

---

## **The Role of Jigsaw Technique in Promoting Social Awareness and Relationship Skills Among Master's Students Within the SEL Framework**

*Aprilia Dyah Kriswinahyu*<sup>1</sup>

*Regina Putri Nernere*<sup>2</sup>

*Paulus Kuswandono*<sup>2</sup>

<sup>1</sup> Corresponding author, English Education Master Program, Sanata Dharma University, Indonesia; [apriyadiyah.krswnhyu22@gmail.com](mailto:apriyadiyah.krswnhyu22@gmail.com)

<sup>2</sup> English Education Master Program, Sanata Dharma University, Indonesia

---

*Received: -*

*Accepted: -*

*Published: -*

---

### **Abstract**

Social awareness and relationship skills, integral components of the social-emotional learning (SEL) framework, serve as fundamental objectives in holistic education. However, Indonesia's SEL concept remains relatively new, particularly in higher education settings. This study examined how learning techniques such as jigsaw enabled the cultivation of social awareness and relationship skills depicted in the SEL framework. Employing a descriptive qualitative research method, this study explored students' interactions in the jigsaw technique among 19 first-semester Master's students in the English Education Master Program at Sanata Dharma University. The data were collected through questionnaires, interviews, and observations, which offered a comprehensive understanding of students' interactions through the jigsaw technique. The findings revealed the potential of jigsaw as a collaborative technique to promote social awareness and relationship skills among higher-education students by exposing students to diverse perspectives and building relationship skills through active communication and collaboration. However, several challenges, such as cultural and emotional barriers and a sense of dominance, inferiority, and trust, emerged in the group interactions that need to be addressed. This study is expected to contribute valuable insights at the higher level of education in Indonesia by applying various learning techniques, one of which is the jigsaw technique, as an effort to implement SEL and improve SEL competencies. The findings provide practical implications for educators and policymakers trying to promote a balance of emotional and



social growth alongside students' academic learning, especially concerning collaborative skills needed in today's world.

**Keywords:** Higher education, jigsaw technique, social-emotional learning (SEL)

**To cite this article:** Kriswinahyu, A. D., Nernere, R. P., & Kuswandono, P. (2025). The role of jigsaw technique in promoting social awareness and relationship skills among master's students within the SEL framework. *SALEE: Study of Applied Linguistics and English Education*, 6(2), 455-472. <https://doi.org/10.35961/salee.v6i2.2004>

**DOI: 10.35961/salee.v6i2.2004**

## 1. Introduction

University students often face various academic and social challenges and expectations. These challenges involve managing demanding coursework, handling research commitments and obligations, and preparing for a professional career, which often leads to academic-related stress. Academic-related stress can lower academic performance, lower student motivation, and raise the risk of school dropout (Pascoe et al., 2020). As higher education emphasizes cognitive development and students' emotional and social development, there is a rising recognition that social-emotional competencies are necessary for students' success and intellectual ability. Social-emotional learning, or SEL for short, emphasizes developing individual skills such as emotional regulation, empathy, and effective communication, making it a robust framework for meeting students' needs. Social-emotional learning offers a promising approach to improving students' well-being and academic achievement (Ahmed et al., 2020; Elmi, 2020; Greenberg, 2023). However, its adoption in higher education, particularly for master's students in the Indonesian educational context, remains overlooked.

The Collaborative for Academic, Social, and Emotional Learning (CASEL) defined SEL as the process by which individuals acquire and apply knowledge, attitudes, and skills to manage emotions, develop healthy identities, achieve personal and collective goals, establish supportive relationships, and make responsible decisions (CASEL, 2020). In this context, the CASEL framework offers a comprehensive approach to SEL, encompassing five fundamental competencies: self-awareness, self-management, social awareness, relationship skills, and responsible decision-making (CASEL, 2020). These interrelated competencies are essential for assisting students in developing emotional and social intelligence. The advantages of implementing SEL are established, with numerous studies demonstrating its potential in terms of academic achievement, improved social behaviors, and enhanced emotional well-being (Ahmed et al., 2020; Hachem et al., 2022; Wang et al., 2019). The benefits of SEL promote the development of critical interpersonal skills and improve students' ability to navigate complex academic and social environment demands. Concerning

---

navigating academic challenges, research suggested that integrating SEL in the educational context strengthens learning motivations, improves classroom interactions, and contributes to student's holistic development toward resilient, empathetic, and responsible individuals (Elmi, 2020; Simion, 2023; Yoder et al., 2021).

This transition from concentrating merely on intelligence quotient (IQ) to considering the role of emotional quotient (EQ) in students' overall development is currently gaining acceptance, as it becomes increasingly apparent that success in academic and professional realms is defined not only by intellectual ability but also by social and emotional competency (Domitrovich et al., 2017; Hansen, 2019). SEL provides a framework for cultivating competencies such as empathy, relationship-building, collaboration, and responsible decision-making, which are integral and necessary for lifelong learning and personal achievement (ShingaeV, 2019). This growing focus on emotional intelligence highlights the need to explore the role of SEL within higher education, particularly in graduate education, as these skills are vital for students preparing to enter or advance in professional careers.

While many educators in several developed countries have tried to apply SEL in K-12 education, SEL implementation in higher education, particularly among master's students in Indonesia has received less attention (Lestari & Azizah, 2023). The gap in research is significant, especially given that master's students face diverse challenges, such as high academic demands, stress, and the pressures of career advancement. As a result, SEL emerges as relevant for master's students since it helps them manage emotional symptoms, build resilience, and manage the complex social context they face (Simion, 2023). Furthermore, SEL competencies bridge the gap between academic learning and life skills, equipping students for the profession through improved collaboration, problem-solving, and leadership skills (Low et al., 2019). Despite this, much of the research on SEL has been on its usage in primary and secondary education, with few studies looking into how it may be adapted and applied at the university level, particularly in Indonesia's higher education environment (Lestari & Azizah, 2023).

While all those SEL competencies are essential, this study focuses on two interconnected competencies that are especially useful and relevant in the setting of graduate education, namely social awareness and relationship skills. Most SEL studies tend to focus on K-12 education or other educational stages, but not much attention has been given to how these competencies, especially social awareness and relationship skills are nurtured in graduate students. Social awareness is the foundation of building relationship skills with others (Elmi, 2020). Social awareness is empathizing with others, particularly those from different cultural backgrounds. At the same time, relationship skills refer to establishing and maintaining healthy and respectful relationships, communicating effectively, collaborating with others, and solving conflicts constructively (CASEL, 2020). While social awareness and relationship skills are often treated as separate competencies in various studies, their interconnected

nature and how they function together in the graduate education setting have not been sufficiently explored.

The significance of social awareness and relationship skills in higher education cannot be overstated since higher education students frequently participate in dynamic, fluid social interactions with lecturers, faculty members, colleagues, professionals, and other people in various academic and extracurricular settings that require these competencies to engage successfully and effectively. Nevertheless, entering college frequently entails higher expectations, new roles, and more duties, which can cause stress and make it more challenging to adjust (Conley, 2015). Further, strong social and emotional competencies that improve self-awareness and interpersonal competency are necessary for the students to overcome these obstacles. By considering these two abilities as the main focus of this study, this study aims to investigate how specific learning models applied in graduate education can reflect the development of SEL competencies for enhancing students' academic experience and professional readiness.

The cooperative learning model is a potential model for promoting competencies within SEL frameworks by developing essential skills, including collaboration, communication, and social awareness (Alamsyah et al., 2019). Cooperative learning is an organized group learning activity in which students exchange information within a framework of personal responsibility and an objective to enhance the learning process for everybody involved (Johnson & Johnson, 2002). Cooperative learning involves students working in small groups to maximize individual and group knowledge (Meijer et al., 2020), as group learning success depends on all group members (Slavin, 1983). In cooperative learning, lecturing, listening, and notation occur alongside additional activities that promote student discussion and cooperation with course materials (Jiang & Dewaele, 2019). Cooperative learning has been discovered in studies to reduce students' stress and emotional difficulties while also increasing academic engagement (Van Ryzin & Roseth, 2021).

Furthermore, cooperative learning improved students' social-emotional competence and empathy (Llorent et al., 2022), notably by raising students' social awareness through meaningful interactions in group work (Karmina et al., 2024). This model promotes positive mutual dependence, personal accountability, and the development of interpersonal skills such as active listening, teamwork, and conflict resolution (Ginsburg-Block et al., 2006, as cited in Hansen, 2019). The development of those competencies is integral to the CASEL framework.

Of the several learning techniques in cooperative learning, jigsaw allows for the development of social awareness and relationship skills among master's students. The jigsaw technique is a student-centered cooperative learning method (Alfares, 2020). The jigsaw learning technique divides students into groups, assigning each member a different piece of the learning material. After understanding their portion, students are assigned to teach their

---

piece to the other group members. This technique enables students to listen actively, interact effectively, and support one another's learning, which are the core components of the SEL competencies of social awareness and relationship skills (Chang & Benson, 2022). Students build their empathy, increase their communication skills, and improve their problem-solving skills while participating in a collaborative learning process.

Even though the jigsaw learning method has been extensively applied in various educational settings, including in the EFL context, its potential to promote SEL competencies in the Indonesian higher education context has not been explored well. Most SEL research in Indonesia focuses on implementing SEL in primary and secondary schools while integrating SEL into the university context is still in its infancy (Anisa et al., 2019; Lestari & Azizah, 2023). Studies from other contexts, such as Lewis & Tran (2012) conducted in Vietnam, have revealed that the jigsaw technique can promote deeper group learning, stronger collaboration, and better information exchange among students than traditional teacher-centered classrooms. This study found that cooperative learning approaches, such as the jigsaw technique, is potentially useful in fostering SEL competencies in Indonesian higher education. However, while there is current research on the benefits of cooperative learning for university students' social-emotional development (Huang & Lajoie, 2023), specific strategies such as the jigsaw method have not been properly explored in Indonesia. Further research into how the jigsaw technique may assist SEL in Indonesian higher education will help to build a more robust theoretical foundation.

This study aims to fill the research gaps by answering these two research questions: (1) *How do master's students' interactions in the jigsaw technique promote social awareness and relationship skills as parts of SEL competencies?* (2) *What challenges do students encounter in reflecting on social awareness and relationship skills during the jigsaw technique?* By focusing on these competencies, this study seeks to highlight how SEL can be potentially integrated into higher education, especially in Indonesia, where the application of SEL in university settings remains limited. The findings of this study are expected to expand the body of research on SEL in higher education and offer practical alternative learning techniques to educators seeking to establish nurturing, holistic learning environments that nurture students' intellectual and emotional development. This study also offers practical implications on establishing SEL programs within higher education curricula that support master's students' academic success and professional career preparation and advancement by integrating emotional quotient (EQ) and intelligence quotient (IQ).

## **2. Methodology**

This section outlines the methodology employed in this study. It comprises the approach, design, setting and participants, data collection techniques, and data analysis to explore students' interactions in jigsaw learning, focusing on their social awareness and relationship skills as components in Social and Emotional Learning (SEL).

### **2.1. Research design**

A descriptive qualitative method was employed in this research. This method is designed to provide a complete and detailed understanding of a phenomenon (Creswell & Poth, 2018). This aligns with the research's objective of capturing the participants' rich experience during jigsaw learning. Further, by utilizing qualitative method, it focuses on the depth of students' engagement with one another and how they develop social and emotional skills in the context of collaborative learning environment. The initial data gathering was conducted by administering a questionnaire. The questionnaire serves as the initial instrument in gathering the foundational information about the participants' social and emotional competencies. Besides, it enables the researchers to identify participants who met the predetermined criteria for further investigation with interviews. This selection screening was completed to ensure that the interviewed participants could offer rich insights. The next phase was done by conducting semi-structured interviews as the main source of the qualitative data. This phase allowed the researchers to explore detailed insights from the participants' experience and validate and expand responses from their previous answers in the questionnaire. By employing descriptive qualitative, the study offers a more comprehensive understanding of how jigsaw learning fosters students' social awareness and relationship skills among students. Further, it also identifies how these components of SEL are promoted with the help of jigsaw learning.

### **2.2. Research setting and participants**

To gain a deeper understanding, the participants of this study were EEMP (English Education Master Program) students of Sanata Dharma University. A total of nineteen students in the first semester of the EEMP program were invited to participate in this research. The age range was diverse between 22-50 years old. The group consists of various regions of Indonesia, including East and West Indonesia, along with an international student. Some participants were employed, and not all of them were full-time students. The gender distribution was 7 males and 12 females.

*Table 1. Participant's demography*

<b>Aspect</b>	<b>Description</b>
Education background	1st-semester students (batch 2024)
Age range	22-50 years old
Gender distribution	7 males and 12 females
Region of origin	East Indonesia, West Indonesia, and International

---

The participants were selected purposively based on the criteria determined to gain the desired information. First, the participant must be a first-semester student of EEMP at Sanata Dharma University. Second, they were enrolled in the Educational Psychology Class. Third, participants must participate in the jigsaw activity for eight weeks. These criteria allow researchers to obtain relevant and comprehensive insights related to the phenomena (Campbell et al., 2020; Creswell & Clark, 2018). The ethical practice in this study was maintained by obtaining consent from the participants before conducting the questionnaire and the interviews. Importantly, participant confidentiality would be kept safe, and they were clearly informed that they could withdraw from the study at any time without any consequences.

### ***2.3. Research instruments and data gathering technique***

A questionnaire and followed with a semi-structured interview were employed to explore the depth of the participants' experience. The questionnaire was administered primarily as the initial instrument to provide a broader overview of participants' SEL competencies. It was not employed as the in-depth data source but as the baseline of the participant selection for the further interview. The questionnaire consists of 10 statement items. The options for answering the statements range from strongly disagree (1) to strongly agree (4). The 4-point scale was utilized to eliminate the neutral option and encourage participant to communicate their stance better. It covers the two SEL components of social awareness and relationship skills adapted from the established version by Panorama (2015). The pre-existing questionnaire was adapted to be more compact in terms of the number of items and reworded to match the context of the participants' backgrounds. The previous questionnaire was designed for 6-12-grade students and adjusted to the participants' backgrounds and levels. Despite the refinement, the questionnaire remained valid and reliable (Panorama, 2016). Therefore, the researchers reviewed the questionnaire continuously to ensure that the instrument was relevant to the study's focus on gathering participants' insights into the role of the jigsaw in promoting SEL competencies. One expert lecturer also reviewed it to complete the construct validity. To help the participants access the questionnaire, the researcher distributed it using Google Forms. As Fowler (2014) suggested, distributing online questionnaires will make it easier for the participants.

The following step was to conduct a semi-structured interview with 5 students. In semi-structured interviews, the researchers have the freedom to adapt and modify the structure or questions during the interview (Ary et al., 2014). The number was sufficient as the researcher reached data saturation from the last interviewed participant (Braun & Clarke, 2019). To maintain objective selection, participants were chosen for interviews based on their questionnaire scores. The aim is to draw interviews from the represented score categories (low, moderate, and high). The open-ended questions were also asked during the interview to understand the participants' dynamics comprehensively. The open-ended questions were

developed based on the subsection components of each social awareness and relationship skills component in SEL (CASEL, 2020). The questions were also modified with the collaborative experience from the participant's context. The interviews were audio recorded with consent from the participants. Lastly, to ensure the trustworthiness of the collected data, the researchers also completed the member-checking stage from the participants.

#### ***2.4. Data analysis***

From the questionnaire results, the researchers gained an overview of the participants' dynamics in the jigsaw learning activity. Further, this allows researchers to select prospective participants to conduct the following interviews. The total score was compared and categorized into 3 groups of distribution. The qualitative data analysis was performed using thematic analysis, drawing themes from the participants' data. Thematic analysis can be defined as a rigorous and inductive method employed to identify and analyze themes from textual data (Guest et al., 2012). Further, they mentioned that this analysis method aims to showcase participants' experiences accurately and comprehensively (Guest et al., 2012). Several steps were involved in conducting thematic analysis. This technique consists of six steps: familiarizing with the data, developing initial codes, generating themes, reviewing themes, defining themes, and composing the final report (Braun & Clarke, 2006). To conduct the data analysis, the researcher first began by repeatedly listening to the recorded interview to be immersed in the phenomenon. The transcription process simultaneously happened while the researchers immersed themselves in the phenomena. The second step was to develop codes from the transcript. Similar and interrelated codes were then combined (Wæraas, 2022). Third, the themes were generated. Fourth, the themes were reviewed, but the probability of going back and forth in refining the codes and the themes was not closed. This process involved the process of repeatedly revisiting the data for meaning in patterns (Christou, 2023). The themes have already been drawn, defined, and composed into a well-written report format.

### **3. Findings and Discussion**

This section presents the results from the thematic analysis of master's students' experiences with the jigsaw technique within the Social and Emotional Learning (SEL) framework. The analysis proposed four key themes that explain how the jigsaw method fosters the development of social awareness and relationship skills and the challenges encountered during its implementation. Ultimately, the first research question was reflected through the enhanced social awareness as well as relationship skills in the group. In answering the second research question, the third and the fourth themes were assigned to describe the challenges that the students had during the jigsaw technique.

### **3.1. Enhancing social awareness through exposure to diverse students' perspectives**

Exposure to diverse discussion viewpoints enhanced students' social awareness in jigsaw learning. From the jigsaw dynamics, students foster the ability to understand the perspectives of and empathize with others (CASEL, 2020) As the group members come from diverse backgrounds, the jigsaw technique provides a setting where students can compromise and negotiate their perspectives, constructing an agreement of knowledge of the topic.

*By doing jigsaw, we got to know other people's opinions, and we could get more insights.* - Participant 2

*Maybe what I haven't understood, I haven't understood from the reading text, I could understand it after I listened to various views from my friends.* - Participant 3

Through this interaction, students began to appreciate the diversity of thought, which is essential for social awareness, a core component of SEL competencies. Within cooperative learning, students are encouraged to discuss and exchange their interpretation of the same reading materials. Students can enrich their knowledge as they exchange their interpretations. Accordingly, cooperative learning fits at the heart of student-centered learning, as students learn from and with their peers, as well as with their teachers (Ivone et al., 2020). Further, as cooperative learning is connected to student-centered learning, it promotes diversity by encouraging them to work with peers who are different from themselves, helping them learn together to achieve common goals (Jacobs & Renandya, 2019). As the students noted, they could also have a better understanding after discussing with their peers how to construct their knowledge and understand the assigned materials. Students later cultivated a mutual understanding, which is important for effective teamwork and learning. Additionally, all of the students also claimed the same notion of the benefit of the jigsaw in respecting any differences they shared during the discussion. Some expressed that they appreciated each of the member's participation in the group contribution. This signifies how each member tried their best to create a supportive environment. It was a safe and comfortable setting that allowed the students to express their opinions to others (Gusta et al., 2020).

*In my opinion, it was very helpful. We could learn to understand other people's opinions even though for example I felt there was something different from what I read and understood. But from there, I considered the opinions of other friends to enrich my point of view.* - Participant 4

Building upon this, the participant highlighted that jigsaw technique allowed him to understand his standpoint but also to develop a greater appreciation for diverse perspectives. Furthermore, this shows that students made an effort to integrate their knowledge with new insights gained from their peers. This collaborative process not only deepened his learning but also encouraged tolerance and mutual respect among peers.

### ***3.2. Building relationship skills through active communication and collaboration***

Jigsaw learning techniques offer an influential power in fostering active communication and collaboration which are paramount in developing relationship skills between people. Within the jigsaw framework, students must participate actively in sharing their opinions while also playing their role as attentive listeners (Chang & Benson, 2022). As students engage in this dynamic pace, they could promote their interpersonal connection and be more adaptive and flexible at the same time to grow relationships with others.

*First, I thought jigsaw learning definitely facilitated us because in the group we were not alone, so we inevitably had to talk.* - Participant 2

*I think it helped, because one example that I remembered, I was in a group with A, and we had never talked before. Then, in the jigsaw, that was the first time I could see her characteristics. Let's say A. Oh, A's sharing is this way.* - Participant 4

As expressed by the students, they also started to improve their relationships with peers they had rarely interacted with before. From the jigsaw activities, students can have better interaction with those who they never discussed with, resulting in a better understanding of how they should communicate with one another as they have different ways to communicate. From that, jigsaw activity cultivated a sense of belonging and mutual support between students (Habiburrahman & Dwinalida, 2024). This interaction then promoted a mutual understanding and trust between members of the group.

Moreover, students also emphasized that jigsaw activity provides opportunities to practice active listening. Not only are they obligated to express their opinion, but in the jigsaw technique, students also need to balance their role as listeners. To fully understand the other peers' insights, students need to give space to others to elaborate on their viewpoints. By actively listening to others, it ensures that jigsaw learning provides a space for all voices to be heard and valued. Afterward, they could respond and provide constructive feedback to achieve the same goal or understanding. Active listening is crucial in fostering relationship skills within SEL as it encourages empathy and collaboration. By being active listeners, students enable others to share their perspectives and consequently strengthen their interpersonal skills (Jeppu et al., 2023).

*When my friends from different regions speak, they had their own style. Some of them could talk really long, some could talk really short, but they could still get the point across. Well, during the jigsaw, I was facilitated.* - Participant 4

As mentioned by the participant, it is evident that the jigsaw technique not only provided them with opportunities to share knowledge but also played a crucial role in developing relationship skills. By encouraging students to communicate, listen actively, and exchange perspectives, the jigsaw technique nurtured their skills in understanding diverse viewpoints from their group members. Further, it trained the students to adapt to varied communication

---

styles, while strengthening their ability to establish connections and collaboration among students.

### ***3.3. Discovering cultural and emotional barriers in group discussions***

Recognizing how cultural and emotional factors affect group discussions is essential when analyzing students' challenges in reflecting on social awareness and relationship skills during the jigsaw technique. In the jigsaw technique, students must participate actively, listen to others effectively, and appropriately contribute their perspectives to the group discussion (Chang & Benson, 2022). However, students' interactions, particularly in cross-cultural group discussions, can be shaped by cultural values regulating how students connect with their peers and express themselves (Hennink, 2017). Such cultural norms from their origin may challenge students to accept the collaborative nature of the jigsaw technique, particularly when their cultural norms contradict the expectations of the learning strategy of active and open communication.

*When expressing my opinion, I noticed how my friends interrupted the discussion. This was mostly about the cultural aspect of how opinions were shared. For example, in Java, culture is still strong. When speaking, someone else suddenly said, 'Excuse me, can I interrupt for a moment?' Even though we were at the same age, even though we're all here together, I still said, 'Please wait, let me finish explaining. – Participant 5*

Traditional cultural values emphasizing politeness, respect, and hierarchy influence how students engage in group discussions, as they must teach and learn from their peers (Hennink, 2017) People usually wait their turn to speak to avoid interruptions and maintain harmonious communication. The participant's excerpt above highlighted the practice of politely asking for permission before interrupting, which was still a cultural value in many settings and was still prioritized. While this cultural value did not hinder general participation in discussions, it created tensions when the jigsaw technique required quicker exchanges of ideas. Some students might hesitate to interrupt or assert their opinions because they appear impolite. This conflict might make it more challenging for them to participate totally in the group discussions, which could restrict their opportunities to gain social awareness and relationship skills, both integral components of SEL. This finding was supported by research from Kuehl et al., 2023, who said that the challenge that may arise from group discussions about cultural diversity is the lack of a sense of belonging. Although interacting with people from different cultural backgrounds is challenging, it will still be beneficial in the short and long term (Hur et al., 2020).

*During the discussions, for example, about metacognition material, it was challenging to understand. Some of my friends engaged actively in the discussion by explaining and exchanging their thoughts. This reflected a cultural difference in learning. In my*

*region, the pace of learning was not as fast as that of my friends in Java. It took a while for me to grasp the material.* – Participant 5

Based on the participant's statements, the researchers identified that complex topics, such as metacognition in Educational Psychology courses, might be challenging to discuss in the learning process. Students' pace of learning varied considerably among individuals, which influenced how students responded to the content. Some students perceived the rate at which new concepts are introduced as slower or faster than others. While some students had a faster grasp of the topic and contributed to the discussion enthusiastically, the other students might have struggled to keep up at the same pace despite their efforts to engage. As a result, students who absorbed the material more slowly might feel disadvantaged in dynamic group discussions where the members have diverse abilities to comprehend the material.

### ***3.4. Encountering personal dominance, inferiority, and validation in group interactions***

In analyzing the challenges in the cooperative learning process, particularly the jigsaw technique, the researchers found that the presence of dominant group members could significantly impact the direction and flow of the discussion. Group members who were more predominant in speaking and delivering their thoughts could lead to an imbalance in group participation.

*If there were someone who enjoyed talking a lot, honestly, sometimes it would be difficult to stop them.* – Participant 3

*I wanted to share my thoughts with the group, but I felt they would not listen. Then, I just kept it to myself.* – Participant 5

This participant's statements exemplified the difficulties faced by quieter group members when attempting to contribute to the discussions. When dominant group members tended to control and dominate the conversation, the voices of people who might have insightful things to share but are less likely to speak up were unintentionally suppressed. Such dominance in a group had consequences that were not only social inconveniences among group members but also impacted the quality and inclusivity of the group's collaboration. The quieter group members might feel disregarded. This exclusion hindered the group's ability to synthesize different viewpoints, making it more challenging to grasp the topic comprehensively.

The researchers identified that dominant group members might also create a learning atmosphere that discourages the quieter students from sharing their ideas. The students' feelings of being unheard and ignored, even before they tried to speak, resulted in a cycle of silence among group members who felt their contributions were unimportant. Eventually, such a dynamic led to disengagement, which could reduce the jigsaw technique's ability to promote deeper learning through collaboration.

---

*I did not feel free to express my thoughts when I was with someone I truly respect because they were older or smarter than me. – Participant 2*

*Because sometimes I felt inferior to the others, I then just let the discussion flow. – Participant 5*

Another significant challenge to students in developing their social awareness and relationship skills was the feeling of inferiority within group settings. Sometimes, some students were reluctant to voice their thoughts, mainly when speaking with those they believed to be more authoritative or competent. Students' feelings of inferiority came from perceived social hierarchies. These findings aligned with a study by Pierce & Gilles (2022), which showed that one possible factor of the occurrence of silencing in group discussion is social hierarchies. In this jigsaw technique among master students, students' feelings of inferiority occurred because of diversity as they came from various ages, occupations, and academic standing.

The third challenge in group collaboration was the difficulty in validating the information shared by group members. Any collaborative learning process requires trust and clarity. The group's ability to learn from one another was lacking when trust and clarity were absent, as trust in the group is critical for students to engage behaviorally and cognitively (Poort et al., 2022). The fourth participant's statement demonstrated some students' hesitation and doubt regarding the accuracy of the shared information.

*Sometimes, I still doubted what my friends shared. Did the concept in the reading material say so? Sometimes I also questioned myself whether I could teach the concept I have learned well to the other friends. – Participant 4*

This challenge frequently arose during group discussions, mainly when students worked with unfamiliar and complex material. It was more challenging to ensure the information shared was accurate because of the requirements of the jigsaw technique, which assigned each participant to learn and teach particular parts of the material. Students might be hesitant to incorporate or expand upon the knowledge that others have contributed, which restricts the flow of ideas in group discussions. The issue of validation is intimately related to the group's social dynamics. Therefore, practical group work and deeper learning will take more time in culturally diverse groups than in a single-culture group (Poort et al., 2019). When students lack confidence in the accuracy of the presented information, they may be hesitant to fully participate in the debate, either questioning everything or withdrawing from active involvement entirely. This behavior contradicts the collaborative aspect of the jigsaw technique, in which trust in one another's contributions is also crucial to the group's success (Poort et al., 2022). Furthermore, a lack of validation can lead to insecurity and inferiority as students begin to mistrust the information presented and their capacity to participate successfully in the conversation.

#### 4. Conclusion

This study explored how the jigsaw technique promoted social awareness and relationship skills of first-semester students of the English education master program. Based on the findings of this study, the jigsaw technique encouraged students to value different points of view, employ active listening, and collaborate with others effectively. Group collaboration taught students to respect opposing ideas, establish trust, and foster an optimal learning environment. Students were required to comprehend and teach the material to the other peers. Social awareness and relationship skills are necessary in academic and professional settings, mainly where effective teamwork is highly upheld.

Ultimately, this study also discovered some challenges in implementing the jigsaw technique from students' points of view. One of the main challenges to practical group discussions was the cultural barriers among students. In this context, some students encountered difficulties accepting diversity, particularly associated with their communication styles and cultural values. To mitigate this issue, educators should consider implementing regular monitoring and feedback sessions where students can share and express their feelings about group dynamics. By listening to students' experiences, educators may suggest improvements to overcome their problems. Another prominent challenge identified in this study was the presence of dominance and inferiority within group dynamics. Some students sometimes experienced difficulties participating in discussions because more confident or experienced students had the tendency to dominate the discussions. To overcome this challenge, educators should ensure all students have equal opportunities to share their thoughts by setting clear guidelines. Educators should set equal time for students to share their pieces of information. When the allocated time is up for one student, another student can continue the discussion. This attempt will also help the discussion more effectively because it runs according to the predetermined time allocation and encourages balanced interactions.

This study has some limitations. One of the limitations is related to the sample size and diversity of research participants, which limits the generalizability of the findings. The results of this study may not reflect the experiences of a wider population with diverse cultural backgrounds. In addition, the study provided useful insights for educators who want to incorporate collaborative learning while also taking into account students' group interactions and relationship-building activities. As an early investigation of SEL in Indonesia's higher education context, this study lays the groundwork for future studies. Future studies should include longitudinal studies to measure the jigsaw technique's long-term influence on student engagement and teamwork. Furthermore, investigating additional SEL components, such as self-awareness, self-management, and responsible decision-making, would provide a more

---

comprehensive picture of how collaborative learning strategies contribute to students' overall social-emotional development.

### References

- Ahmed, I., Hamzah, A. B., & Abdullah, M. N. L. Y. B. (2020). Effect of social and emotional learning approach on students' social-emotional competence. *International Journal of Instruction*, 13(4). <https://doi.org/10.29333/iji.2020.13441a>
- Alamsyah, H. &, Universitas, H., Negeri, I., & Serang, H. (2019). Kajian konseptual tentang social-emotional learning (SEL) dalam pembelajaran bahasa. In *Jurnal Pendidikan-ISSN* (Vol. 11, Issue 1).
- Alfares, N. (2020). The effect of using a self-regulated jigsaw task on female students' performance in the course of curriculum reading in English at Umm Al-Qura University in Saudi Arabia. *Arab World English Journal*, 11(4), 519–533. <https://doi.org/10.24093/awej/vol11no4.33>
- Anisa, L., Agustina Suganda, L., & Putera Jaya, H. (2019). Indonesian English teachers' social-emotional competence and students' English learning motivation. *Indonesian Journal of English Language Teaching and Applied Linguistics*, 4(1), 2019. [www.ijeltal.org](http://www.ijeltal.org)
- Ary, D., Jacobs, L. C., Sorensen, C. K., & Walker, D. A. (2014). *Introduction to research in education* (9th edition). Wadsworth Cengage Learning.
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77–101.
- Braun, V., & Clarke, V. (2019). To saturate or not to saturate? Questioning data saturation as a useful concept for thematic analysis and sample-size rationales. *Qualitative Research in Sport, Exercise and Health*. <https://doi.org/10.1080/2159676X.2019.1704846>
- Campbell, S., Greenwood, M., Prior, S., Shearer, T., Walkem, K., Young, S., Bywaters, D., & Walker, K. (2020). Purposive sampling: complex or simple? Research case examples. *Journal of Research in Nursing*, 25(8), 652–661. <https://doi.org/10.1177/1744987120927206>
- CASEL. (2020a). *CASEL's SEL framework*. <https://casel.org/fundamentals-of-sel/what-is-the-casel-framework/>
- Chang, W.-L., & Benson, V. (2022). Jigsaw teaching method for collaboration on cloud platforms. *Innovations in Education and Teaching International*, 59(1), 24–36. <https://doi.org/10.1080/14703297.2020.1792332>
- Christou, P. A. (2023). How to use thematic analysis in qualitative research. *Journal of Qualitative Research in Tourism*, 3(2), 79–95. <https://doi.org/10.4337/jqrt.2023.0006>

- Conley, C. S. (2015). *SEL in higher education*.  
[https://ecommons.luc.edu/psychology\\_facpubs](https://ecommons.luc.edu/psychology_facpubs)
- Creswell, J. W., & Clark, V. L. P. (2018). *Designing and conducting mixed methods research* (3rd edition). SAGE Publications, Inc.
- Creswell, J. W., & Poth, C. N. (2018). Qualitative inquiry and research design: choosing among five approaches. In *Journal of Chemical Information and Modeling* (4th edition). SAGE Publications, Inc.
- Domitrovich, C. E., Durlak, J. A., Staley, K. C., & Weissberg, R. P. (2017). Social-emotional competence: An essential factor for promoting positive adjustment and reducing risk in school children. *Child Development*, 88(2), 408–416.  
<https://doi.org/10.1111/cdev.12739>
- Elmi, C. (2020). Integrating social-emotional learning strategies in higher education. *European Journal of Investigation in Health, Psychology and Education*, 10(3), 848–858. <https://doi.org/10.3390/ejihpe10030061>
- Fowler, F. J. (2014). Survey research methods. In *Sage Publications, Inc* (5th edition).
- Greenberg, M. T. (2023). Evidence for Social and Emotional Learning in Schools. *Learning Policy Institute, March*.
- Guest, G., MacQueen, K. M. & Namey, E. E. (2012). Applied thematic analysis. In *Sage Publications*.
- Gusta, W., Christina, D., & Zakirman. (2020). Improved student collaboration skills on English learning using jigsaw models. *International Journal of Scientific and Technology Research*, 9(3), 1051–1056.
- Habiburrahman, M., & Dwinalida, K. (2024). Students' perception on jigsaw strategy in English teaching and learning activities. *Journal of English Pedagogy and Applied Linguistics*, 1(1), 15–26.
- Hachem, M., Gorgun, G., Chu, M.-W., & Bulut, O. (2022). Social and emotional variables as predictors of students' perceived cognitive competence and academic performance. *Canadian Journal of School Psychology*, 37(4), 362–384.  
<https://doi.org/10.1177/08295735221118474>
- Hansen, C. B. (2019). *The heart and science of teaching: Transformative applications that integrate academic and social-emotional learning*. Teachers College Press.
- Hennink, M. M. (2017). Cross-cultural focus group discussions. In *A New Era in Focus Group Research* (pp. 59–82). Palgrave Macmillan UK. [https://doi.org/10.1057/978-1-137-58614-8\\_4](https://doi.org/10.1057/978-1-137-58614-8_4)
- Huang, X., & Lajoie, S. P. (2023). Social emotional interaction in collaborative learning: Why it matters and how can we measure it? In *Social Sciences and Humanities Open* (Vol. 7, Issue 1). Elsevier Ltd. <https://doi.org/10.1016/j.ssaho.2023.100447>
- Hur, J. W., Shen, Y. W., & Cho, M.-H. (2020). Impact of intercultural online collaboration project for pre-service teachers. *Technology, Pedagogy and Education*, 29(1), 1–17.

- <https://doi.org/10.1080/1475939X.2020.1716841>
- Ivone, F. M., Jacobs, G. M., & Renandya, W. A. (2020). Far apart, yet close together: Cooperative learning in online education. *Studies in English Language and Education*, 7(2), 271–289. <https://doi.org/10.24815/siele.v7i2.17285>
- Jacobs, G. M., & Renandya, W. A. (2019). Student-centered cooperative learning: Linking concepts in education to promote student learning. In *Springer Nature Singapore Pte Ltd.*
- Jeppu, A. K., Kumar, K. A., & Sethi, A. (2023). ‘We work together as a group’: implications of jigsaw cooperative learning. *BMC Medical Education*, 23(1), 1–8. <https://doi.org/10.1186/s12909-023-04734-y>
- Jiang, Y., & Dewaele, J.-M. (2019). How unique is the foreign language classroom enjoyment and anxiety of Chinese EFL learners? *System*, 82, 13–25. <https://doi.org/10.1016/j.system.2019.02.017>
- Karmina, S., Dyson, B., & Setyowati, L. (2024). Teachers’ perspectives on implementing cooperative learning to promote social and emotional learning. *Jurnal Cakrawala Pendidikan*, 43(2). <https://doi.org/10.21831/cp.v43i2.68447>
- Kuehl, R. A., Enz, M. K., & Mehlretter Drury, S. A. (2023). Using enclave groups to discuss workplace cultural diversity and community inclusion. *Human Communication Research*, 49(2), 194–204. <https://doi.org/10.1093/hcr/hqad006>
- Lestari, S., & Azizah, N. N. (2023). The Implementation of Social Emotional Learning Approach in Elementary School. *Jurnal Prima Edukasia*, 11(2), 266–275. <https://doi.org/10.21831/jpe.v11i2.62179>
- Llorent, V., González-Gómez, A., Farrington, D., & Zych, I. (2022). Improving Literacy Competence and Social and Emotional Competencies in Primary Education Through Cooperative Project-Based Learning. *Psicothema*, 1(34), 102–109. <https://doi.org/10.7334/psicothema2020.372>
- Low, S., Smolkowski, K., Cook, C., & Desfosses, D. (2019). Two-year impact of a universal social-emotional learning curriculum: Group differences from developmentally sensitive trends over time. *Developmental Psychology*, 55(2), 415–433. <https://doi.org/10.1037/dev0000621>
- Meijer, H., Hoekstra, R., Brouwer, J., & Strijbos, J.-W. (2020). Unfolding collaborative learning assessment literacy: a reflection on current assessment methods in higher education. *Assessment & Evaluation in Higher Education*, 45(8), 1222–1240. <https://doi.org/10.1080/02602938.2020.1729696>
- Panorama Education. (2015). *User guide social-emotional learning*. <https://dpi.wi.gov/sites/default/files/imce/sspw/pdf/seluserguide.pdf>
- Panorama Education. (2016). *Reliability and validity of Panorama’s social-emotional learning measures*. <https://panorama-www.s3.amazonaws.com/files/sel/SEL-Validity-Report.pdf>

- Pascoe, M. C., Hetrick, S. E., & Parker, A. G. (2020). The impact of stress on students in secondary school and higher education. *International Journal of Adolescence and Youth*, 25(1), 104–112. <https://doi.org/10.1080/02673843.2019.1596823>
- Pierce, K. M., & Gilles, C. (2022). Examining silenc(ing) in literature discussion groups. *Linguistics and Education*, 68, 100963. <https://doi.org/10.1016/j.linged.2021.100963>
- Poort, I., Jansen, E., & Hofman, A. (2019). Intercultural group work in higher education: Costs and benefits from an expectancy-value theory perspective. *International Journal of Educational Research*, 93, 218–231. <https://doi.org/10.1016/j.ijer.2018.11.010>
- Poort, I., Jansen, E., & Hofman, A. (2022). Does the group matter? Effects of trust, cultural diversity, and group formation on engagement in group work in higher education. *Higher Education Research & Development*, 41(2), 511–526. <https://doi.org/10.1080/07294360.2020.1839024>
- Shingaev, S. M. (2019). *Development of emotional intelligence in school students as an important component of their successful personality*. 615–623. <https://doi.org/10.33910/herzenpsyconf-2019-2-76>
- Simion, A. (2023). The impact of socio-emotional learning (SEL) on academic evaluation in higher education. *Educatia* 21, 24, 109–117. <https://doi.org/10.24193/ed21.2023.24.11>
- Van Ryzin, M. J., & Roseth, C. J. (2021). The Cascading Effects of Reducing Student Stress: Cooperative Learning as a Means to Reduce Emotional Problems and Promote Academic Engagement. *The Journal of Early Adolescence*, 41(5), 700–724. <https://doi.org/10.1177/0272431620950474>
- Wæraas, A. (2022). Thematic analysis: making values emerge from texts. *Researching Values: Methodological Approaches for Understanding Values Work in Organisations and Leadership*, 153–170. [https://doi.org/10.1007/978-3-030-90769-3\\_9](https://doi.org/10.1007/978-3-030-90769-3_9)
- Wang, Y., Yang, Z., Zhang, Y., Wang, F., Liu, T., & Xin, T. (2019). The effect of social-emotional competency on child development in Western China. *Frontiers in Psychology*, 10. <https://doi.org/10.3389/fpsyg.2019.01282>
- Yoder, N., Conner, P., Martinez-Black, T., & Ressel, R. (2021). *Elevating social and emotional learning throughout the day: Ten teaching practices that promote SEAD in culturally responsive ways* (pp. 119–147). <https://doi.org/10.4018/978-1-7998-6728-9.ch007>