IMPROVING 21ST CENTURY STUDENTS' LEARNING SKILLS THROUGH THE GROUP INVESTIGATION COOPERATIVE LEARNING MODEL IN ARABIC CLASSES

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Article Information

ABSTRACT

This study explores the Group Investigation (GI) model's role in developing 21st-century skills in collaboration, communication, creativity, and problem-solving in Arabic language learning. Addressing a research gap, it examines how GI enhances these skills, fostering effective learning and student engagement in the classroom. This study uses a qualitative approach, and it examines the implementation of the Group Investigation model in teaching Arabic to 57 students in two classes. Observations over 3 hours per class focused on student interactions during group assignments, highlighting activeness, role distribution, opinion exchange, and task allocation. Documentation through photos and videos validated the observations and supported the analysis of 21st-century skills. Data analysis employed an interactive approach. The results of the study indicate that the implementation of the Group Investigation cooperative learning model in Arabic learning instruction significantly illustrates students' 21st-century skills. This study contributes to Arabic language learning by demonstrating that the Group Investigation (GI) model enhances 21st-century skills, particularly creativity. Future research should explore additional strategies within GI to strengthen communication and collaboration while evaluating its impact on Arabic language learning outcomes.

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INTRODUCTION

Students' ability to face the challenges of the 21st Century has become a primary focus in education, with specific emphasis on collaboration, creativity, communication, and problem-solving skills (Liao et al., 2016; M. Rahman, 2019; Rojas et al., 2021; Tang et al., 2020). These skills are considered crucial in preparing the future generation to confront dynamic changes in the workplace and daily life (Care et al., 2016; Silber-Varod et al., 2019; Wrahatnolo & Munoto, 2018). In this era of digitalization and globalization, enabling students to become creators of knowledge rather than mere consumers of information is pivotal for individual and collective success (Gretter & Yadav, 2016). However, ensuring that these skills are effectively instilled remains a challenge in modern education systems.

To address this, effective and adaptive learning and assessment designs are key to instilling 21st-century skills into educational practices (Cretu, 2017; El Mawas & Muntean, 2018; Mutohhari et al., 2021; Nurlenasari et al., 2019). Teachers must integrate innovative strategies such as project-based learning, collaborative learning, and the effective use of technology to facilitate student-centered learning experiences (Alahmad et al., 2021; Bedir, 2019; Häkkinen et al., 2017; Sulistyaningrum et al., 2019; Urbani et al., 2017). Among these strategies, cooperative learning has emerged as a widely researched pedagogical approach aimed at enhancing student motivation, social interaction, and academic achievement (Mora et al., 2020; Rodríguez et al., 2017; Rosé & Ferschke, 2016; Sansone et al., 2019).

The cooperative learning model has long been a focus of research efforts aimed at enhancing social interaction and academic achievement among students (Fernandez-Rio et al., 2017; Gull & Shehzad, 2015; Johnson & Johnson, 2017; Mendo-Lázaro et al., 2022). The fundamental concept of cooperative learning involves collaboration among students to achieve shared learning goals (Jacob, 2020; Parveen et al., 2017; Roman, 2018; Van Ryzin et al., 2020). These models have proven effective in enhancing student motivation, developing social skills, and improving understanding of the material (Gillies, 2016; Russell et al., 2018). A high level of interactive quality significantly influences both instructor and learner social presence, as well as learner satisfaction (Kamaruddin & Yusoff, 2019; Oyarzun et al., 2018).

Cooperative learning occurs when students collaborate in small groups to assist each other in comprehending a subject (Ridwan & Hadi, 2022; Sezek, 2020). One of the most renowned cooperative learning models is the Group Investigation model (Arinda et al., 2019; Haryono, 2020; Sugiharto, 2020). The Group Investigation model is a cooperative learning strategy that places students into groups to conduct investigations on a specific topic. The Group Investigation cooperative learning model has been found effective in enhancing students' higher-order thinking skills and social skills (Bedregal-Alpaca et al., 2020; Darmuki et al., 2019; Komala et al., 2020).

Previous studies have extensively depicted the implementation of the Group Investigation model in various subject contexts. Among these studies, the initial findings indicate that Group Investigation encourages students to argue, work diligently, share, assist peers, and foster camaraderie (Purwananti, 2019). The application of Group Investigation also contributes to students' teamwork abilities, cognitive learning outcomes, critical thinking skills, and scientific communication skills (Leasa & Wuarlela, 2023; Rosiani et al., 2020). Additionally, the implementation of this model has proven to enhance student learning activities and outcomes, albeit requiring competent teachers, as it necessitates instructors

capable of delivering relaxed, varied, and student-centered teaching styles (Fitriani, 2021). Specifically in the context of second language learning, Group Investigation encourages students to develop critical thinking skills, social skills, and learning abilities in an open and democratic learning environment (Purwananti, 2019; Ardiansyah et al., 2023)). From the student's perspective, they demonstrate a positive attitude toward the implementation of Cooperative Learning even if it is not implemented accurately (Mohammad Alhebaishi, 2019).

While numerous studies have explored the implementation of the Group Investigation model across various subjects, there remains a notable gap exists in understanding how GI can simultaneously enhance 21st-century skills while addressing the unique challenges of Arabic learning, such as passive learning and limited engagement. This study explicitly explores the application of the GI cooperative learning model in Arabic language classrooms to address these challenges. It investigates how GI can foster collaboration, creativity, and communication while aligning linguistic proficiency with modern educational demands. By tailoring GI to the Arabic learning context, this research seeks to demonstrate its potential to provide dynamic, interactive, and student-centered learning experiences. Moreover, the study offers insights into the adaptability of GI for language acquisition. It contributes to the broader literature on cooperative learning by bridging the gap between traditional language teaching methods and the need for 21st-century competencies.

METHOD

The primary aim of this study is to analyze the aspects of collaboration, creativity, communication, and problem-solving skills among students through the implementation of the Group Investigation cooperative learning model in Arabic language instruction. With a specific focus on these dimensions, the research seeks to offer valuable insights into the design and execution of the Group Investigation model within the context of Arabic language teaching. Employing a qualitative research approach (Rahardjo, 2023), this study adopts a qualitative methodology to enable a comprehensive understanding of the multifaceted factors inherent in classroom learning (Ainin, 2016).

Table 1. Participant Detail Table

Class	Number of Students	Gender	Average Age
A	28	13 Male, 15 Female	12 years old
B	29	13 Male, 16 Female	12 years old
Total	**57**	**45.6% Male, 54.4% Female**	**12 years old**

To gather data, this research employs two primary methods: observation and documentation (Rahardjo, 2011). Through observation, researchers directly observed the implementation of the Group Investigation model in teaching Arabic language for a total of 3 hours in each class, involving a total of 57 students across two different classes. Although conducted non-participatively, the learning process proceeded naturally as the students were not informed beforehand, allowing for thorough observation in every session. Throughout this period, the researcher meticulously noted the interactions between teacher and students, as well as students and students. The interactions observed in this research were collaborative activities within groups during the process of completing group assignments. The researcher

conducted comprehensive observations of all groups at the beginning, followed by focused observations of each group alternately. The key points recorded during the observation included the level of activeness of each individual within randomly assigned groups, the discussion mechanisms for determining roles in each group, how individuals within the groups expressed and listened to opinions and the task distribution methods implemented by the groups.

Simultaneously, documentation was conducted by recording all forms of interactions taking place. The data collected during the observation and documentation processes were recorded in various formats, including pictures and videos, to facilitate further analysis. Photo and video documentation were utilized to validate the observation notes. This documentation provided a clear depiction of students' expressions and gestures during the observation, enabling a more comprehensive analysis of the forms of interaction between individuals that reflect 21st-century skills. Interviews with randomly selected students were also conducted to gather their responses throughout the learning process.

The data analysis process in this study utilizes qualitative methodology, employing an interactive analysis approach (Rahardjo, 2023; Sugiyono, 2016). The data analysis process begins with collecting and grouping data based on themes relevant to the research focus of observation and documentation. After that, the data is simplified by reducing it to remove irrelevant information. The reduced data is then presented systematically through easy-to-understand narratives. Conclusions drawn from data are verified and confirmed to ensure their validity and consider alternative points of view. Finally, data from both methods (observation and documentation) are compared and used to create a narrative that summarizes the findings and their implications for the research focus.

RESULT AND DISCUSSION
Implementing Group Investigation Model in Arabic Learning

Cooperative learning is a common term based on several essential elements interpreted and realized through various methods, models, and procedures, each focusing on a blend of these different elements (Alhebaishi, 2019). Group Investigation, as one of the cooperative learning models, has emerged in the educational realm since the mid-20th Century. It was developed by American educational psychologists Dr. Roger T. Johnson and Dr. David W. Johnson in 1974 (Sharan & Sharan, 1992). This model has since become a popular approach in cooperative education and is utilized across various educational levels and learning contexts.

Despite emerging decades ago, Group Investigation remains relevant in today's learning conditions if applied adequately by teachers and tailored to students' needs. This model offers a student-centered approach, fostering collaboration, communication, and joint problem-solving among students (Leasa & Wuarlela, 2023). By considering the characteristics and needs of individual and group students, teachers can design challenging and supportive learning activities that facilitate the development of social, cognitive, and language skills (Hasibuan et al., 2024; Lee Manning & Lucking, 1991; Slavin, 1989). Thus, Group Investigation remains an effective tool in facilitating active, student-centered learning and preparing them to face the challenges of the evolving world. The implementation of cooperative learning using the Group Investigation model in Arabic language instruction consists of several stages, as follows.

Stage 1: Group Allocation

The grouping is done randomly using a counting method to ensure that each group consists of both male and female students. This is aimed at creating diversity within each group, thereby facilitating balanced social interaction among students in learning. Involving students of both genders in diverse groups fosters inclusivity and encourages dynamic collaboration among group members in cooperative learning. Moreover, the counting method from one to four is employed to form four groups comprising 7-8 students each, ensuring an equitable distribution of members and providing opportunities for active participation in group activities. Random grouping also contributes to fostering a fair learning environment and reducing potential conflicts or imbalances in student distribution among the groups (Ali, 2021). Thus, random grouping is pivotal in cooperative learning as it promotes diversity, inclusivity, and equitable distribution of students among their respective groups, thereby supporting the creation of a collaborative and constructive learning environment.

Stage 2: Teacher Explains the Task

At this stage, the teacher begins by explaining the task to be completed by each group. In this instructional illustration, the formed groups are likened to families planning the construction of a house. The teacher provides an overview that each group has roles akin to family members collaborating to plan the house's design and draft descriptive texts related to the house. Besides verbal explanations, the teacher also provides written instructions on the whiteboard to facilitate students' understanding of the given instructions. At this stage, the teacher also conducts a review of previously taught vocabulary to remind students so that later in assignments, students can compose tasks with a thorough understanding of the vocabulary. This is considered essential in Arabic language learning (Jundi, 2023b; Kadir et al., 2022; Nabila & Jundi, 2023).

Stage 3: Group Task Execution

Each group is responsible for carrying out three specific stages in this project. First, they are asked to discuss and establish a family name for each group. In this stage, the communication and collaboration skills of the students can be observed, as they must engage in discussions to reach an agreement on the family name they will use. Additionally, this stage is an opportunity for students to learn to work together to achieve common goals, as well as to build trust and cooperation among group members. Second, each group is collectively expected to design the floor plan of the house to be built for their family. In this stage, in addition to the ongoing collaboration and communication of students, their creativity in designing the floor plan can also be observed. Students will work together to combine their ideas and create a unique floor plan that meets the needs of the family they are portraying. Third, each group is tasked with writing a text in Arabic that explains the identity of the family and the floor plan design they have created based on the guidelines provided by the teacher. In this stage, the student's ability to solve problems can be observed through the way they adjust their descriptive text with the examples given by the teacher and the floor plan they have created. This certainly requires critical thinking and analysis from students to present information clearly and in accordance with the guidelines provided. Additionally, this stage is also an opportunity for students to enhance their Arabic writing skills and apply the

knowledge and skills they have learned in a real-life context. Thus, through these three stages, students not only learn about communication, collaboration, creativity, and problem-solving but also improve their Arabic language skills overall.

Stage 4: Presentation of Task Results and Appreciation

After completing their work stages, each group will have the opportunity to present their work in front of the entire class. This presentation process serves not only as a moment to share ideas and work with classmates but also as an opportunity for each group member to practice public speaking. During the presentation process, students can practice speaking skills, deliver information clearly, and demonstrate their understanding of the project they have worked on. The teacher then provides appreciation and feedback to each group, recognizing the efforts and contributions made and offering constructive advice for future improvement. This process not only builds students' confidence and motivation but also provides valuable learning opportunities to enhance the quality of group work and public speaking abilities. Thus, the presentation process becomes an integral part of collaborative learning and the development of students' communication skills—group presentation activities, as seen in the picture below.

Figure 1. Group Presentation

The results of implementing the group investigation model above reflect that teachers are required to transform their roles from mere information deliverers to guides and additional facilitators in the cooperative learning process. They have additional responsibilities in designing learning activities that ensure genuine cooperation, as optimal as possible, and in line with students' cooperative skill levels (Fitriani, 2021). In essence, teachers should introduce cooperative learning skills alongside delivering instructional content. The appreciation given by teachers during the learning process also holds a significant positive impact, such as reward, as evidenced in enhancing students' learning motivation (Amin et al., 2023; Hasibuan & Jundi, 2023a).

Analyzing Students' 21st Century Soft Skills Through Group Investigation Model

During the implementation of cooperative learning using the Group Investigation model in Arabic language instruction, the researcher conducted observations to monitor the performance of each individual within the groups. The researcher regularly visited each group during the work period to assess their performance. This was done to analyze the extent to

which students were able to implement collaborative and communicative skills, creativity, and problem-solving within the context of Arabic language learning.

Communication and Collaboration

Observational findings indicate several insights regarding the aspects of communication and collaboration within the learning context. It was found that some students experience difficulty in adapting to new group members, demonstrating an inability to interact effectively in changing social situations. Additionally, there is disagreement among some students regarding random group assignments, resulting in resistance to the learning process that can affect the overall group dynamics. Furthermore, some academically proficient students encounter challenges in collaborating with their group members, indicating a gap between academic skills and interpersonal abilities. Other findings indicate uncooperativeness and a lack of contribution from some male students toward female students within the group, indicating an imbalance in participation and contribution among group members. All of these findings highlight the importance of developing communication and collaboration skills in the learning environment to facilitate effective and constructive interaction among students.

Creativity

Based on the observation results, it was found that in terms of the creativity skill aspect, the majority of groups were able to demonstrate significant abilities. They were capable of creating house layout designs that were not only unique but also tailored to the characteristics and needs of each family they portrayed. Furthermore, some groups were also able to formulate family names effectively and assign clear roles to each group member, demonstrating their ability to think creatively in constructing a coherent family narrative. Several groups successfully presented their group work outcomes with creative presentations, showing their ability to integrate visual and verbal elements engagingly. Moreover, most student groups were able to proactively establish roles for each group member, reflecting their capacity to collaborate and improvise according to the given context. For example, some students took on roles as parents. In contrast, others assumed roles as other family members, such as children, aunts, uncles, or grandparents, showcasing their ability to develop characters in the family simulation.

Problem-Solving

Based on observations, it can be noted that, in terms of problem-solving skills, some groups successfully divide tasks effectively among their members to complete assigned tasks. However, the majority of groups still struggle with task allocation. This indicates that students' problem-solving skills have not fully developed optimally. The lack of ability to divide tasks may hinder group work efficiency and productivity and affect the quality of the outcomes achieved. Factors contributing to this deficiency may include a lack of understanding of the importance of task allocation, insufficient communication and negotiation skills among group members, and a lack of awareness of individual responsibilities in achieving common goals.

Discussion

In this research results, it is evident that the implementation of the cooperative learning model Group Investigation in the context of Arabic language learning provides a comprehensive overview of students' 21st-century soft skill development. One aspect observed is the ability to communicate and collaborate (Fahri et al., 2024) . Despite some students facing challenges in adapting to new groupmates or disagreeing with random group allocation, this underscores the importance of developing social skills such as adaptability and teamwork (Bedregal-Alpaca et al., 2020). Furthermore, it is also apparent that some students may possess strong academic abilities but cannot collaborate with peers within their group, highlighting the significance of interpersonal skills development in education (Fitri & Hasibuan, 2024).

Communication and collaboration skills are essential abilities for students in the 21st Century, evolving within the digital era and globalization (Fitriani et al., 2023; Hasibuan, Haerullah, et al., 2023; Jundi et al., 2023; Spies & Xu, 2018). Communication skills encompass the ability to articulate ideas clearly, listen empathetically, and comprehend various perspectives (Osterman, 1993). Meanwhile, collaboration skills involve the ability to work with others, appreciate each individual's contribution, and execute tasks effectively as part of a team (Hasibuan et al., 2024; Hasibuan, Fitriani, et al., 2023; Slavin, 1989). Both of these skills not only support academic success but also prepare students to face real-world challenges in the future, where practical cooperation and communication are key to success in the workplace and daily life.

Research conducted by Oktaviani and colleagues highlights the essential importance of communication and collaborative skills as the most vital soft skills in the 21st century era (Oktaviani et al., 2019). These findings indicate the need for greater attention to the development of these aspects in the current educational curriculum. Communication skills not only encompass students' ability to convey ideas effectively but also their capacity to listen, comprehend, and respond well to others' ideas (Hasibuan & Fitriani, 2023; Maryani et al., 2024). This ability is key to creating an inclusive and collaboration-based learning environment that encourages students to work together productively to achieve common goals (Hasibuan & Fitriani, 2023; Robert, 2005).

Collaborative skills also serve as the foundation for shaping individuals capable of adapting and working in teams amidst the dynamics of the modern world (Rojas et al., 2021). The ability to collaborate with individuals from different backgrounds, perspectives, and expertise is a valuable asset in facing complex challenges in the global workplace environment. Therefore, teachers need to integrate activities and learning strategies that promote collaboration and interaction among students in every aspect of the curriculum, including Arabic language learning, as observed in the study (Sa'adah et al., 2022).

However, the research findings indicate that students' collaboration skills are not yet fully optimal or evenly distributed. Some students still struggle with collaboration when completing group tasks. It is important to note that various factors influence an individual's collaborative abilities, including confidence and social factors. Confidence plays a critical role in effective student participation and collaboration. Confident students are more likely to engage in group tasks and discussions actively (Hanum et al., 2023). Social factors also significantly impact collaborative learning, as social connections such as peer relationships

can enhance collaboration and participation. Strong social ties and active online engagement contribute positively to these interactions (Kumar & Shahani, 2023).

Additionally, it is crucial to recognize that students' collaboration often falls short due to specific obstacles. Common challenges include a lack of collaborative skills, free-riding, competence disparities, and friendship dynamics. These issues are frequently exacerbated by an overemphasis on cognitive aspects of learning at the expense of collaborative dimensions (Le et al., 2018).

Furthermore, students' creativity in generating solutions and presentations stands out. Unique house layout designs, family name creations, and creative presentations demonstrate students' ability to think outside the box and apply new ideas in the context of Arabic language learning. This creativity is a crucial aspect of 21st-century soft skills, as an ever-changing world requires individuals capable of addressing challenges in innovative and unconventional ways (Bunyamin et al., 2022).

Creativity skill refers to the ability to generate new ideas, innovative solutions, and original works across various fields (Craft, 2003; Runco, 2008). It involves students' capability to think and integrate diverse knowledge and experiences (Kaplan, 2019; Siregar et al., 2023). Creativity skills enable students to devise unique solutions to complex challenges, adapt flexibly to changes, and contribute to innovation in the ever-evolving digital era (Bruno & Canina, 2019). This ability is highly crucial in preparing students to face the demands of the increasingly dynamic and complex future job market.

On the other hand, problem-solving abilities are also evident from the findings of this research. Groups that successfully delegated tasks efficiently demonstrated their ability to self-organize and overcome challenges arising during the learning process. This reflects the importance of developing problem-solving skills in education (Tang et al., 2020), as in today's complex and fast-paced world, students need to have the capability to navigate various intricate situations and devise practical solutions (Bedir, 2019). Thus, the outcomes of this research provide a robust portrayal of the relevance of Arabic language learning in cultivating 21st-century soft skills essential for future success.

Problem-solving skills involve the ability to identify, analyze, and resolve problems effectively and creatively (Franestian et al., 2020). This entails critical thinking processes, the ability to formulate alternative solutions, and the courage to confront challenges and take necessary risks to achieve satisfactory solutions (Lee, 2018; Rabie-Ahmed & Mohamed, 2022). Problem-solving skills are not only relevant in academic contexts but also highly essential in daily life and the workplace, where individuals are confronted with various complex issues requiring innovative solutions and adaptation to continuous changes (Rahman, 2019).

The utilization of cooperative learning models indeed holds the potential to foster 21st-century skills among students; however, further in-depth and extensive research is warranted to comprehend the implications more comprehensively. Research also needs to expand to examine students' perceptions and responses to the implementation of this approach (Anhusadar, 2020; Aswasulasikin, 2020; Jundi, 2020). Analyses of this nature are crucial to provide a more concrete understanding of students' experiences and expectations regarding the implemented learning strategies as well as teachers (Ali et al., 2022; Jundi & Ali, 2023). Additionally, evaluations of the learning process should be conducted using valid and

reliable instruments. Furthermore, analyses need to be conducted on educators with similar objectives (Jundi, 2023c, 2023a).

According to the author's perspective, there are several fundamental reasons why the Group Investigation Model is highly suitable and crucial to be implemented in Arabic language learning. Firstly, Arabic language learning necessitates a profound understanding, encompassing both intrinsic and extrinsic linguistic aspects. Within the Group Investigation model, students are afforded the opportunity to delve deeply into specific topics (Arinda et al., 2019; Bonde et al., 2023). Secondly, Arabic language learning also requires the development of active communication skills, both in writing and speaking. In this model, students collaborate in groups to design house plans and write descriptive texts in Arabic, thereby honing their communication skills in a practical manner. Thirdly, Arabic language learning also demands the application of language in authentic and relevant contexts such as a language environment (Adam et al., 2022; Dalle, 2019; Dalle & Jundi, 2021; Jundi et al., 2022). Through Group Investigation, students are tasked with producing descriptive texts about the houses they have designed, allowing them to apply the Arabic language in concrete and relevant contexts.

However, it is also essential to provide adequate attention to instructional management. With effective instructional management, teachers can create a conducive and well-organized learning environment. This includes thorough lesson planning, efficient time management, and regular monitoring of student progress (Hasibuan & Jundi, 2023b, 2023a; Jundi & Hasibuan, 2023). In the context of Arabic language program management, Arabic language instructional management must be optimized to meet the needs of students and achieve maximum learning outcomes as expected by schools and relevant stakeholders. Thus, good instructional management becomes key to enhancing the effectiveness and efficiency of the Arabic language learning process.

This study includes a discussion of the elements impacting collaboration challenges during the Group Investigation (GI) model's deployment in order to provide a more thorough analysis. Key challenges include varying levels of student motivation, unequal participation, and differences in prior knowledge and social skills among group members. The study suggests a number of tactics to deal with these problems, including defined group responsibilities to guarantee equitable contributions, continual instructor facilitation to direct cooperation, and focused interventions to help students who are less engaged or have skill gaps. Additionally, reflections and feedback from both students and teachers were collected through surveys and interviews to gain insights into their experiences with the GI model. These reflections highlight the benefits of the model, such as improved communication and teamwork skills, while also emphasizing areas for improvement, including the need for more straightforward instructions and better time management within group tasks (Usman et al., 2023). By integrating these perspectives, the study provides a holistic view of the model's effectiveness and practical recommendations for optimizing its implementation in developing 21st-century skills.

CONCLUSION

Based on the results and discussions presented, it can be concluded that the implementation of cooperative learning using the Group Investigation model in Arabic language education effectively enhances students' skills in communication, collaboration, and creativity, thus yielding significant positive impacts. Moreover, this research provides a comprehensive overview of the development of 21st-century skills among students in the context of Arabic language learning. Despite some students facing difficulties in adjusting to new group members and collaborating, the majority of groups demonstrated notable progress in creativity and problem-solving. Weaknesses were observed in task allocation, while the lack of fluency in communication between male and female students was particularly evident. However, implementing cooperative learning can significantly improve communication among students who previously interacted minimally or not at all, gradually fostering and strengthening their communication skills.

In light of these findings, it is crucial to emphasize the development of communication, collaboration, creativity, and problem-solving skills within the educational curriculum to prepare students for the increasingly complex and dynamic demands of the future world. To this end, implementing a variety of cooperative learning models can help foster more significant interaction among students. For instance, specific strategies should be designed to encourage less active students to participate more actively within their groups. Nevertheless, given the limitations of this study, further research is required to explore this topic using quantitative methodologies to assess the impact of cooperative learning models on enhancing students' 21st-century skills. Additionally, future studies should consider the role of teachers as a key variable in the research.

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AUTHOR CONTRIBUTIONS STATEMENT

SS made substantial contributions to the conceptual framework and design of the research. Y served as the project supervisor, overseeing the entire research process. MJ handled correspondence, developed the methodology, and conducted data analysis. RH developed the instruments and carried out data collection. TF acquired the funding for the project. IS and NG assisted in drafting and structuring the manuscript.

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