21st Century Skills in English Language Teaching: A Study at SMPN 27 Makassar

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ABSTRACT

21st century education focuses not only on mastering academic knowledge but also on developing essential skills to face the dynamics of an ever-evolving world. This study aims to explore the application of 21st century skills in teaching English at SMPN 27 Makassar, Indonesia, and to identify the strategies used by teachers and the challenges they face. This study used a qualitative descriptive method, using a sample of two English teachers at SMPN 27 Makassar to provide in-depth insights into their teaching practices. Data were collected through observation checklists, semi-structured interviews, and documentation to ensure a comprehensive understanding of classroom dynamics and teaching approaches. The results revealed that both teachers predominantly used cooperative learning strategies, particularly the Jigsaw method, to encourage collaboration, communication, and active participation among students. In addition, this study highlighted the importance of integrating critical thinking, creativity, communication, and collaboration as key components of 21st century skills in enhancing students' engagement and comprehension of English. However, several challenges were identified, including time constraints, limited access to adequate teaching facilities and resources, and varying levels of students' language proficiency, which pose significant barriers to the effective implementation of these skills. Despite these challenges, teachers demonstrated adaptability by modifying their teaching techniques to better suit students' needs and maximize learning outcomes. This study underscores the need for ongoing professional development programs that focus on 21st-century pedagogy, as well as increased institutional support and investment in educational resources. By addressing these factors, SMPN 27 Makassar can better prepare its students for the demands of the modern world, ensuring that they not only master academic content but also develop the essential skills needed for lifelong learning and future success. This study provides valuable insights for

educators and policymakers aiming to improve English language teaching through the integration of 21st-century skills in Indonesian secondary schools.

Keywords: 21st Century Skills; English Language Teaching; Teacher Strategies; Challenges

INTRODUCTION

In an era of globalization and rapid technological advancement, education must evolve to equip students with the skills needed to thrive in the 21st century. Integrating 21st-century skills (critical thinking, communication, collaboration, and creativity) into the curriculum is essential to preparing students for the challenges of the future. These skills are not just add-ons; they are fundamental competencies that students must develop to navigate the complexities of modern life and work. The 21st century is characterized by a fast-paced, interconnected world where individuals are required to navigate complex problems and collaborate with diverse groups. Traditional educational approaches, which often emphasize rote learning and passive learning, are increasingly inadequate in developing the skills needed to succeed in this dynamic environment. Research by the OECD (2018) highlights the importance of equipping students with competencies that go beyond academic knowledge, emphasizing the need for a holistic approach to education that nurtures cognitive and social skills.

In addition, the advent of the digital age has changed the way information is accessed and processed. Today's students are bombarded with vast amounts of information from a variety of sources, making it essential for them to develop critical thinking skills to effectively evaluate and synthesize this information. The ability to communicate ideas clearly and collaborate with others in a variety of settings has become a prerequisite for success in both academic and professional settings. In this context, the role of educators is crucial; they must not only impart knowledge but also facilitate the development of these essential skills. The urgency to integrate 21st-century skills into education is further underscored by the demands of the global job market. Employers are increasingly seeking individuals who can think critically, collaborate, and communicate effectively. A report by the World Economic Forum (2020) suggests that skills such as problem-solving, creativity, and emotional intelligence are among the key skills needed for the future workforce. This shift requires a re-evaluation of teaching methodologies and curriculum frameworks to ensure that students are fully prepared for the challenges they will face in their careers and personal lives.

In Indonesia, the implementation of the 2013 Curriculum aims to address these challenges by promoting a more student-centered approach that encourages active learning and the development of 21st-century skills. However, the effectiveness of this curriculum in practice is still a topic of discussion, as many teachers face obstacles in its implementation, including limited resources, inadequate training, and varying levels of student readiness. Previous research has shown that traditional

teaching methods often fail to develop these skills, creating an urgent need for innovative pedagogical approaches. For example, Bolat & Deneme (2024) found that teachers in secondary schools often struggle to incorporate these skills due to lack of training and resources. Similarly, Kurniati et al. (2024) highlighted the importance of collaborative learning in developing critical thinking and communication skills among students. Furthermore, Azhary & Ratmanida (2021) emphasized the need for innovative teaching methods, such as project-based learning, to enhance student engagement and creativity in language learning.

Despite these insights, a significant research gap remains in understanding the specific strategies employed by teachers in integrating 21st-century skills into English language teaching, particularly in the context of SMPN 27 Makassar. Previous studies have primarily focused on identifying challenges and the necessity for innovative methods, but they have not thoroughly examined the practical approaches that educators are currently using or the contextual factors influencing their implementation. Additionally, there is a lack of comprehensive analysis regarding how these strategies impact student engagement and skill development in real classroom settings. This paper aims to explore the implementation of 21st-century skills in English language teaching at SMPN 27 Makassar, focusing on the strategies used by teachers and the challenges they face. By addressing this research gap, the study seeks to provide insights that can inform educational practice and policymaking in Indonesia.

Ultimately, understanding how teachers navigate the integration of these essential skills into their teaching practices is critical to developing effective educational strategies that are aligned with the demands of the 21st century. This study aims not only to highlight successful practices but also to identify areas for improvement, ensuring that students are well-equipped to thrive in an increasingly competitive and interconnected global landscape. By highlighting the experiences and challenges faced by educators, this study aims to contribute to a deeper understanding of the educational landscape in Indonesia and to advocate for the necessary support and resources that can improve the teaching and learning experience.

What is new in this study is its specific focus on the practical strategies used by English teachers at SMPN 27 Makassar to integrate 21st-century skills into their teaching practice, a topic that has not been widely explored in previous studies. While previous studies have mainly examined challenges or suggested theoretical approaches, this study provides a contextual analysis of how these skills are actually implemented in real classrooms. It also investigates factors that influence their integration, such as institutional support, teacher perceptions, and student engagement. This practical orientation not only fills a gap in the literature but also offers fundamental insights for improving educational strategies in similar contexts.

The findings of this study have the potential to inform educational practice not only at the school level but also at the regional and national levels. By identifying

effective strategies and common challenges in the field, this study can serve as a valuable reference for policy makers, curriculum developers, and teacher training institutions. In particular, this study can contribute to the formulation of professional development programs that better equip teachers to develop 21st-century competencies. The results can also help schools across Indonesia adopt evidence-based practices to improve English language education to align with the demands of the modern world.

LITERATURE REVIEW

Previous Related Study

Several studies have explored the integration of 21st century skills in educational settings, particularly in language teaching. For example, Bolat & Deneme (2024) conducted a study on the challenges faced by secondary school teachers when trying to incorporate 21st century skills into their English language teaching. Their findings indicated that many teachers lacked adequate training and resources, which hampered their ability to effectively implement these skills in the classroom. Similarly, Kurniati et al. (2024) examined educators' efforts to implement 21st century learning principles in English language education. Their study highlighted the importance of collaborative learning strategies in fostering critical thinking and communication skills among students. The study emphasized that teachers who actively engaged students in group work and project-based learning were more successful in developing these essential competencies. Azhary & Ratmanida (2021) also contributed to the discourse by investigating the role of innovative teaching methods in enhancing student engagement and creativity in language learning. Their study underscored the need to move beyond traditional teaching approaches to incorporate more interactive and student-centered practices that are in line with the demands of the 21st century. These studies collectively illustrate the urgent need for educators to adapt their teaching methodologies to better prepare students for the complexities of modern society. They also highlight the challenges teachers face in this endeavor, including inadequate training, lack of resources, and the need for supportive educational environments.

Constructivist Learning Theory

The theoretical framework for the strategies used by teachers in this study is based on constructivist learning theory. Constructivist theory states that knowledge is constructed through social interaction and collaboration, and emphasizes the importance of active learning. According to Vygotsky (1978), learning is essentially a social process, and students learn most effectively when they engage in meaningful interactions with peers and teachers. This theory supports the use of cooperative learning strategies, as it encourages students to work together, share ideas, and develop critical thinking skills.

In addition, the challenges faced by teachers in implementing 21st century skills are explained through the lens of Bandura's self-efficacy theory. Self-Efficacy Refers to an individual's belief in their ability to succeed in a given situation or complete a given task (Bandura, 1997). In the context of this study, teachers' self-efficacy has a significant impact on their ability to overcome obstacles when implementing 21st century skills. Teachers with high levels of self-efficacy tend to be more resilient in facing challenges and are more able to implement innovative teaching strategies effectively, while teachers with low self-efficacy may have difficulty in adopting new learning approaches.

Furthermore, the theory of 21st century skills is also an important part of this theoretical framework. According to the Framework for 21st Century Learning developed by the Partnership for 21st Century Skills (P21, 2009), 21st century teachers not only act as material deliverers, but also as facilitators, collaborators, and mentors who are able to create a learning environment that supports the development of critical thinking, communication, collaboration, and creativity (4C) skills. Teachers need to master pedagogical content knowledge that is tailored to the needs of the 21st century and be able to utilize information technology to support learning. Trilling & Fadel (2009) also emphasize that teachers must have the competence to apply flexible and adaptive learning methods in a learning environment that is constantly changing and challenging.

By examining the intersection of constructivism theory, self-ability theory, and 21st century skills theory, this study aims to provide a comprehensive understanding of how teachers at SMPN 27 Makassar implement 21st century skills in their English teaching practices. This theoretical framework will serve as a basis for analyzing the collected data and help explain the complexity of developing these essential skills in the classroom.

METHOD

Design and Samples

This study used a qualitative design that was very effective in exploring the implementation of 21st century skills in English language teaching. The focus of this study was on two English teachers at SMPN 27 Makassar who were selected as the sample of this study. The selection of these teachers was based on certain criteria, including their experience in teaching English and their demonstrated commitment to integrating 21st century skills into their curriculum. The qualitative design allowed for an in-depth exploration of teachers' strategies and challenges in implementing 21st century skills. Using non-participant observation, the researcher will collect data on classroom practices without interacting with the teachers or students, ensuring an objective assessment of how these skills are integrated into the learning environment. In addition, interviews will be conducted with the selected teachers to gain insight into the strategies, and challenges they face in implementing these skills in their teaching. A purposive sampling technique was

used to select participants, ensuring that the selected teachers met the criteria required for this study. This approach allows for a focused investigation of the specific experiences and practices of teachers who are actively involved in integrating 21st century skills into their English language teaching. By focusing on these two teachers, this study aims to provide a comprehensive understanding of the complexities involved in developing 21st century skills in the classroom at SMPN 27 Makassar. Overall, the qualitative design and carefully selected sample will facilitate an in-depth exploration of the current state of English language education and the effective integration of 21st century skills, providing valuable insights for the field of education.

Instrument and Procedure

The data in this study were collected through three main instruments: an observation checklist, a semi-structured interview guide, and documentation. These instruments were selected to provide a comprehensive understanding of how English teachers at SMPN 27 Makassar apply 21st-century skills in their teaching practices and to explore the challenges they encounter. Data collection began with non-participant classroom observation, during which the researcher used a systematically developed observation checklist. This checklist focused on four key 21st-century skills: critical thinking, communication, collaboration, and creativity. The researcher observed selected English teachers as they conducted lessons and used the checklist to mark observed behaviors and strategies related to these skills. This method allowed for direct documentation of how the targeted skills were integrated into classroom instruction without disrupting the natural learning environment (Sugiyono, 2018).

Following the classroom observation, semi-structured interviews were conducted with the same English teachers. The interview questions were designed to explore three main aspects: the strategies used by teachers to integrate 21st-century skills, and the challenges they faced during implementation. Each interview lasted approximately 30 to 45 minutes and was recorded with the teachers' consent to ensure accurate transcription and analysis. The semi-structured format offered flexibility, allowing the interviewer to probe deeper into specific responses based on the flow of conversation (Sugiyono, 2018).

In addition to observations and interviews, the researcher also collected relevant documentation to support the findings. This included photographs of classroom activities that demonstrated the use of 21st-century skills, as well as video and audio recordings of the interviews. These materials were used to provide contextual background and to triangulate the data collected from the other instruments (Sugiyono, 2018). The participants in this study were English teachers at SMPN 27 Makassar, selected through purposive sampling. This technique was chosen because it enabled the researcher to focus on participants who met specific criteria relevant to the study, such as experience in teaching English and active involvement in the application of 21st-century skills in their teaching practices.

Data Analysis

In this study, the researcher used a qualitative data analysis approach to examine the implementation of 21st Century Skills in English Language Teaching at SMPN 27 Makassar. The analysis process began with data reduction, where the researcher simplified and systematically organized the collected data. Classroom observations were conducted using a checklist to document the strategies used by teachers in integrating critical thinking, communication, collaboration, and creativity skills into their teaching practices. Recorded observations were filtered to focus on significant findings, ensuring that only relevant information was included for further analysis.

After data reduction, the researcher engaged in data presentation, organizing information into thematic categories that facilitated understanding. The findings were presented in a descriptive narrative format, summarizing key observations, quotes from teacher interviews, and document analysis. This structured presentation allowed for clearer interpretation of the results, highlighting the various strategies used by teachers and their perceptions of the importance of 21st Century Skills in the learning process.

The final stage of analysis involved drawing conclusions, where the researcher interpreted the results and formulated key findings. This included linking the findings to relevant theoretical frameworks on 21st Century Skills and pedagogical practices, thereby analyzing how strategies implemented by teachers impact student learning and engagement. To enhance the validity of the findings, triangulation was used, utilizing multiple data sources, including observations, interviews, and documentation. This comprehensive approach provided a deeper understanding of the strategies and challenges faced by teachers in integrating 21st Century Skills into their curriculum. Thematic analysis revealed key themes such as the importance of collaboration, the role of technology in enhancing learning experiences, and challenges related to student engagement and confidence. Through this rigorous analysis process, the researcher was able to draw meaningful conclusions about the integration of 21st Century Skills in English Language Teaching at SMPN 27 Makassar.

RESULT AND DISUSSION

This section describes the results of qualitative data analysis obtained through interviews and classroom observations of two English teachers at SMPN 27 Makassar. The focus is on how teachers apply 21st century skills, namely critical thinking, communication, collaboration, and creativity (4C) in English teaching and the challenges they face in implementing 21st century skills.

Implementation Strategies of 21st-Century Skills

Based on the results of interviews and classroom observations, both teachers implemented the Jigsaw cooperative learning strategy in integrating 21st-century skills. This strategy was implemented through four systematic stages that support active student involvement

Origin Group Formation

Teacher A formed heterogeneous groups based on students' academic backgrounds, while Teacher B used a random method to form groups. From classroom observations, heterogeneous groups proved to be more effective in encouraging collaboration because students with higher abilities tended to help their friends understand the material. In the interview, Teacher A stated:

> *("Saya sengaja mencampur siswa agar mereka bisa belajar satu sama lain. Biasanya siswa yang pintar akan membantu temannya yang kesulitan, dan ini membangun kerja sama yang alami.")*
> "I deliberately mixed the students so they could learn from each other. Usually smart students will help friends who are having difficulty, and this builds natural cooperation."

Teacher B shared that random grouping can be challenging at first, but it encourages creativity and communication among students who have not interacted much before.

Expert Group Discussion

At this stage, students move into "expert" groups and discuss specific subtopics. Observations show that discussions in these groups encourage critical thinking skills, as students must understand the material in depth in order to teach it again. Teacher B explained:

> *("Mereka saling mengajukan pertanyaan, dan beberapa sampai menggunakan analogi sendiri untuk menjelaskan. Ini menunjukkan bahwa mereka berpikir kritis, bukan sekadar menghafal.")*
> "They ask each other questions, and some even use their own analogies to explain. This shows that they are thinking critically, not just memorizing."

Teacher A added that students who were initially passive became active when given important roles in expert groups.

Teaching Back to Home Group

After becoming "experts" on a subtopic, students return to their original groups and teach the material. Observations showed an increase in students' confidence when conveying information to their peers. Some students use visual aids, such as pictures and sketches, and play short games. Teacher A said:

> *("Saya tidak membatasi cara mereka menyampaikan. Ada yang membuat poster, ada yang pakai drama kecil. Ini menunjukkan kreativitas mereka.")*
> "I don't limit how they convey it. Some make posters, some use small dramas. This shows their creativity."

This activity also improves interpersonal communication, as students learn to adjust their coordination methods to the dynamics of their group.

Evaluation and Reflection

The final stage includes reflection and evaluation, both verbally and in writing. Teachers ask students to write summaries, provide responses to friends' presentations, and create final projects. In an interview, Teacher B said:

> *("Saya beri mereka kebebasan memilih media: bisa video, podcast, atau bahkan gambar komik. Ini bagian dari mengembangkan kreativitas.")*
> "I give them the freedom to choose media: it can be videos, podcasts, or even comic pictures. This is part of developing creativity."

From the observation, students who are usually passive are more daring to express themselves through non-verbal media such as digital posters and slideshows, indicating that learning is not only focused on results, but also the process of creative and collaborative exploration.

Challenges in Implementing 21st-Century Skills

Although both teachers showed high commitment, they faced various obstacles in implementing the 4Cs optimally. The results of the interviews and observations revealed the following challenges:

Student Participation

The second teacher said that most students lacked confidence in speaking English. In the observation, some students only whispered to their friends when asked to answer, and did not want to speak in front of the class. Teacher A stated:

> *("Siswa takut salah. Mereka malu kalau ditertawakan. Jadi saya izinkan mereka menulis dulu sebelum berbicara.")*
>
> "Students are afraid of making mistakes. They are embarrassed if they are laughed at. So, I let them write first before speaking."

Teacher B used a similar approach, asking students to discuss in small groups before collaborating with the whole class, so that their confidence gradually increased.

Language and Cultural Barriers

Teacher A observed that the use of regional languages, especially Makassarese, was still dominant in student interactions. This hindered the fluency of English use. She stated:

> *("Di luar kelas, mereka selalu pakai bahasa Makassar. Jadi ketika masuk kelas, mereka kesulitan beralih ke English mode.")*
> "Outside the classroom, they always use Makassarese. So when they enter the classroom, they have difficulty switching to English mode."

Meanwhile, Teacher B complained about the tendency of students to use language that is less polite or too informal in academic contexts, such as slang.

Time Constraints

Observations showed that limited time often hindered the completion of group projects to the fullest. In an interview, Teacher B explained:

> *("Untuk bisa menjalankan semua 4C dalam satu pertemuan itu sulit. Biasanya saya fokus ke dua saja, misalnya kolaborasi dan kreativitas dulu, baru yang lainnya di pertemuan berikut.")*
> "It's hard to do all 4Cs in one meeting. Usually I only focus on two, for example collaboration and creativity first, then the others in the next meeting."

Teacher A added that despite wanting to explore various creative methods, limited class time was a major obstacle in designing in-depth and comprehensive activities.

Infrastructure Limitations

Limited infrastructure was a significant challenge. Both teachers stated that the classrooms did not have adequate projectors, speakers, or internet access. In the observation, it was seen that Teacher A brought her personal laptop and speakers to class to show learning videos. She said:

> *("Saya bawa sendiri dari rumah. Kalau menunggu fasilitas sekolah, bisa-bisa siswa tidak pernah merasakan pembelajaran berbasis multimedia.")*
> "I brought them myself from home. If I wait for school facilities, students might never experience multimedia-based learning."

Teacher B also emphasized the need for system support so that teacher innovation does not depend solely on individual initiative.

Overall, the results of this study indicate that English teachers at SMPN 27 Makassar have implemented 21st century skills creatively and reflectively, although limited by external factors such as facilities and learning duration. Institutional support, professional training, and infrastructure provision are important factors to optimize the integration of 4C sustainably.

These findings indicate that while teachers at SMPN 27 Makassar are proactive in integrating 21st-century skills, systemic support and targeted professional development are needed to optimize implementation. This study explored how English teachers at SMPN 27 Makassar implement 21st-century skills in the classroom and their perceptions of these competencies. The discussion is organized into three core themes: instructional strategies, teacher perceptions, and implementation challenges, framed using constructivism theory, perception theory (Robbins), and self-efficacy theory (Bandura).

This study shows that cooperative learning strategies, especially the Jigsaw model, are the main approach used by English teachers at SMPN 27 Makassar in integrating 21st century skills. This strategy is in line with constructivism theory (Vygotsky), which emphasizes the importance of social interaction and active activities in building knowledge. Assigning students to home groups and expert groups encourages critical thinking, communication, collaboration, and creativity, the four main components of 21st century skills (4C). This is supported by the findings of Lathifah et al. (2021) that learning activities designed for communication and collaboration strengthen the role of teachers in facilitating active learning.

The formation of groups based on academic ability and randomization reflect efforts to create an inclusive environment and support interactions across social abilities. This is in line with Robbins (2001) in his perception theory, that teachers' perceptions of classroom dynamics influence the strategies chosen. In the expert group phase, students not only absorb information, but also reconstruct meaning through peer discussions, reflecting dialogical practices in constructivism theory. Re-presentation in the form of compression, roleplay, or creativity and communication tutorials, as also conveyed by Kurniati et al. (2024) in the application of student-centered learning and digital literacy.

The challenges faced by teachers in implementing 21st-century skills at SMPN 27 Makassar are increasingly closely related to Bandura's self-efficacy theory. Students' low self-confidence in critical thinking and expressing opinions indicates low self-efficacy. This is in line with the findings of Yelis Bolat et al. (2024), which showed that the lack of training for teachers also affects the low utilization of these skills in the classroom. Teachers overcome this challenge through strategies such as using writing before verbal presentations or small group work to create mastery experiences, as suggested by Bandura as a way to build student self-efficacy.

Language and cultural barriers were also found, where students tended to be more comfortable using regional languages than English. This creates a sense of insecurity and inhibits active interaction. Teacher A's "it's okay to be wrong" pressure approach is in accordance with Bandura's theory of verbal persuasion and the role of peer models in building self-confidence. Teacher B highlighted the issue of informal language use that reflects the need for fostering communication ethics as part of 21st century skills. Teachers also identified time as a major constraint in carrying out collaborative and creative activities. Teacher B stated that time constraints required them to divide the focus of skills into several meetings, a strategy that reflects high self-efficacy where teachers remain adaptive and solution oriented. This strengthens the results of Lathifah et al. (2021) that the duration of teaching often limits the implementation of optimal collaboration.

Infrastructure barriers, such as the lack of projector devices and internet connections, are also significant challenges. The second teacher took the personal initiative to bring devices from home, reflecting a high level of self-efficacy in overcoming systemic limitations. This contrasts with the findings of Bolat et al. (2024) which showed that the lack of management and infrastructure support was a major obstacle but could not always be overcome by initiative teachers. The actions of teachers at SMPN 27 Makassar showed strong personal innovation and commitment.

CONCLUSION

The main findings of this study are that English teachers at SMPN 27 Makassar have demonstrated proactive and innovative efforts in implementing 21st-century skills, namely critical thinking, communication, collaboration, and creativity (4C) using strategic cooperative learning methods, especially the Jigsaw model. This model allows students to learn actively and collaboratively both at home and in expert groups, thus creating an inclusive and dynamic learning environment. This teaching practice is very much in line with constructivist learning theory, which emphasizes the importance of social interaction and student agency in constructing knowledge. Teachers not only encourage students to exchange ideas and solve problems together but also facilitate opportunities for students to express themselves creatively through various media, such as posters, mini-dramas, digital slides, and podcasts. This approach is consistent with current pedagogical recommendations that advocate multimodal and student-centered learning

environments to foster competencies needed in the 21st century. However, this study also uncovered several significant challenges that hinder the optimal implementation of these skills. Students' lack of confidence, especially in speaking English, limited their engagement in classroom discussions.

Cultural and linguistic habits, such as the frequent use of Makassarese and informal speech patterns, posed further barriers to academic communication. Teachers addressed these issues by incorporating scaffolding techniques, such as allowing students to write before speaking or initiating discussions in smaller groups, strategies that reflect Bandura's self-efficacy theory in fostering gradual development of confidence. Time constraints emerged as another significant constraint. Teachers often had to prioritize certain skills (e.g., focusing on collaboration and creativity in one meeting) rather than implementing all four competencies simultaneously. In addition, school infrastructure limitations such as lack of internet access, multimedia devices, and classroom technology forced teachers to rely on personal resources to support learning activities. These findings highlight the important role of teacher agency and self-efficacy in sustaining educational innovation despite systemic limitations. In conclusion, although teachers at SMPN 27 Makassar have made commendable strides in embedding 21st-century skills into their English language teaching practices, the full realization of these efforts requires broader institutional support. This includes the provision of adequate facilities, professional training opportunities tailored to the integration of the 4Cs, and a policy framework that recognizes and supports the complex realities of classroom practice. With this support, the creative and student-centered approaches observed in this study have strong potential to be scaled up and sustained for long-term educational impact.

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