforts to integrate education, and to prepare future generations to become leaders and innovators. Data analysis was carried out by considering the level of relevance of the data to research conducted in the last 5 years.

Results and Discussion

The results and discussion in this section will reveal how important creative thinking and critical thinking skills are in the 21st century, the challenges in developing them, as well as approaches that can be taken to strengthen learning of 21st century

skills and tips for preparing the next generation to become leaders. and innovators in an increasingly complex era. Next, look at the results of these efforts and discuss interesting findings and their implications. The following is an explanation of the discussion, including:

1. The importance of creative thinking and critical thinking skills in the 21st century

The 21st century is an era characterized by rapid change and increasing complexity in various aspects of life. In facing this challenge, creative thinking and critical thinking skills become very important. These skills involve the ability to view problems from multiple points of view, generate new ideas, analyze information carefully, and solve problems in innovative and effective ways.

The importance of creative thinking skills in the 21st century lies in its ability to create innovative and *out-of-the-box solutions* to the problems faced. In a world that continues to develop rapidly, complex and unprecedented problems often arise. In these conditions, the ability to think creatively allows individuals to generate new ideas, see opportunities amidst challenges, and find unusual solutions . Innovation is the key to solving difficult social, economic and environmental problems , and creative thinking is the foundation (Putri et al., 2022).

Apart from that, critical thinking is also an important skill in the 21st century. In the era of abundant information, you will be faced with a lot of data and information that needs to be processed and evaluated carefully. Critical thinking allows us to analyze information carefully, distinguish between facts and opinions, identify weaknesses in arguments, and make decisions based on rational thinking. And in a world that is complex and full of ambiguous information, the ability to think

critically helps us make informed and effective decisions (Redhana, 2019).

Furthermore, creative thinking and critical thinking skills are also important in the modern world of work. In an era where automation and technological developments are changing the employment landscape, routine and repetitive tasks are increasingly being replaced by machines and algorithms. On the other hand, jobs that require creative thinking and critical thinking skills tend to remain connected and are difficult to replace by machines. The ability to create new ideas, see opportunities, and solve complex problems is a valuable asset in this ever-changing world of work.

Then, creative thinking and critical thinking skills also contribute to holistic individual development. As well as helping to hone communication, collaboration and problem solving skills involving social, emotional and intellectual aspects. In the realm of education, these skills enable students to become independent, critical and creative learners, who are ready to face future challenges with strong confidence and ability.

In order to strengthen creative thinking and critical thinking skills in the 21st century, education has a very important role. Education that focuses on developing these skills must involve active and collaborative teaching methods, which encourage students to think creatively, analyze critically, and take an active role in the learning process. In addition, education should also encourage students to see connections between different disciplines, to integrate knowledge and skills from various domains, and to apply them in the real world. (Karnia et al., 2023).

Based on the information above, it can be concluded that creative thinking skills and Critical thinking has great importance in the 21st century. Amid rapid change and increasing complexity, these

skills enable individuals to generate innovative solutions, analyze information carefully, and solve problems in an effective manner. Creative thinking and critical thinking skills are also appropriate in the modern world of work and contribute to holistic individual development. Therefore, education has an important role in strengthening these skills and preparing future generations to face future challenges with strong confidence and ability.

2. Challenges in developing 21st century learning

One of the main challenges in developing 21st century learning is the changing role of teachers. In ancient times, teachers acted as sources of knowledge who provided information to students. However, in 21st century learning, the teacher's role has changed to become a learning facilitator who helps students acquire critical thinking, collaboration and creativity skills (Pare & Sihotang, 2023). Teachers must also be able to integrate technology well in learning and must be able to encourage students to become independent thinkers and take an active role in the learning process. This means teachers need to adopt a more open, inclusive and collaborative approach in teaching (Warsita, 2017).

Technology integration is an important challenge in 21st century learning. The use of electronic devices, *online* learning platforms, and other digital tools can increase the accessibility and effectiveness of learning. However, there are challenges in ensuring that technology is used wisely, appropriately, and according to students' needs. Teachers need to understand and use technology effectively, as well as teach students about digital literacy, online safety, and ethics in the use of technology. It is also important to address gaps in access to technology, so that all students have the same opportunity

to utilize the potential of technology in learning (Amalida & Halimah, 2023).

Developing 21st century skills is the main focus in 21st century learning. Skills such as critical thinking, problem solving, collaboration, communication, creativity and digital literacy are essential for students to succeed in an ever-evolving world. Challenges in developing these skills include developing appropriate curricula, adequate assessment, and teacher training to facilitate the development of these skills. The curriculum must be designed in such a way that it provides opportunities for students to develop these skills through active, project-based and contextual learning. Assessments should also reflect 21st century skills, such as by using project assignments, portfolios, or formative assessments that provide constructive feedback. Teachers need to be given adequate training and support to develop understanding and skills in teaching 21st century skills.

appropriate curriculum is an important factor in 21st century learning. The curriculum of the past may no longer be adequate to prepare students with the skills needed in the 21st century. The challenge in developing an appropriate curriculum requires identifying important skills and knowledge, integrating cross-disciplinary learning, and update the curriculum regularly in line with world developments. The curriculum must include 21st century skills, such as problem solving, creativity, collaboration and communication skills, as well as knowledge relevant to developments in technology, the environment and society. Curriculum development should involve participation from various stakeholders, including teachers, students, parents, and industry experts, to ensure that the curriculum reflects real-world needs and demands (Warsita, 2017).

Project-based and contextual learning is an approach that is needed in 21st century learning. The challenge in implementing this approach is creating a learning environment that encourages students to think critically, work collaboratively, and connect learning with real-world contexts. Teachers need to design projects that are challenging, appropriate, and meaningful for students, as well as provide the support and guidance needed in the learning process. It is also important to build connections between classroom learning and experiences outside the classroom, such as through field trips, internships, or collaboration with local communities and industry (Syafuruddin, 2024).

In addition, lifelong learning is important in 21st century learning. The challenge in developing lifelong learning is creating a culture of continuous learning, where students and teachers continuously develop their knowledge and skills. This involves independent learning, reflection and ongoing professional development for teachers. Teachers need to be examples for students in adopting a lifelong learner attitude and developing metacognitive skills that enable them to continuously learn, adapt, and thrive in a rapidly changing world. (Lestari & Iryanti, 2024).

So it can be concluded that 21st century learning presents a number of challenges that need to be overcome in order to prepare students with appropriate skills and knowledge for the future. Changes in the role of teachers, wise integration of technology, development of 21st century skills, appropriate curricula, project-based and contextual approaches, and lifelong learning are important focuses in developing 21st century learning. By overcoming these challenges, we will create an education system that is adequate to face the demands of an ever-growing world.

3. Methods for strengthening 21st century skills learning

In order to strengthen learning of 21st century skills, there are several methods that can be applied. The following are several methods that can be used to improve the development of 21st century skills in the educational sphere, including (Fikri et al., 2021) :

a. Project Based Learning

Project-based learning engages students in challenging, real-world projects. Students work collaboratively to identify problems, plan solutions, and produce products or results that can be used in everyday life. This method allows students to develop critical thinking, creativity, collaboration and communication skills.

b. Collaborative Learning

Collaborative learning involves students working as a team to achieve learning goals. Students interact with each other, share ideas, and learn from each other. This method allows students to build collaboration skills, effective communication, negotiation, and joint problem solving.

c. Problem Based Learning

The problem-based learning method involves students in identifying, analyzing, and solving real problems. Students learn through an in-depth process of investigation, research, and problem solving. This method allows students to develop problem solving, critical thinking, data analysis and innovation skills.

d. Technology Based Learning

The use of technology in learning can strengthen the development of 21st century skills. Students can use digital tools, online learning platforms, and other digital resources to access information, collaborate, and create products or works that relate to real-world contexts. This method allows students to develop digital literacy, technology problem solving, and *online collaboration skills*.

e. Game Based Learning

Game-based learning uses game elements in the learning context. Students learn through the challenges, scores, competitions, and rewards given in the game. This method can increase motivation, engagement, and skills such as problem solving, critical thinking, and teamwork.

f. Simulation Based Learning

Simulation-based learning methods involve students in practical experiences that simulate real situations. Students can use computer simulations, physical simulations, or social simulations to develop skills in a safe and controlled context. This method allows students to develop problem-solving skills, decision-making, and technical skills.

g. Independent Learning

Independent learning encourages students to take responsibility for their own learning. Students learn independently, manage time, select resources, and develop metacognitive skills. This method allows students to develop independence, initiative, and lifelong learning skills.

h. Contextual Learning

Contextual learning methods connect learning with real world contexts. Students learn through real-life experiences, field trips, internships, or collaborations with local communities and industry. This method allows students to develop a deep understanding of the connection between learning and their everyday lives.

i. Input and Feedback Based Learning

Providing constructive input and feedback is an important method in strengthening the learning of 21st century skills. Teachers can provide specific and actionable feedback to students to help them understand their strengths and areas that need improvement.

Additionally, students can also provide feedback to each other through collaboration and peer assessment. This method allows students to develop

reflection skills, an appreciation for diversity, and the ability to receive and give constructive feedback.

j. Life Skills Based Learning

Life skills learning involves developing skills appropriate for everyday life, such as communication skills, interpersonal skills, time management skills, and financial skills. This method allows students to develop skills that they can apply in various contexts of their lives.

4. Tips for preparing future generations to become leaders and innovators in the modern era

Preparing the next generation to become leaders and innovators in the modern era is essential to ensure a successful and sustainable future. Here are some tips that can help prepare the next generation (Hanipah et al., 2023) :

a. Focus on 21st Century Skills Development

21st century skills, such as critical thinking, creativity, effective communication, teamwork, and problem solving, are essential skills for future leaders and innovators. Encouraging and training future generations in the development of these skills will help them face challenges and exploit opportunities in the modern era.

Education must focus on developing 21st century skills through active, collaborative, and project-based learning approaches. Giving students the opportunity to think critically, confront real problems, and work in teams will help them develop skills that suit the demands of the modern world of work.

b. Supporting Creativity and Innovation

Creativity and innovation are the keys to solving complex problems and creating positive change in the modern era. Future generations need to be encouraged to think

outside the boundaries, come up with new ideas, and look for innovative solutions.

Education must provide space for exploration and experimentation, provide the means to encourage student creativity, and develop a mindset that is open to change. Engaging students in creative projects, design challenges, or arts-based experiences can help them develop the creative and innovative skills necessary to become future leaders and innovators.

c. Fostering Independence and Entrepreneurship

Future generations need to have strong independence and entrepreneurship to face an ever-changing world. They need to be able to take initiative, manage themselves, and overcome obstacles with agility.

Education should provide opportunities for students to develop their independence through independent study, individual project assignments, or independent work opportunities. Additionally, introducing students to entrepreneurial concepts and skills can help them see opportunities, develop business ideas, and learn about risk management.

d. Encourage Collaboration and Communication

Effective collaboration and communication are essential skills for future leaders and innovators. Encouraging the next generation to work in teams, listen to others' opinions, and communicate clearly and effectively will help them build strong relationships and achieve common goals.

Education should provide opportunities for students to collaborate on team projects, group discussions, or simulated real-life situations. Through this experience, students can learn how to contribute to a team, listen empathetically, and communicate effectively. Foreign language learning and the use of relevant communication technologies can also help

students develop strong communication skills.

e. Instilling Ethics and Leadership Values

Preparing the next generation to become leaders and innovators also involves instilling strong ethical and leadership values. They need to understand the importance of integrity, work ethics, social responsibility and inclusive leadership.

Education should help students understand these values through character studies, ethical discussions, and community service experiences that involve them in projects that have a positive impact on society. Through good role models and leadership development learning, students can learn to become effective and responsible leaders.

f. Integrating Technology and Digitalization

The modern era is characterized by rapid technological progress and digitalization. Preparing the next generation must include understanding and effectively utilizing technology. They need to develop digital literacy, an understanding of *cyber security*, and the right technology skills.

Education must integrate technology into the curriculum and daily learning. Providing access to technological devices, training in the use of digital tools, and teaching about technological ethics will help future generations to adapt to ongoing technological changes.

g. Building Global Awareness

The modern era is characterized by increasingly close global connectivity. Preparing the next generation to be leaders and innovators requires an understanding of global issues, cultural diversity, and cross-border cooperation.

Education should broaden students' horizons through the introduction of global studies, student exchanges, or collaboration with international institutions. Encouraging

students to learn about different cultures and perspectives and learn to work with people from diverse backgrounds will help them become inclusive and effective leaders in this modern, global era.

5. The positive impact of creative thinking and critical thinking in the 21st century

The positive impact of creative thinking and critical thinking in the 21st century can be expressed from the two points of view of creative thinking and critical thinking, both of which are clearly different.

a. Think creatively

Creative thinking is the ability to generate new ideas, see problems from different perspectives, and create innovative solutions. In the context of the 21st century, creative thinking is becoming increasingly important because the ever-changing and developing world requires fresh and innovative approaches to solving complex problems. The following are some of the positive impacts of creative thinking (Redhana, 2019) :

1) Innovative Solutions

Creative thinking allows humans to see problems from new angles and create innovative solutions. In a complex and rapidly changing world, the ability to think creatively allows us to find new approaches to facing existing challenges. For example, in the field of technology, creative thinking has resulted in innovations such as mobile applications, social media platforms, and *blockchain technology*. These innovative solutions have changed the way we interact, work and live every day.

2) New Product and Service Development

Creative thinking helps in the development of new products and services that suit people's needs and expectations. By spotting opportunities in the market and understanding consumer desires, creative

thinking enables innovators to create products that are better, more efficient, and more attractive to customers. For example, technology companies such as Apple and Tesla have succeeded in creating revolutionary products such as the iPhone and the Tesla electric car that combine technological innovation with attractive design.

3) Increased Efficiency

Creative thinking can also help increase efficiency in various areas of life. By looking at existing processes with a creative lens, we can identify new ways to increase efficiency, reduce costs, or avoid potentially costly mistakes. For example, in the manufacturing industry, creative thinking can lead to improvements in production flows, more efficient use of resources, and reduced waste.

4) Stimulation of Economic Growth

Creative thinking also has a positive impact in stimulating economic growth. Innovation and the creation of new products and services create new business opportunities that can create jobs, increase income and encourage economic development. For example, the technology industry in Silicon Valley has become a center for innovation and the creation of new jobs.

5) Successful Career Development

The ability to think creatively can be a valuable asset in developing a successful career in the 21st century. In an ever-changing work environment, the ability to think creatively allows individuals to adapt quickly, find innovative solutions, and face challenges with confidence. It can help individuals to advance in their careers and achieve professional success.

b. Critical thinking

Critical thinking is the ability to carefully analyze information, evaluate arguments, and make decisions based on logic and strong evidence. The following are

some of the positive impacts of critical thinking (Rahayu et al., 2022) :

1) Better Decision Making

Critical thinking helps individuals in making better decisions and informants. In an era of abundant information, the ability to analyze data, distinguish fact from opinion, evaluate arguments, and recognize bias can help individuals make smarter, more rational decisions. In business, critical thinking skills can help managers identify opportunities, overcome challenges, and make strategic decisions.

2) Information Filtering

In the digital era, there is a lot of information available quickly and easily. However, not all of this information is reliable or accurate. Critical thinking allows individuals to use rigorous evaluation skills in filtering information, identifying trustworthy sources, and avoiding the spread of false or misleading information. In social media and online news, critical thinking skills are becoming increasingly important to differentiate between fake news and legitimate news.

3) Effective Problem Solving

Critical thinking also helps in effective problem solving. With the ability to objectively analyze situations, identify weaknesses, and find ways to improve processes, individuals with critical thinking skills can overcome challenges in a more effective manner. These capabilities are invaluable in a variety of fields, such as business, technology, science, and public service.

4) Development of Strong Arguments

Critical thinking involves the ability to carefully evaluate arguments and develop strong, proven arguments. This allows individuals to convey their ideas with confidence, influence others, and participate in constructive discussions and debates. In a world that is globally connected and filled with complex debates, the ability to think critically is becoming

increasingly important in maintaining opinions that are based on facts and logic.

5) Improved Analytical Abilities

Critical thinking also helps in improving an individual's analytical skills. In the era of big data and analytics, the ability to analyze data, identify patterns, and draw meaningful conclusions is becoming increasingly important. Critical thinking allows individuals to look beyond raw data and apply analytical thinking in making informed decisions.

6) Deep Understanding

Critical thinking allows individuals to understand a topic in more depth. With the ability to evaluate information, ask relevant questions, and see different points of view, individuals can gain a more comprehensive understanding of an issue or concept that contributes to the development of broader knowledge and more critical thinking.

7) Constructive Self-Evaluation

Critical thinking also involves the ability to dig within oneself, recognize personal weaknesses and strengths, and conduct constructive self-evaluation. This ability allows individuals to continuously learn and develop, improve their skills, and overcome existing deficiencies. In a competitive world, the ability to conduct honest and critical self-evaluation is key to personal and professional growth.

Conclusion

Based on the discussion above, it can be concluded that 21st century skills, creative thinking and critical thinking are becoming increasingly important. Both are core capabilities that enable individuals to meet powerful challenges with innovative solutions and a rigorous analytical approach. Creative thinking involves the ability to think outside the box, generate new ideas, and find unique solutions to problems at hand. Meanwhile, critical thinking involves the ability to critically

analyze information, evaluate arguments, and make informed and rational decisions based on a deep understanding of the situation at hand. The two complement each other, forming the foundation for strong and comprehensive thinking.

In education, it is important for teachers and students to develop and strengthen both of these skills. Teachers need to adopt a learning approach that encourages students to think critically and creatively through project-based, problem-based and contextual learning. While students need to be encouraged to practice these skills in a variety of contexts and receive constructive feedback to improve their abilities. Thus, creative thinking and critical thinking skills are not only relevant for academic success, but also for success in professional and personal life in the 21st century.

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