

INTEGRATING 21st CENTURY SKILLS: CREATIVE THINKING, COMMUNICATION, COLLABORATION, AND CRITICAL THINKING IN THE EFL CLASSROOM

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Abstract

This study aims to describe how teachers incorporate 21st century skills, including creative thinking, communication, collaboration, and critical thinking into their lesson plans, explore the integration of these skills into English language teaching, and identify the challenges teachers face when integrating those skills in the classroom. This research was conducted at an Islamic Junior High School in Surakarta. The researchers used a qualitative approach with a descriptive method. The research instrument was information obtained through observations and interviews, as well as lesson plan guides made by teachers. The subjects of this study were one English teacher and two representatives of grade XI students. To analyze the data, four stages were employed: data collection, data reduction, data presentation, conclusion drawing, and verification. The results showed that 1) teachers had incorporated 21st century skills into the lesson plans they made. 2) Teachers have integrated 21st-century skills in the classroom well. 3) there are some challenges experienced by teachers when integrating 21st century skills in the classroom, such as the lack of motivation to learn English in students and the lack or limitations of school facilities to support success in integrating 21st century skills (creative thinking, communication, collaboration, and critical thinking) in EFL classes.

Keywords: *Education, 21st Century Skills, English Language, EFL Classroom*

1. INTRODUCTION

The 21st century is an era of globalization that is gaining significant attention because it enables easy interaction between people from anywhere in the world, marked by increasing interactivity, digital advancements, artificial intelligence, and virtual systems. The interrelationship between human resources, technology, and others affects various aspects of life, including education in Indonesia (Nurhayati et al., 2024). Thus, in the age of globalization and swift technological advancement, education is defined as a deliberate and

organized attempt to establish an enjoyable learning environment and process that motivates students to actively cultivate religious and spiritual attitudes, discipline, noble and admirable morals, skills, and socialization abilities (Jannah et al., 2021).

Technology and education must coexist in the 21st century for the expected innovative, creative, cooperative, and learner-centered learning outcomes to be realized. In the 21st century, students' talents are given equal weight to their cognitive abilities. In addition, the 21st century demands

student competencies that include expertise, ideas, and skills that can improve (Yusliani et al., 2019). Therefore, an adequate competency standard is needed. This aligns with Nurhalisah et al. (2022) that the latest competency standards are needed so that the characteristics of 21st century learning can be achieved. To achieve the predetermined goals, learning is carried out by involving teachers, students, and other learning tools that can increase interaction.

The Ministry of Education and Culture No. 22 of 2016 in Indonesia implemented the 2013 curriculum on process standards for primary and secondary education in 2016 to meet the needs of the 21st century. According to the opinion of Anggraini et al. (2020) the curriculum aims to equip students with 21st-century skills and prepare them for success after graduation. Teachers must modify their teaching strategies, models, and methods according to the characteristics of 21st-century generation learners to teach effectively. Many institutions, including an Islamic junior high school in Surakarta, have adopted the 2013 curriculum.

In recent studies, the integration of 21st-century skills, such as critical thinking, creativity, communication, and collaboration, into the classroom has become a focal point. However, while various studies have examined the implementation of these skills in different educational settings, the challenges faced by teachers in integrating these competencies into the curriculum remain underexplored. For instance, research by Anggraini et al. (2020) highlights the role of teachers in modifying their instructional methods, but does not fully address the obstacles they encounter, such as technological constraints and student engagement

issues. Therefore, further investigation is needed to understand how these skills can be effectively integrated into teaching practices and the specific challenges educators face in this process.

This study observed English teachers at an Islamic Junior High School in Surakarta who successfully integrated the 4C skills—critical thinking, creativity, communication, and collaboration—into English as a Foreign Language (EFL) instruction. However, teachers faced challenges such as limited access to technology, low student motivation, and low student engagement. This research aims to conduct a study focusing on how teachers integrate and implement 21st-century skills in the EFL classroom then identify the challenges teachers faced.

2. LITERATURE REVIEW

To achieve innovative, creative, collaborative, and learner-centered outcomes in the 21st century, technology and education must coexist. Students' talents are valued equally with their cognitive abilities, and the twenty-first century requires student competencies that include knowledge, concepts, and abilities that can be enhanced (Yusliani et al., 2019). As a result, a sufficient skill threshold is required. This aligns with the view of Nurhalisah et al. (2022) who emphasize the need for updated competency standards to meet the demands of 21st-century learning. In order to achieve predetermined goals, learning is carried out by involving teachers, students, and other learning materials that can improve interaction.

The 4Cs, or 21st-century skills, include critical thinking, creativity, communication, and collaboration. Critical thinking involves assessing arguments and analyzing data, while

creativity involves fostering new ideas and asking unusual questions. Communication and collaboration prepare students for global and digital interactions in work and international environments (Zubaidah, 2018). In addition, Indarta et al. (2022) stated that the 4Cs are soft skills that are more useful in everyday life than hard skills and should be applied in continuous learning through student-centered teaching and activities.

21st-century learning requires five key skills: communication, problem-solving, flexibility, creativity, and technology utilization (Ekizer & Yildirim, 2023). Teachers must create learning designs that align with these skills, ensuring student involvement and a focus on technology (Septikasari & Frasandy, 2018). Technology can enhance English language learning by encouraging collaboration and improving communication between educators and students. However, many schools lack adequate access to technology, hindering the successful implementation of technology-based approaches. Therefore, teachers must develop tailored learning models to cater to these needs.

Teaching English as a foreign language (EFL) requires integrating 21st-century skills such as creative thinking, critical thinking, and effective communication (Richards, 2015). According to a study by Cahyaningrum (2017), the absence of standards and student motivation made learning English difficult. To improve language use, the classroom environment should encourage meaningful English interactions. The use of technology in English language teaching requires ongoing teacher training and adequate infrastructure support (Saavedra & Opfer, 2012). Educators should also receive training on designing

educational environments that encourage innovation, teamwork, and problem-solving. Many English teachers struggle to incorporate these skills into lesson plans due to a lack of knowledge and proper training (Albahlal, 2019).

Meanwhile, Nurhayati et al. (2024) suggested that teachers create learning support components such as curriculum, lesson plans, and integrated models to encourage students to apply their education to real-world situations. They should avoid traditional learning tactics and provide engaging technology-based activities. This agrees with Tarihoran (2019), who stated that the responsibility of teachers in the 21st century is to develop students' social and emotional intelligence, prepare them for the future, and measure success through communication, problem-solving, flexibility, innovation, and adaptability.

In the 21st century, teachers must adopt learning models such as Program-Based Learning (PBL) and Project-Based Learning (PJBL) to improve critical thinking, creativity, communication, and collaboration skills. As revealed by Daga et al. (2024), PBL learning models can improve student communication and creativity, while PJBL improves learning outcomes by increasing creativity, critical thinking, and independence. These approaches can improve the learning atmosphere and make it easier for students to understand the information conveyed by the teacher.

From the above research, the research conducted by Albahlal (2019) with title Integration of 21st Century Skills into English had differences and similarities with this study. The similarity between previous research and this study is that both incorporate

21st-century skills into English language learning. The difference is that the research only focuses on investigating 21st-century skills reported in the relevant literature and reviews the roles and locations of 21st-century skills in EFL classrooms.

The following study was carried out by Pratama, Cahyono, and Aggraito (2019) using the Problem-Based Learning Model to assess junior high school students' critical thinking and communication skills. The results showed that during the learning process, students still struggle to analyze the problems given by the teacher and still think in rather basic terms, so they cannot achieve the learning objectives. They struggle when assigned to create posters or props, resulting in a performance that falls short of expectations. Both of these studies employed problem-based learning as a classroom learning methodology, which is one of their commonalities.

3. RESEARCH METHOD

This research used a qualitative approach with descriptive methods. According to Creswell (2018) qualitative research is a method for understanding the meaning given by people or groups to social or human issues. This method involves questions that arise, data from the participant's environment, inductive data analysis, and the researcher's judgment of the significance of the data. The participants advocated an inductive approach, personal meaning, and the importance of revealing the complexity of a situation. This study was carried out in the Islamic Junior High School in Surakarta. The main topic in this study is integrating 21st-century skills (creative thinking, communication, collaboration, and critical thinking) in the EFL classroom. English teachers

apply the 4Cs in English teaching and identify the challenges faced by teachers when implementing 21st-century skills in the classroom.

The observations were carried out before and during the classroom teaching. Prior to teaching, the researchers observed how the English teacher designed the lesson plan (RPP), including learning objectives, teaching methods, and the planned activities aimed at fostering students' 4C skills. During the classroom activities, the researchers observed how those plans were implemented, how students responded to group work, classroom discussions, presentations, and how actively they participated. Notes were taken regarding students' level of engagement and whether the planned 4C-based activities were successfully realized in class. The researchers also identified several challenges faced during implementation, such as limited time and varying student motivation.

To ensure the validity of the study results, the researchers increased their engagement, conducted continuous observation, held interviews, used triangulation techniques, and referred to supporting materials such as books, audio recordings, and documents. To analyze the data, researchers used descriptive qualitative data analysis methods, which began with selecting data and simplifying it, then presenting the data by compiling information obtained from observation transcripts, interviews, and documents, and the next stage was concluding.

4. RESULTS AND DISCUSSION

4.1. Integrating the 4Cs into lesson plans

In the designed lesson plan, it was seen that the teacher asked learners to observe videos or pictures shown on the projector screen. Then learners analyze

the social function, text structure, and linguistic elements of the procedure text. In this session, learners are free to express their ideas related to the topic. This encouraged learners to think freely and generate ideas without fear of being criticized. Another activity seen is that the teacher asked learners to create and assemble words, phrases, or sentences into a text in the form of text procedures that are by the language structure and linguistic elements.

The purpose of teachers integrating 4C skills in each innovative content is so that students can develop learning concepts in a fun way and encourage students to think systematically and creatively. For the creative thinking content to be realized, the teacher assigns students to make a short video with their group related to the procedure text material using English.

The visible communication content was that learners debate and discuss with the teacher or peers related information in the form of images or videos that have been observed from the procedure text. As a result, students learn to accept one another's viewpoints, develop their listening skills, and get the confidence to voice their thoughts. The second activity seen is that learners are asked to create a procedure text and present it in front of the class with their group in English. This innovative content integrated by the teacher aims to train learners' skills in conveying ideas orally, confidently, and structurally.

Third, the integrated content of collaboration was seen when the teacher asks learners to form small groups to determine, compare, and arrange some pictures and sentences based on the social function and text structure related to procedure text (manual/recipe). In addition, the teacher assigns learners to their groups to work together to design a short video showing the steps of their

procedure text. Integrating this collaborative content aims to develop the ability to work together in solving problems, sharing tasks, and supporting each other to achieve common goals.

Another innovative aspect of collaboration that was evident is that students were asked, in groups, to create a procedural text based on the tool they have chosen, with full responsibility. This activity is realized through the tasks assigned by the teacher. The students, along with their groups, are given two worksheets to complete together. The goal is to enhance collaboration skills, planning, and coordination in facing challenges together.

The critical thinking content integrated into the core activity was evident when students discussed several questions prepared by the teacher related to the video or image of the procedural text shown through the projector. Additionally, students observe and gather information from various learning sources that can build knowledge and support their analysis. The purpose of this is to sharpen students' ability to assess various factors involved in a problem, find logical solutions, and develop their ability to evaluate the quality of information, recognize bias, and develop skills to seek more valid information.

Another evident activity was when students worked on evaluation questions through the Quizizz link provided by the teacher. This is done to encourage students to think logically and systematically in solving problems, as well as developing skills in evaluating and selecting the best solution.

According to the findings from the researchers' observations and the lesson plans developed by the ninth-grade teachers at the first Islamic school Surakarta, the lesson plan has been

revised to incorporate learning activities that align with the 4C competencies. These conclusions are based on interviews conducted with English teachers:

“I use the K13 curriculum for my lesson plans for grades IX and VII, and the structure is in line with it as well. As for grade VII, I apply the independent learning curriculum. In this curriculum, I do not prepare lesson plans but use learning modules provided by the government. For the K13 curriculum, I prepare complete lesson plans for two meetings. When preparing the lesson plan, I also determine the learning model or method that can integrate the 4Cs appropriately. To ensure students actively participate in the learning process, it is appropriate to create a project for them based on the procedure text material; therefore, I use the PjBL learning model”.

From the exposure of the results of the integration of lesson plans above, it can be concluded that when preparing lesson plans, teachers always choose what learning models or methods are in accordance with the material to be taught. In this text procedure material, teachers use Project-Based Learning (PjBL) and Problem-Based Learning (PBL) learning models. The teacher utilizes the PjBL model in this text material to enhance student engagement in learning while also determining the learning model and technology tools to be used. In this text procedure material, teachers utilize technology such as smartphones, laptops, and projectors. The use of smartphones is only during lesson time; students can search for additional information, make videos, and collect assignments. The smartphones are returned at the end of the course. Teachers use laptops to make it easier to remember notes or supporting information needed for

presentations. To facilitate the delivery and display of PowerPoint in the form of visuals or videos on text procedural content, teachers utilize projectors.

The analysis of the data above leads to the conclusion that making lesson plans entails more than just assembling them. However, it must be syllabus-guided, effective, and efficient; adhere to the proper learning model; and take into account the technological instruments employed and their application. This is confirmed by Zaitun's (2018) research, which states that lesson plans are essential for systematic learning activities and goal achievement. Without a solid strategy, learning becomes unfocused.

4.2. English Teachers Apply the 4Cs in English Teaching Creative Thinking Skills

The result of implementing the first creative thinking skills indicator listed in the lesson plan involved students in creating new and useful things. This ability was evident when students viewed various examples of procedure texts shown on the projector screen. Then, the teacher asks the learners to organize and compare the differences between two procedure texts (manual/recipe) based on social function, generic structure, and linguistic features. The teacher gives a homework assignment to improve students' creativity skills. Students are directed to create a video related to the content of the procedure text with the prearranged group. They are granted creative liberty while producing the videos. However, the teacher emphasizes that it must be based on the structure and characteristics of the procedure text.

The implementation of creativity skills indicators in the second class was observed when the instructor instructed

students to arrange the images from the provided worksheet in the correct order to create a procedure text. Students are then instructed to work in groups to discuss the film created and complete the table on the instructor-prepared worksheet. In the classroom, educators need to foster an environment that encourages creativity and innovation to practice these skills.

In this text procedure material, it is very appropriate to integrate creativity and collaboration skills because the project tasks given and joint discussions can improve creativity skills in students. This finding bolsters the idea put out by Zubaidah (2018) that allowing pupils to think in different ways will foster their creativity. It is important to encourage students to think creatively, ask unconventional questions, try to come up with speculative answers, and have opportunities to come up with fresh ideas and solutions. Other research discussing creative thinking was also revealed by Arianti and Pramudita (2022) that learning exercises and other activities can help students develop their creative thinking skills. For example, teaching them to think creatively by approaching problems from their point of view can help them generate ideas for suitable alternative problem-solving.

Communication skills

The outcomes of implementing the first indicator of communication skills were evident when students listened to the teacher explaining the material they would study. This can motivate learners to become attentive listeners and show respect for others. Engage in group discussions with classmates or with the teacher regarding the procedure text video they watched in English: 'What do you observe in the picture?', 'Have you ever utilized it?', 'Do you know how to

operate it?'. However, not all individuals possess strong communication skills. Some students may sometimes articulate their thoughts verbally but struggle with written expression, or vice versa.

The implementation of the second indicator of communication skills was seen when students presented the results of the procedure text they made in front of the class with their group. Teachers always instructed students to use English when discussing with teachers or peers and when presenting in front of the class. This will help pupils develop their English-speaking abilities while also encouraging a brave mindset. The teacher often uses writing exercises to help students communicate better. Students were required to compose a procedural text by writing and stringing words together.

This supports the theory expressed by Lestari and Hindun (2023). In addition to listening and understanding what others say, communication skills also include the ability to express thoughts, facts, and views clearly and effectively. This includes the ability to speak in public, write, and discuss in an educational setting. Other research discussing communication skills was revealed by Partono et al. (2021), which stated that when in class, teachers must foster comfortable communication between students about lessons and topics because students' language affects their understanding. Abusive language can lead to miscommunication, confrontation, and negative behavior, as the recipient of the message may have difficulty understanding the message. Therefore, teachers should encourage students to use polite language during lessons.

Collaboration skills

The results of the implementation of the first collaboration skills indicator were seen when the teacher asked learners to form small groups of 4-5 people to complete the task of making a procedure text video and then uploading it to the YouTube channel. Students had to work together with their classmates to complete a project that ended with the creation of a product during the PjBL stages. The teacher conducts discussions with students related to videos and images displayed through the projector. Students' cooperation skills also include more obvious behaviors like respecting one another, participating in the activity, and tolerating others' viewpoints. When students collaborate in groups to compose procedure texts using tools from their environment that they have thoughtfully chosen, they showcase the implementation of the second indication of collaboration skills. Another visible activity is that the teacher gave an assessment task by asking students to work on evaluation questions on the Quizizz link that has been provided. Although the teacher has used cooperation skills effectively. Students had difficulty completing the evaluation task given by the teacher because the session only lasted for two hours and was interrupted by Dhuha prayers, so the task had to be completed at home.

Collaborative learning creates a robust learning environment. Independent expression, communication, data-driven defense, and production of ideas are essential for learners. By using a project-based learning model, the application of collaboration skills can run smoothly. According to research conducted by Mashudi (2021) states that through freedom of opinion and even dissent, learner-centered learning seeks to

produce new knowledge. This education helps students learn how to accept other people's differences in the social environment. Other research discussing similar matters was conducted by Redhana (2019) states that working with others includes (1) being able to work efficiently and respect different team members, (2) being adaptable and willing to make concessions to achieve common goals, and (3) being responsible in collaborative work and valuing the contributions of all team members.

Critical Thinking Skills

The results of the implementation of the first critical thinking skills indicator in the classroom involved students solving problems. Activities were seen by the teacher and learners discussing the images displayed through the projector screen with several questions given: 'What do you find in the picture?', 'Have you ever used it?', and 'Do you know how to use it?'. Responding to inquiries or expressing comments demonstrates that students comprehend the subject matter they will be studying. Answering questions or expressing opinions demonstrates that students comprehend the subject matter being covered. Teachers ensure students understand the material by answering questions and providing opinions, while also valuing and respecting each other's opinions. They monitor student activity by going around the class and provide opportunities for learners to explore information from various sources, enhancing their knowledge and analysis.

The second demonstration of critical thinking skills was observed when students worked in groups to complete the assignments provided by the teacher. Students received two worksheets. The first worksheet

required them to arrange the images in the correct sequence to create a procedure text. The second worksheet, based on the video produced by the group, asked students to discuss and fill in the table. Afterward, students presented their findings in front of the class and engaged in a discussion to express their individual opinions.

Project-based learning is the most effective method for developing critical thinking and problem-solving skills, as it encourages students to be actively involved in answering questions and solving problems, which can be further enhanced by the complexity of the task. This activity supports the theory from Arnyana (2019) that problem formulation, argumentation, deduction, induction, evaluation, and decision-making are aspects of critical thinking. Learning whose grammar develops each element of critical thinking skills is one type of learning that can help build critical thinking skills. Widodo and Wardani's (2020) study supports this assertion. It is considered that expressing arguments supported by reasoning is a fundamental aspect of critical thinking. The brain needs to be trained to concentrate to adapt to critical thinking, as accurate information serves as the foundation for it, and understanding cannot be achieved without focus and attention.

3.4. The Challenges of Implementing 21st Century Skills that Teachers Face in The Classroom.

Limited Resources and Technology

There are many factors that teachers experience when teaching in the classroom, including a lack of resources. One of the challenges teachers faced when adopting 4C skills is inadequate school infrastructure, which reduces teaching effectiveness. Projectors are a common tool that

teachers use to help students learn. Teachers can make teaching easier and student learning easier with the addition of projectors. Teachers have to take turns using the projector which is less supportive.

The internet network in the classrooms of Islamic Junior High School Surakarta already supports computers in the classroom, and students are only allowed to use their cell phones with permission from their teachers. However, not all students carry cell phones. Some still share their cell phones with their parents or younger siblings, or their parents forbid them to bring them. Therefore, those who did not have cell phones also had difficulties when it came to finding more information or solving Quizzi questions. As a solution, the instructor allowed them to take turns with their peers or those who had already completed the task. To shorten the working time, the instructor occasionally gave them a cell phone.

Lack of Student's Motivation

Teaching English in the classroom presents difficulties for teachers in addition to the problem of inadequate resources. Examples are students' low motivation to learn and their belief that English is a challenging subject. Therefore, teachers are tasked with creating a friendly, safe, and stimulating learning environment. As they influence students' motivation to learn, teachers should also have a positive personality and strong academic credentials. In addition, building close relationships with students is essential to liven up the classroom atmosphere.

Limited Experience and Teachers' Knowledge

Many educators lack the knowledge and expertise necessary to use 21st-

century abilities. This can be the result of inadequate training or a lack of knowledge about the most efficient ways to teach certain abilities. Teachers must get ongoing education and training in 21st-century skills. Project-based learning, technology use, and other interactive teaching strategies that foster the growth of critical and creative thinking, teamwork, and communication skills in the classroom can all be incorporated into this program.

5. CONCLUSION

This research examined the integration of 21st-century skills into EFL courses, including critical thinking, communication, collaboration, and creative thinking. Based on the study, the teacher's lesson plan includes 21st-century abilities. Secondly, it is expected that instructing students in 21st-century skills will enhance their abilities in critical thinking, communication, collaboration, and creative thinking. However, teachers face several difficulties when attempting to successfully integrate 21st-century skills in EFL classes. These difficulties include students' lack of motivation to learn English and the absence or restriction of school facilities.

Future research should expand beyond the current focus on integrating 21st-century skills into EFL classrooms. Researchers could explore the role of digital tools, online learning, or technology-based applications in enhancing 4C integration. Investigating different educational settings, such as urban versus rural locations, and examining approaches like challenge-based learning, increased participation, or flipped classrooms could provide valuable insights into improving 4C integration in EFL education.

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