



## English Learning and Innovation Skills in 21<sup>st</sup>: Implementation of Critical Thinking, Creativity, Communication, and Collaboration

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### ABSTRACT

This essay looks at how to improve English language learning through the application of critical thinking, creativity, communication, and teamwork abilities. Students are expected to be able to navigate life's obstacles on their own thanks to the skills they have acquired since, among other things, a generation raised in the 21st century that is inundated with "conveniences" that have two sides can have both beneficial and harmful effects. Training students in social skills and global awareness is the main reason for the need of utilizing critical thinking, creativity, communication, and collaboration learning abilities in education. These skills include problem-solving, communication, creativity and innovation, and cooperation. To provide students with the full range of talents and abilities necessary for a more affluent life, all of these competencies must be developed during the learning process.

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## **INTRODUCTION**

The 21st Century is full of information disclosure, known as the Century of globalization (Alex, 2019). The era known as "generation 4.0" of the industrial revolution began this century and is marked by heightened connectedness, interactivity, and the creation of digital systems, artificial intelligence, and virtual reality. Naturally, there have been many significant changes to human life, making it significantly different from that of the previous century. (Alfoudari et al., 2021). So many challenges exist because of the Industrial Revolution 4.0 as a form of development in the 21st Century (Purwanto et al., 2020). The boundaries between humans, robots, and other resources are becoming increasingly blurred, and information and the impact of communication technology is being seen in many aspects of life, including education in Indonesia.

The 21st-century educational landscape is beset with formidable obstacles. The Indonesian generation needs to be prepared for the improvements in information and communication technologies in public life by means of 21st-century education. (Nasar et al., 2023; Nuswantoro et al., 2023). Furthermore, education has emerged as a fundamental human necessity, and its significance has only grown in tandem with the advent of contemporary difficulties. Furthermore, investing in education is one way to raise the caliber of each individual, according to Melinda Puspita Sari Jaya et al. (2023). As students are the primary recipients of instruction at educational establishments, the goal of the learning process ought to be to assist students in improving their abilities. In any attempt to raise the standard of human life, education is essential since it serves to humanize people.

There is a central principle of learning initiated by Jennifer Nicholas that learning in the 21st Century must be learner-centered. Learners are no longer objects in Education but are included in the process of becoming subjects in learning. Schools, teachers, and students must also be able to collaborate with various parties to share experiences and information for learning development. Learning can also be related to students' real lives, so teachers should use methods that can encourage students to apply the knowledge, values, and beliefs they have gained in the educational process in the real world. 21st-century skills also prepare students to be involved in their social environment and various programs in the community (Hanadya et al., 2023; Hidayad et al., 2023).

The challenges educators face in the 21st Century are challenging because they are responsible for producing quality students who can compete globally. To ensure that students master the curriculum and acquire life skills, teachers provide their pupils with critical thinking, creativity, communication, and collaboration abilities. The American Association of Colleges for Teacher Education (AACTE) and the Partnership for 21st Century Skills have determined that critical thinking and problem-solving, creativity and invention, teamwork, and communication are 21st-century skills that students must master. (Choi & Chung, 2021). A rainbow scheme of 21st-century skills and knowledge that teachers or educators can integrate into learning in the 21st Century.

Another study conducted by (Priyatni & As'ari, 2019) on the abilities of Indonesian high school teachers in the Industrial Era's 21st-century classroom

According to 4.0, teachers of 21st-century learning must be more knowledgeable and proficient in technology than their pupils, thus it's important to give them the Critical Thinking, Creativity, Communication, and Collaboration skills that are essential for the 21st century. Given the foregoing, it is essential to be prepared for the challenges of the twenty-first century in order to adapt to the changing requirements of society, the requirement for certain skills and competencies, and the rapid growth of technology. It is essential that students comprehend the skills necessary for the twenty-first century. As a result, the purpose of this article is to clarify the difficulties facing the 21st century and the need of critical thinking, creativity, communication, and teamwork.

## **LITERATURE REVIEW**

### ***A. Implementation of 21st century skills***

In order to progress in this era and overcome hurdles, everyone must learn 21st century abilities for both their personal and professional lives. 21st century talent has been defined by several groups. The aggregate definitions from several organizations are nearly identical. The National Education Association refers to the 21st century talents as "The 4Cs" (n.d.).

The "4Cs" are collaboration, communication, creativity, and critical thinking. According to Ratnasari (2019), The capacity to carry out a range of analyses, assessments, evaluations, reconstructions, and decision-making processes that lead to rational and reasonable action is known as critical thinking skills. Topics, materials, and issues are taken into consideration through analysis, evaluation, and reconstruction exercises. (Hailikari et al., 2022). Creativity is the capacity to produce novel and inventive solutions to challenges, including the generation of novel and diverse ideas (Kapoor et al., 2020). Communication abilities are the capacity to explain new ideas, thoughts, facts, or knowledge both in writing and orally. Collaboration abilities include fluency, effective teamwork, respect for individual diversity, and a readiness to make the choices required to accomplish a shared objective (Dede, 2008; Schleischer, 2015).

Meanwhile, four categories are used in the 21st Century Skills Assessment and Teaching to group 21st century knowledge, attitudes, values and ethics (Sahlberg, 2007). There are many different ways to think, including learning, problem solving, creativity, invention, and metacognition. Second, teamwork, communication, and collaboration are examples of working practices. Third, communication, literacy, and general knowledge are all necessary skills for working in the information technology industry. Fourth, good life and career, civic involvement, social and personal responsibilities, and cultural knowledge and awareness are all aspects of global citizenship. The 21st-century skills graduates need to compete and succeed in the 21st century have been identified by the Partnership for 21st Century Skills (Elwood & MacLean, 2009). These skills can improve marketability, employability, and civic readiness.

### ***B. The main topics and themes of the 21st century***

Understanding important subjects and ideas is a must for all students in the twenty-first century. Among these fundamental subjects are the arts, mathematics, physics, economics, geography, history, citizenship, and government, in addition to English. Students need to master fundamental courses as well as interdisciplinary issues of the twenty-first century in order to gain a deeper understanding of the academic subject. An explanation of these transdisciplinary themes can be found below :

- **Global Consciousness**  
To become globally aware, one must (1) use 21st century skills to understand and address global issues; (2) learn from and work with people from different cultures, religions, and lifestyles in an atmosphere of mutual respect; and (3) engage in dialogue in personal, professional, and social contexts. Understanding other countries and cultures involves using a non-English language, being financially literate, economic, and business, and being an entrepreneur. (4) able to make responsible financial decisions for oneself, (5) understand the functioning of the economy in society, and (6) use entrepreneurial skills to increase output and career opportunities,
  - **Environmental literacy**  
Environmental literacy includes: (1) demonstrating knowledge and understanding of the environment and the factors that influence it; (2) demonstrate knowledge and understanding of people's impact on nature; (3) researching, analyzing and drawing appropriate conclusions about practical solutions to environmental problems; and (4) take individual and collective action to address environmental challenges.
  - **Social literacy**  
Actively participating in civic life to learn how government functions, exercising civic rights and obligations at the local, national, and international levels, and understanding the local and global effects of citizen decisions are examples of civic literacy.
- C. *Student Learning Outcomes in the 21st Century***
- **Communication & Collaboration**  
Creative thinking is developing new ideas, employing a variety of ways to concept development, and summarizing, evaluating, and assessing one's own ideas in order to maximize and improve creative endeavours. When working creatively with others, one needs to: (1) create, implement, and convey new ideas to others in an effective manner; (2) think freely and adapt to fresh viewpoints; (3) bring originality and novelty to the work and understand the bounds of accepting new ideas; and (4) view failure as a teaching opportunity. When putting innovation into practice, innovative concepts must be used to create positive outcomes.
  - **Critical thinking and problem-solving skills**  
Using a variety of reasoning techniques – both deductive and inductive – appropriate to the circumstances is part of practical thinking. To create products, systems thinking involves examining how different components

interact in complex systems. A person must (1) effectively analyze and evaluate arguments, evidence, statements, and beliefs; (2) analyze and evaluate alternative viewpoints; (3) synthesize and make connections between arguments and information; (4) interpret information and draw conclusions based on the best analysis; and (5) critically reflect on learning processes and experiences to make trade-offs and decisions. To overcome difficulties, one must first complete unusual challenges. Secondly, it is necessary to identify problems and formulate questions that explain many points of view and lead to better solutions.

- Effective communication includes the following: (1) the ability to articulate ideas and thoughts in a range of contexts and forms using written, spoken, and nonverbal communication skills; (2) the ability to listen well enough to understand what is being said; (3) the use of communications for a variety of purposes; (4) the use of various media and technologies and the assessment of their effects; and (5) the ability to communicate effectively in a variety of settings. Two characteristics of working with others include being productive and appreciating the contributions of each team member. Additional qualities include flexibility and a readiness to compromise in order to accomplish shared objectives, accepting accountability for teamwork, and appreciating the contributions of each team member.
- Information, media and technology skills  
Individuals living in the media and technological age are renowned for their capacity for teamwork, their quick adaptation to changes in information, media, and technology, and their simple access to a multitude of knowledge sources.
- Technology, Information and Communication (ICT) Skills  
To apply technology effectively, one must: (1) use it as a tool for idea research, organization, evaluation, and communication; (2) use social networks, digital technologies, and communication tools in an appropriate manner to access, manage, integrate, evaluate, and create information; and (3) understand the ethical and legal issues surrounding information technology.

## METHODOLOGY

This study demonstrates how a scenario links to an indicator or the current state of the field's findings using a descriptive qualitative research methodology. Descriptive data, such as written or spoken words, are produced by people or observed activities through a qualitative research procedure. In order to gather data and information for this study, interviewing and recording examinations of the pertinent data sources were employed (Libarkin et al., 2005; Lotto, 1986). This study draws on library research, accumulating in-depth information on one or more topics (Marshall & Rossman, 2014).

Both primary and secondary sources are used in this investigation. The reason it's called "library research" is that the information or resources required to finish the study can be obtained in books, dictionaries, encyclopaedias, periodicals, records, magazines, and other library-available publications. The

readings used in this investigation can be broadly categorized into two groups: (Huberman & Miles, 2002; Setiyadi, 2006): Textbooks, encyclopedias, monographs, and other comprehensive sources of reference that frequently include general notions and concepts; Journals, research bulletins, theses, and other sources can be used as specific references.

## **RESULT AND DISCUSSION**

### ***Result***

Many challenges face people in the 21st century; in addition to fundamental skills, people must possess high-level competencies to adapt to changes, capture and use technology, acquire knowledge by choosing, analyzing, and evaluating rapidly generated information, apply that knowledge in daily life, and transform it into products. The skills and competencies individuals must have in the information society are 21st-century skills (Hargreaves, 1994; Schleicher, 2015). Now, the 21st Century has arrived and presents the life of the world without borders. Technology is advancing at an accelerating rate, and life's obstacles are becoming more difficult. Those who aren't able to compete will eventually disappear. Challenges in the 21st Century require breakthrough thinking so that the output produced is quality and competes with an open world. The following are problems in the world of Education, namely: (1) the learning process that is too oriented to mastery of theory and memorization; (2) the demands of a curriculum that imposes so that learning is less contextual with the surrounding environment; (3) lack of monitoring of the quality of Education; (4) teacher professionalism (Tshibalo, 2007). Schools should teach life skills supported by a quality learning environment and adequate services (Lee et al., 2022; Lo et al., 2013). Students are expected to be able to handle obstacles in life on their own in the future thanks to the skills they have acquired. The 21st Century demands global skills in thinking, working, mastering technology, and being a citizen of the world. Education that emphasizes the potential of students as a whole is needed.

### ***Discussion***

Critical thinking, creativity, communication, and teamwork are among the 21st century abilities. To maintain their competitiveness in the global marketplace, pupils must be equipped with 21st-century abilities, or the ability to handle difficulties of the twenty-first century. Students are expected to be able to handle obstacles in life on their own in the future thanks to the skills they have acquired. Four competencies are essential for 21st-century work: digital literacy, creative thinking, efficient communication, and high output, according to Budiyanto et al. (2024). As per additional research, the primary objectives of employing critical thinking, creativity, communication, and cooperation abilities in the classroom are the enhancement of students' social skills and their awareness of the world. Critical thinking and problem-solving, creativity and innovation, communication, and teamwork are some of these abilities. (Bonar Siagian & M Bambang Purwanto, 2023). It was also discovered that globalization affects every facet of life, including society (Purwanto et al., 2023).

Giving pupils the 21st-century abilities they need to deal with difficult situations both now and in the future is the aim of education. (Purwanto, 2023).

Along with technological developments, various changes in competence (Purwanto, 2022). In the 21st Century Skills Framework, four essential competencies must be possessed in the 21st Century: Critical Thinking, Creativity, Communication, and Collaboration (Azhary & Ratmanida, 2021), including:

- 1) Critical thinking and problem solving: The ability to understand a problem or problems, link disparate facts until assumptions or points of view surface, and find answers to a situation at hand. Critical thinking abilities encompass the capacity to obtain, evaluate, acquire, and become proficient in (Bekteshi, 2017).
- 2) Creativity and innovation: The capacity to pose questions, think creatively, and dare to propose novel concepts and solutions. Learners who possess diverse thinking will further enhance their creativity and originality. Pupils need to be challenged to think creatively, adopt fresh perspectives, ask unconventional questions, strive to come up with answers, and give novel ideas and solutions. Individual success is what creatively skilled students will achieve (Afini et al., 2023).
- 3) Communication skill (communication ability): the capacity to influence and inspire people, express ideas succinctly and persuasively both in writing and when speaking, and use concise phrases to convey information. According to Happ (2013), communication ability is a person's skill in conveying a message that is clear and easily understood by the recipient of the message. Effective communication abilities are crucial in both the workplace and daily life. The 21st century offers opportunities for multilingual communication rather than monolingualism.
- 4) Ability to work Collaboration The ability to work together or collaborate with a team or co-worker. Practical collaboration skills must be accompanied by skills in building technology and social media to create a broader range of collaboration environments. In the learning process, collaboration is a type of cooperation where people support and enhance one another to carry out specified duties in order to achieve a predetermined goal, such as life and job skills or information media and technology. (Haryana et al., 2021).

Life and career skills refer to life and professional skills. This is the 21st-century skills system. 2) By "learning and innovation skills," We refer to the capacity for critical thought, problem-solving, creativity, innovation, collaboration, and communication. Critical thinking, creativity, communication, and teamwork are these four abilities. Information and abilities in technology Media are information media and technology abilities. Among these are ICT literacy, media literacy, and information literacy. This literacy is necessary for students to build technology-based learning both with and without networks. (Tohani & Aulia, 2022).

Students are utilized as learning subjects so they might acquire knowledge as effectively as possible; 21st-century pupils' features (Jefferson & Anderson,

2017; Kembara et al., 2019) are 1) Cooperative, creative, and inventive problem-solving, critical thinking, and communication abilities. 2) Possess the motivation and aptitude for ICT, new media, and digital literacy. 3) Adaptable and flexible programs. Skills that are decided in accordance with 21st-century living settings demonstrate the capabilities expected of humans with knowledge, skills, and equipment. It is expected of people in the twenty-first century to be able to adapt to changes and technological breakthroughs, locate their place in society, and select and assess knowledge from a wide range of sources and possess a high degree of skills and competences to use the knowledge they acquire in daily life and transform it into products (Maneen, 2016; Priyatni & As'ari, 2019; Thornhill-Miller et al., 2023).

## CONCLUSION

A modern and applied learning approach is required in the twenty-first century. Soft skills, such as critical thinking and problem-solving abilities, creative and innovative thinking abilities (creativity and innovation), communication abilities (communication), and collaboration abilities (collaboration), are the most important competencies required to meet the challenges of the twenty-first century. Soft skills are also necessary in order to access information, communicate, and solve problems. These four skills include critical thinking, creativity, communication, and teamwork. Everyone must improve their critical thinking, creativity, communication, and teamwork abilities in order to navigate life in the twenty-first century. The abilities that are required in the twenty-first century can be employed as a means of achieving a higher standard of living. Every type of knowledge needs to be cultivated during the educational process and imparted to students in order for them to graduate with full skills and talents that will pave the way for a more affluent existence.

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