



# **The Effect of the Jigsaw Technique on Enhancing EFL Student Participation and English Speaking Skills at Abu-Issa College**

***Sunyah Fathi Alhadi Omar***

University of Zawia, Abuissa College of Education, English Department, Zawia, Libya, LY 00218, [s.omar@zu.edu.ly](mailto:s.omar@zu.edu.ly)

## **ABSTRACT :**

This study investigates the effectiveness of the Jigsaw technique in enhancing student participation and English speaking skills among fifth-semester EFL students at Abu-Issa College. Grounded in social constructivist theory and cooperative learning principles, the research employed a quantitative descriptive design using a structured questionnaire as the sole data collection instrument. The questionnaire was administered to a purposive sample of 40 students who had experienced Jigsaw-based instruction over a four-week period. The results indicated high levels of agreement with statements related to enjoyment, focus, comprehension, and increased confidence in speaking. In contrast, low levels of agreement were recorded on negatively phrased items, suggesting that students did not experience boredom or reluctance to engage with peers. These findings support the view that the Jigsaw technique creates a student-centered and collaborative learning environment that fosters active engagement and oral communication. While the results are promising, limitations such as the use of a single institution and reliance on self-report measures suggest the need for further research using mixed methods to deepen the understanding of the technique's long-term impact. The study concludes that the Jigsaw strategy is a valuable pedagogical tool for improving participation and speaking proficiency in EFL contexts.

**Keywords:** Jigsaw technique, cooperative learning, EFL participation, speaking skills, peer interaction.

## **1. Introduction**

In recent decades, the role of student-centered learning has grown significantly in English as a Foreign Language (EFL) education. Traditional methods that rely heavily on teacher instruction often fail to actively engage students or improve essential communicative competencies, particularly in speaking. In many EFL contexts, including at Abu-Issa College, learners frequently remain passive in class and are hesitant to use English orally. This hesitancy can stem from anxiety, lack of confidence, or limited opportunities to practice in a safe and collaborative environment.

One innovative method that has shown promise in addressing these challenges is the Jigsaw technique. Originally introduced by Elliot Aronson in the 1970s, the Jigsaw technique is a cooperative learning strategy that encourages students to become responsible for parts of a lesson and then teach what they have learned to their peers. This structure promotes not only comprehension but also interpersonal communication and active engagement. In language classrooms, such collaborative methods are particularly beneficial as they increase interaction, lower affective filters, and provide meaningful contexts for speaking practice.

Despite its theoretical advantages, the Jigsaw technique remains underexplored in Libyan EFL classrooms. There is a pressing need to empirically assess its effectiveness in local contexts, particularly in higher education institutions like Abu-Issa College, where speaking performance and classroom participation are areas of concern.

## **2. Problem Statement**

Many EFL students at Abu-Issa College face low participation and lack confidence in speaking English. Teacher-centered methods, still common in classrooms, often limit opportunities for interaction and communication (Richards & Rodgers, 2014). The Jigsaw technique, a cooperative learning strategy developed by Aronson (1978), has been shown to improve participation and speaking skills in EFL contexts (Slavin, 1995; Mengduo & Xiaoling, 2010). However, its effectiveness in Libyan higher education remains underexplored. This study investigates whether applying the Jigsaw technique can enhance participation and speaking abilities among EFL students at Abu-Issa College.

## **3. Research Questions**

1. To what extent does the Jigsaw technique enhance EFL student participation at Abu-Issa College?
2. To what extent does the Jigsaw technique improve EFL students' English speaking skills at Abu-Issa College?

---

#### 4. Objectives of the Study

1. To evaluate students' perceptions of the Jigsaw technique in English language learning.
2. To determine the effectiveness of the Jigsaw technique in promoting classroom participation.
3. To assess the impact of the Jigsaw technique on the development of students' speaking skills.

---

#### 5. Significance of the Study

This study is significant for several reasons. First, it offers insight into how cooperative learning strategies like the Jigsaw technique can be utilized in Libyan EFL classrooms to improve participation and speaking proficiency. Second, it provides practical implications for EFL instructors who seek to adopt more interactive and student-centered teaching methods. Third, it contributes to the limited body of local literature on cooperative learning and may inform future pedagogical decisions and curriculum design in similar educational settings.

---

#### 6. Limitations of the Study

The scope of this study is confined to fifth EFL semester students at Abu-Issa College. It uses a single quantitative instrument, a student questionnaire, to collect data. The study does not include qualitative insights such as interviews or classroom observations, which may have offered a deeper understanding of students' experiences. Additionally, the study focuses only on one institution, limiting the generalizability of its findings.

---

#### 7. Literature Review

The literature relevant to this study centers on the theoretical and empirical foundations of cooperative learning in EFL instruction, with particular attention to the Jigsaw technique. This section first outlines the theoretical framework that supports collaborative learning environments, followed by a focused discussion on the role of the Jigsaw method in EFL contexts. It also explores the importance of student participation and the development of speaking skills as essential components of communicative competence. Finally, it reviews key studies that have examined the effectiveness of the Jigsaw strategy in enhancing student engagement and oral language performance.

##### 7.1 Theoretical Framework

This study is grounded in social constructivist theory and cooperative learning principles, which together provide a robust foundation for understanding how collaborative strategies like the Jigsaw technique enhance EFL student engagement and speaking proficiency.

##### 7.1.1 Social Constructivist Theory

The foundation of this study is grounded in social constructivist learning theory, which emphasizes the critical role of social interaction in the development of knowledge. Social constructivism, as proposed by Vygotsky (1978), posits that learning is not an isolated, individual process but rather a socially mediated activity. According to this view, students construct meaning more effectively when they engage in collaborative learning experiences that involve meaningful communication, negotiation, and shared understanding. Knowledge, therefore, is co-constructed through dialogue, questioning, and the exchange of perspectives with others in a learning community.

This theory highlights the concept of the Zone of Proximal Development (ZPD), which refers to the range of tasks a learner can perform with the help of a more knowledgeable peer or instructor but cannot yet perform independently. Learning occurs most effectively within this zone when students are scaffolded through interaction and guided support. In this context, peer collaboration serves as a key mechanism for cognitive development, particularly in language learning environments.

##### 7.1.2 Cooperative Learning and Interdependence

Aligned with the principles of social constructivism is the model of cooperative learning, in which students work together in structured group settings to achieve common learning objectives. Cooperative learning is characterized by positive interdependence, individual accountability, group processing, and face-to-face primitive interaction (Slavin, 1995). Unlike traditional classroom structures where learning is often competitive or individualistic, cooperative learning promotes a shared responsibility for success and encourages learners to support one another academically and socially.

Through cooperative tasks, students not only engage with content at a deeper level but also develop interpersonal and communication skills that are essential for language development. This model supports the view that learning is enhanced when students are actively involved in helping and explaining concepts to their peers.

##### 7.2 The Jigsaw Technique as an Instructional Strategy

The Jigsaw technique is a direct application of both social constructivist and cooperative learning theories. Developed by Aronson in the 1970s, the Jigsaw method involves dividing a lesson into segments, with each student in a group assigned one segment to study and later teach to their group.

members. This structure requires learners to become both knowledge receivers and knowledge providers, which increases their engagement, motivation, and sense of responsibility.

By assigning individual accountability and interdependent roles, the Jigsaw technique ensures that all students contribute to the group's learning process. In doing so, it fosters cognitive engagement and collaborative interaction, allowing students to learn from each other through explanation, clarification, and discussion. These characteristics make the Jigsaw method particularly effective for promoting speaking practice, peer feedback, and active participation, all of which are critical in EFL contexts.

In summary, the theoretical foundation of this study supports the use of the Jigsaw technique as an instructional strategy that not only facilitates academic learning but also cultivates a collaborative classroom culture. Rooted in Vygotsky's social constructivism and Slavin's cooperative learning framework, the technique creates a learning environment where students construct knowledge through dialogue, cooperation, and shared responsibility.

### ***7.3 The Jigsaw Technique in EFL Learning***

The **Jigsaw technique**, developed by Aronson (1978), requires students to become "experts" on specific content segments and then teach that content to their group members. This method not only fosters peer teaching but also encourages interdependence, accountability, and verbal interaction. In EFL contexts, the Jigsaw approach has been widely reported to improve learners' engagement and comprehension (Mengduo & Xiaoling, 2010). Students are more likely to speak, listen, and clarify ideas during group work, which reinforces language acquisition. Furthermore, Richards and Rodgers (2014) stated that jigsaw activities encourage learners to communicate meaningfully, a key component of communicative language teaching.

### ***7.4 Student Participation in EFL Classrooms***

Student participation is a major determinant of effective language learning. Active participation helps reduce passivity, boosts motivation, and enhances communicative competence (Brown, 2001). However, many traditional classroom structures limit opportunities for learners to engage actively. Studies have shown that cooperative learning methods, including the Jigsaw technique, significantly increase student involvement (Kagan, 1994). In particular, Gillies (2007) indicated that learners working in structured peer groups are more willing to contribute to discussions and support one another's learning, thereby creating a more inclusive and motivating classroom environment.

### ***7.5 Speaking Skills and Cooperative Learning***

Speaking is one of the most challenging skills for EFL learners due to anxiety, limited vocabulary, and fear of making mistakes. Yet, it is also the most crucial skill for real-life communication. Cooperative learning methods like Jigsaw reduce learner anxiety and promote fluency by providing learners with authentic reasons to speak (Nation & Newton, 2009). According to Oxford (1997), students are more likely to develop oral proficiency in supportive, collaborative settings where they feel less judged and more engaged. The peer interaction inherent in Jigsaw encourages learners to explain, paraphrase, and clarify language content, actions that naturally promote speaking development.

### ***7.6 Previous Studies on Jigsaw and Language Learning***

Several international studies have consistently confirmed the effectiveness of the Jigsaw technique in enhancing both student participation and English-speaking skills, especially in EFL contexts. For instance, Ghaith (2003) conducted a study on Lebanese students and found that the implementation of the Jigsaw technique led to notable increases in learners' motivation levels and their confidence in speaking English. The cooperative and interdependent structure of the method encouraged students to engage more actively in classroom discussions and take greater responsibility for their learning, which, in turn, improved their oral performance.

Similarly, in an Indonesian context, Suprijono (2013) observed that EFL learners who were regularly exposed to the Jigsaw technique during their English classes demonstrated marked improvements in their oral communication skills. The collaborative nature of the method appeared to create a more supportive learning environment, where students felt more at ease to express themselves and practice speaking with their peers.

While these studies point to the positive impact of Jigsaw on language acquisition and communication skills in different educational settings, there remains a noticeable lack of research exploring its application within Arab educational contexts. One notable exception is the study by Ahmed and Salih (2019) in Sudan, which revealed that the use of Jigsaw-based instruction significantly improved both classroom interaction and the speaking performance of EFL students. Their findings suggest that even within the Arab world, the technique holds considerable promise for enhancing student engagement and linguistic output.

Despite these encouraging results from various international and regional contexts, there is still a significant gap in the literature concerning the use of the Jigsaw method in Libyan higher education institutions. To date, very few empirical studies have investigated how this cooperative learning strategy functions within Libyan EFL classrooms. This gap underscores the necessity of conducting context-specific research such as the present study, which seeks to determine whether the positive outcomes observed in other countries can also be realized in the setting of Abu-Issa College. By doing so, the study not only contributes to the broader understanding of the Jigsaw technique but also addresses a critical void in localized pedagogical research.

---

## **8. Methodology**

This section outlines the research design, participants, instrument, procedures, and data analysis methods used to investigate the effect of the Jigsaw technique on student participation and speaking skills in EFL classrooms.

### 8.1 Research Design

The study adopts a quantitative descriptive design, suitable for examining participants' attitudes and self-reported behaviors through structured instruments (Creswell, 2012). A questionnaire was employed as the sole data collection tool to gather measurable insights into students' experiences with the Jigsaw technique. Dörnyei (2007) concluded that this approach allows for a broad assessment of patterns across a targeted group while ensuring replicability and consistency in data collection.

### 8.2 Participants

The target population consists of fifth EFL semester students at Abu-Issa College. A total of 40 participants were selected through purposive sampling, ensuring that all participants had recently engaged in English lessons that incorporated the Jigsaw technique. The selection criteria focused on learners with intermediate to advanced English proficiency levels to ensure their ability to assess their own participation and speaking development meaningfully.

### 8.3 Sampling Technique

This study employed purposive sampling, a non-probability sampling method commonly used in educational and applied linguistics research. The purpose of this technique is to intentionally select participants who possess specific characteristics relevant to the objectives of the study (Etikan, Musa, & Alkassim, 2016). In this case, fifth-semester EFL students at Abu-Issa College were chosen because they had prior experience with the Jigsaw technique as part of their English coursework.

Purposive sampling allows the researcher to focus on a particular subset of the population that is best suited to provide the data needed for answering the research questions (Palinkas et al., 2015). The selected students were assumed to have sufficient exposure to Jigsaw-based instruction and were capable of evaluating its effect on their participation and speaking skills. This approach was also suitable given the study's contextual limitations and the exploratory nature of the research.

Dörnyei (2007) concluded that while purposive sampling does not support statistical generalization to a broader population, it enhances contextual depth and internal validity by ensuring that participants have meaningful and relevant experience with the phenomenon under investigation.

### 8.4 Instrument

The primary instrument for data collection was a researcher-developed questionnaire consisting of 10 items measured on a 4-point Likert scale: *Strongly disagree*, *Disagree*, *Agree*, and *Strongly agree*. The items focused on two key areas: (1) students' participation and engagement during Jigsaw-based lessons, and (2) perceived improvements in English speaking confidence and fluency.

Items were adapted from similar studies using cooperative learning strategies in language contexts (Gillies, 2007; Mengduo & Xiaoling, 2010). The questionnaire included both positively and negatively worded items (e.g., "Using Jigsaw makes me bored") to reduce response bias. Two TEFL experts reviewed the items for content validity, ensuring clarity and alignment with the study's objectives (Pallant, 2013).

### 8.5 Procedures

After obtaining informed consent, students were introduced to the purpose of the study and instructed on how to complete the questionnaire. The survey was administered after students had participated in a series of English lessons that incorporated the Jigsaw technique over a period of four weeks. The lessons included structured group activities, peer teaching, and task-based language use aligned with the Jigsaw method (Aronson, 1978). All data were collected anonymously to protect student confidentiality.

## 9. Data Analysis

Descriptive statistics were used to analyze the responses, including mean scores, standard deviations, and frequency distributions. Reversed scoring was applied to negatively worded items. The results were interpreted in relation to the two core variables: student participation and speaking skill development. Data were processed using SPSS (Statistical Package for the Social Sciences).

## 10. Results

This section presents the findings of the questionnaire administered to 40 EFL students at Abu-Issa College, following their participation in English lessons using the Jigsaw technique. The questionnaire consisted of 10 Likert-scale items designed to measure perceptions of participation and speaking skill improvement.

Item	Strongly Disagree	Disagree	Agree	Strongly Agree	Mean	1. D
1. Using the Jigsaw technique in English is fun.	1	3	22	14	3.23	0.68
2. I like the use of Jigsaw technique in learning English.	1	2	25	12	3.20	0.61

3. Using Jigsaw makes me bored. ( <i>Reversed</i> )	6	20	9	5	2.08	0.75
4. Jigsaw helps me focus more on using the language.	0	3	24	13	3.25	0.56
5. English lessons using Jigsaw improve my language.	0	4	23	13	3.23	0.58
6. Jigsaw makes me more passionate about the language.	1	5	21	13	3.15	0.66
7. Jigsaw makes it easier for me to understand lessons.	0	4	26	10	3.15	0.52
8. I feel confident when explaining lessons to peers.	2	6	24	8	2.95	0.68
9. Jigsaw helps me remember lesson content.	1	5	24	10	3.08	0.64
10. I am reluctant to ask friends about things I don't understand. ( <i>Reversed</i> )	10	16	8	6	2.15	0.83

Note: Items 3 and 10 were reverse-coded during analysis.

**Table1: Results of the questionnaire**

### 10.1 Interpretation of the Obtained Results

- The highest mean scores were observed in Items 4 and 5 ( $M = 3.25$  and  $M = 3.23$ ), indicating that most students agreed that the Jigsaw technique improves focus and language learning.
- Items 1 and 2 (fun and preference for Jigsaw) also scored highly ( $M = 3.23$  and  $3.20$ ), suggesting a positive student attitude toward the technique.
- Item 8, concerning speaking confidence, showed a relatively strong mean of 2.95, indicating improved comfort in peer interactions.
- The reversed items (3 and 10) had low agreement, confirming that most students did not feel bored or reluctant to ask peers, which further supports the claim that Jigsaw enhances engagement and reduces classroom anxiety.

Overall, the results suggest that the majority of students found the Jigsaw technique beneficial for both participation and speaking development. The combination of high scores in positive indicators and low scores in reversed items reflects a strong student preference for collaborative, peer-led learning environments.

The descriptive statistics table presents the distribution of responses for each of the ten questionnaire items based on the perceptions of 40 EFL students toward the use of the Jigsaw technique in their English language classes. Overall, the data show a consistent trend of positive student perceptions.

Items 1 and 2, which assess the students' general enjoyment and preference for the Jigsaw technique, received high mean scores of 3.23 and 3.20 respectively, indicating that the majority of participants found the technique enjoyable and preferred it over traditional approaches.

The strongest agreement appeared in Items 4 and 5 (means = 3.25 and 3.23), which relate to the enhancement of language focus and improvement. These results suggest that students perceive the Jigsaw technique as contributing significantly to their cognitive engagement and linguistic development. Item 7, which concerns comprehension of lessons, also scored high ( $M = 3.15$ ), indicating that learners find it easier to understand content when engaged in peer-based tasks.

Item 8, which addresses speaking confidence, had a slightly lower but still positive mean of 2.95, suggesting that while the majority of students feel more confident speaking English during Jigsaw activities, some still face challenges.

Importantly, the reversed items (3 and 10) had low mean scores of 2.08 and 2.15, respectively. This indicates that students largely disagreed with statements suggesting boredom or reluctance to ask peers questions, both of which are barriers to effective classroom participation.

In summary, the table illustrates that most students experienced enhanced participation, motivation, and speaking confidence when the Jigsaw technique was employed, supporting the core hypothesis of this study.

## 11. Discussion

The findings of this study provide clear evidence that the Jigsaw technique has a positive impact on student participation and speaking skill development in EFL classrooms at Abu-Issa College. The overall responses from the 40 participants reflected high levels of agreement with statements related to enjoyment, motivation, comprehension, and confidence in using English during Jigsaw-based lessons. These results are consistent with existing literature that supports the use of cooperative learning strategies in language education.

One of the key findings is that students found English lessons using the Jigsaw technique enjoyable and engaging. The high mean scores for Items 1 and 2 indicate that learners perceived the Jigsaw tasks as more interactive and motivating than traditional teacher-centered activities. This aligns with Gillies (2007), who noted that cooperative structures increase learner satisfaction and reduce boredom in classroom environments.

In terms of language development, items related to comprehension, focus, and language improvement (Items 4, 5, and 7) received the highest ratings. This suggests that students felt more involved and better able to understand and retain lesson content when learning through peer interaction. These findings support the claims of Nation and Newton (2009), who emphasized that learners retain information more effectively when engaged in collaborative, communicative tasks.

Perhaps most importantly, the study revealed notable gains in speaking confidence. Item 8, which focused on learners' willingness to explain content to peers, recorded a strong mean score. This suggests that the Jigsaw approach not only encourages speaking but also reduces anxiety, likely due to the supportive nature of small-group discussions. Oxford (1997) highlighted that such structured interaction lowers the affective filter, making learners feel more at ease when speaking.

Interestingly, the reversed items (3 and 10), which measured boredom and reluctance to interact, showed the lowest mean values. This indicates that the Jigsaw method may help overcome common barriers to participation such as fear of speaking or disengagement. Slavin (1995) argues that cooperative learning provides equal opportunities for all students to contribute, which may explain the reduction in reluctance seen in this study.

Taken together, the findings suggest that the Jigsaw technique fosters a classroom environment that supports participation, enhances understanding, and builds speaking confidence among EFL learners. While the sample size and single-instrument design limit the generalizability of the results, the consistency with existing research strengthens the conclusion that cooperative learning methods are highly effective in EFL contexts.

## 12. Conclusion

This study examined the impact of the Jigsaw technique on student participation and speaking skills among fifth-semester EFL students at Abu-Issa College. Using a structured questionnaire administered to a sample of 40 students, the research aimed to evaluate students' perceptions of the technique's effectiveness in enhancing engagement and oral language development. The analysis of the responses indicates that the Jigsaw technique has a notably positive influence on classroom participation, comprehension, and spoken English communication.

Participants expressed strong agreement with statements related to enjoyment, improved focus, motivation to learn, and confidence in speaking, particularly when explaining lessons to peers. These responses suggest that the Jigsaw strategy not only makes learning more enjoyable but also promotes greater ownership of knowledge and active involvement in the learning process. Such findings underscore the value of the Jigsaw technique in creating a dynamic, interactive, and learner-centered classroom environment, which is essential for the development of communicative competence. Furthermore, the consistently low levels of agreement with negatively phrased items, such as those indicating boredom or reluctance to seek help, imply that the use of the Jigsaw method helps reduce anxiety and other psychological barriers that commonly hinder speaking performance in EFL contexts. This reinforces the belief that cooperative learning structures provide a supportive framework that enhances both academic and interpersonal outcomes.

While the findings are promising, several limitations must be acknowledged. The study was limited to a single institution and relied solely on a self-report questionnaire, which may have introduced subjective bias. Additionally, the absence of qualitative data, such as interviews or classroom observations, restricts the depth of insight into students' experiences. To strengthen the validity and generalizability of future research, it is recommended that similar studies be conducted across multiple institutions using mixed-method approaches that combine quantitative and qualitative tools.

## 13. Recommendations

English language instructors are encouraged to integrate the Jigsaw method into the regular EFL curriculum, as its student-centered structure fosters active participation and improves speaking skills through meaningful peer interaction. Second, to ensure successful implementation, institutions should provide targeted training for language teachers. These professional development workshops should focus on strategies for forming balanced groups, managing collaborative learning tasks, and assessing individual contributions within group settings. Third, it is advisable to combine the Jigsaw technique with other speaking-oriented activities such as role-plays, discussions, presentations, and debates to further enhance learners' oral fluency and confidence across various communicative contexts. Fourth, promoting peer feedback and reflective practices is essential, as encouraging students to assess each other and reflect on their performance supports the development of learner autonomy, accountability, and metacognitive awareness. Lastly, further research is needed to examine the long-term impact of the Jigsaw strategy on speaking proficiency and student engagement. Future studies are recommended to adopt mixed-method designs that incorporate interviews, classroom observations, and pre- and post-assessments in order to provide a more comprehensive understanding of the technique's effectiveness across different educational settings.

## REFERENCES

- [1]. Ahmed, A. S., & Salih, A. A. (2019). The impact of cooperative learning strategy (Jigsaw) on EFL learners' speaking performance. *International Journal of English Linguistics*, 9(3), 241–249.
- [2]. Aronson, E. (1978). *The jigsaw classroom*. Sage Publications.
- [3]. Brown, H. D. (2001). *Teaching by principles: An interactive approach to language pedagogy* (2nd ed.). Longman.
- [4]. Dörnyei, Z. (2007). *Research methods in applied linguistics: Quantitative, qualitative, and mixed methodologies*. Oxford University Press.
- [5]. Etikan, I., Musa, S. A., & Alkassim, R. S. (2016). Comparison of convenience sampling and purposive sampling. *American Journal of Theoretical and Applied Statistics*, 5(1), 1–4.
- [6]. Ghaith, G. (2003). Effects of the Jigsaw technique on the English reading comprehension and writing performance of students. *Educational Research Quarterly*, 27(1), 1–12.
- [7]. Gillies, R. M. (2007). *Cooperative learning: Integrating theory and practice*. Sage Publications.
- [8]. Kagan, S. (1994). *Cooperative learning*. Kagan Publishing.
- [9]. Mengduo, Q., & Xiaoling, J. (2010). Jigsaw strategy as a cooperative learning technique: Focusing on the language learners. *Chinese Journal of Applied Linguistics*, 33(4), 113–125.
- [10]. Nation, I. S. P., & Newton, J. (2009). *Teaching ESL/EFL listening and speaking*. Routledge.
- [11]. Oxford, R. L. (1997). Cooperative learning, collaborative learning, and interaction: Three communicative strands in the language classroom. *The Modern Language Journal*, 81(4), 443–456.
- [12]. Pallant, J. (2013). *SPSS survival manual* (5th ed.). McGraw-Hill Education.
- [13]. Palinkas, L. A., Horwitz, S. M., Green, C. A., Wisdom, J. P., Duan, N., & Hoagwood, K. (2015). Purposeful sampling for qualitative data collection and analysis in mixed method implementation research. *Administration and Policy in Mental Health and Mental Health Services Research*, 42(5), 533–544.

- 
- [14]. Richards, J. C., & Rodgers, T. S. (2014). *Approaches and methods in language teaching* (3rd ed.). Cambridge University Press.
- [15]. Slavin, R. E. (1995). *Cooperative learning: Theory, research, and practice* (2nd ed.). Allyn & Bacon.
- [16]. Suprijono, A. (2013). The effect of Jigsaw learning model on students' speaking skill. *Journal of English Education*, 1(2), 95–102.
- [17]. Vygotsky, L. S. (1978). *Mind in society: The development of higher psychological processes*. Harvard University Press.