# WAYS OF IMPROVING SCHOOL STUDENTS' VOCABULARY THROUGH JIGSAW TECHNIQUES

Shvaikovskiy A.S. (candidate of pedagogical sciences, associate professor),

Ibragimov B.S. (4<sup>th</sup> year student)

M. Auezov South Kazakhstan University (Shymkent, Kazakhstan) shvaikovskiy\_a@mail.ru

Abstract. The article analyzes the potential possibilities of using the "Jigsaw" technique to improve vocabulary of school students. The study is based on a synthesis of theoretical frameworks and empirical research, identifying the mechanisms through which Jigsaw activities contribute to vocabulary improvement. Enhancing vocabulary proficiency holds significant importance for school students as it alleviates the mastery of educational content, enhances reading and writing competencies, fosters the cultivation of critical thinking abilities, and augments self-assurance. Creating a collaborative learning environment and encouraging participation makes Jigsaw methods an excellent tool for educators striving to expand their students' vocabulary repertoire. Research findings suggest that Jigsaw activities stimulate active engagement, foster collaborative efforts, and facilitate profound comprehension, consequently resulting in substantial enhancements in students' vocabulary proficiency. The article discusses practical implications and offers ideas and guidelines for further research to enrich teaching practice and educational policy.

**Keywords:** classroom strategy, collaborative learning, jigsaw techniques, language dexterity, lexical competence, student engagement, vocabulary proficiency, vocabulary repertoire, word stock.

Annotatsiya. Maqolada maktab o'quvchilarining so'z boyligini yaxshilash uchun "Jigsov" texnikasidan foydalanishning potentsial imkoniyatlari tahlil qilinadi. Tadqiqot nazariy asoslar va empirik tadqiqotlar sinteziga asoslangan bo'lib, Jigsov faoliyati so'z boyligini yaxshilashga yordam beradigan mexanizmlarni aniqlaydi. So'z boyligini oshirish maktab o'quvchilari uchun muhim ahamiyatga ega, chunki u ta'lim mazmunini o'zlashtirishni engillashtiradi, o'qish va yozish qobiliyatlarini oshiradi,

tanqidiy fikrlash qobiliyatlarini rivojlantirishga yordam beradi va oʻziga ishonchni oshiradi. Hamkorlikdagi oʻquv muhitini yaratish va ishtirokni ragʻbatlantirish Jigso usullarini oʻquvchilarining lugʻat repertuarini kengaytirishga intilayotgan oʻqituvchilar uchun ajoyib vositaga aylantiradi. Tadqiqot natijalari shuni koʻrsatadiki, Jigsov faoliyati faol ishtirokni ragʻbatlantiradi, hamkorlikdagi saʻy-harakatlarni rivojlantiradi va chuqur tushunishni osonlashtiradi, natijada oʻquvchilarning soʻz boyligi sezilarli darajada yaxshilanadi. Maqolada amaliy natijalar muhokama qilinadi va oʻqitish amaliyoti va ta'lim siyosatini boyitish uchun keyingi tadqiqotlar uchun gʻoyalar va koʻrsatmalar taklif etiladi.

**Kalit so'zlar:** sinf strategiyasi, hamkorlikda o'rganish, jigsov texnikasi, til epchilligi, leksik kompetentsiya, o'quvchilarning faolligi, so'z boyligi, lug'at repertuari, so'z fondi.

Аннотация. В анализируются потенциальные статье возможности «Лобзик» использования методики ДЛЯ улучшения словарного школьников. Исследование основано на синтезе теоретических основ и эмпирических исследований, определяющих механизмы, с помощью которых занятия Jigsaw способствуют улучшению словарного запаса. Улучшение словарного запаса имеет большое значение для школьников, поскольку оно облегчает усвоение учебного содержания, улучшает навыки чтения и письма, способствует развитию способностей критического мышления и повышает уверенность в себе. Создание среды совместного обучения и поощрение участия делают методы Jigsaw отличным инструментом для преподавателей, расширить словарный запас своих учеников. Результаты стремящихся исследований показывают, что занятия «Пилой» стимулируют активное участие, способствуют совместным усилиям и способствуют глубокому пониманию, что, как следствие, приводит к существенному улучшению словарного запаса учащихся. В статье обсуждаются практические последствия и предлагаются идеи и рекомендации для дальнейших исследований по обогащению педагогической практики и образовательной политики.

**Ключевые слова:** стратегия обучения, совместное обучение, методы «головоломки», языковая ловкость, лексическая компетентность, вовлеченность учащихся, словарный запас, словарный запас, запас слов.

The recognition of the paramount significance of lexical competence within language education is indispensable, irrespective of whether a person is engaged in the acquisition of their primary language or the mastery of a secondary one [1;22].

Vocabulary assumes a pivotal role across various dimensions of linguistic proficiency, serving as the linchpin for the unequivocal expression of thoughts, the comprehension of conveyed messages, the precise articulation of ideas, and the establishment of appropriate contextual frameworks. Proficiency in wielding a diverse vocabulary repertoire not only signifies linguistic adeptness but also significantly bolsters the efficacy of interpersonal communication. Moreover, the acquisition of vocabulary substantially augments the development of ancillary language competencies, encompassing listening, speaking, reading, and writing skills. Furthermore, it fosters a nuanced appreciation of cultural nuances, fostering crosscultural understanding. Additionally, a robust lexicon correlates positively with scholastic accomplishment, as it underpins pivotal tasks such as reading comprehension and scholarly discourse. To cultivate an expansive vocabulary, a plurality of pedagogical methodologies is employed, including contextual learning paradigms and engagement with authentic language materials.

One of the advanced approaches of vocabulary instruction is a cooperative learning activity called "Jigsaw". The concept was initially pioneered by social psychologist Elliot Aronson in the early 1970s transforming conventional classroom dynamics through prioritizing collaborative learning [2;36].

At its essence, the technique involves dividing a complex topic into separate parts, assigning each part to different members of a group, and then bringing those parts back together for overall discussion and synthesis. This approach elaborates a sense of interdependence among students, as each individual's understanding contributes to the group's collective knowledge. It promotes student engagement, as

they are motivated to thoroughly comprehend their assigned portion in order to effectively teach it to their peers. In addition, by teaching and explaining their segment to others, students reinforce their own comprehension and retention of the provided material.

Elliot Aronson's earliest experiments on the Jigsaw technique were groundbreaking in demonstrating the prospective of collaborating learning strategies to diminish intergroup animosity and improve students' learning outcomes. His experiments aspired to establish the collaborative learning conditions that would encourage positive interdependence and mutual understanding of students from various backgrounds. The traditional Jigsaw experiment typically involved dividing a classroom of students into small, varied groups. Each group was then assigned a specific section of the overall learning material to become proficient in. For instance, in a history class, one group might focus on the reasons of the World War 1, while another group might study its key battles. After becoming "experts" on their assigned topics, students would then reconvene in new, "jigsaw" groups constituted of one member from each expert group. In these jigsaw groups, students would take turns teaching their peers about their corresponding topics, thereby implementing a collaborative learning experience where each student provided valuable knowledge to the collective comprehension of the theme matter. Students commenced to appreciate each other's efforts and developed empathy and high regard for their peers. Furthermore, the cooperative nature of the Jigsaw techniques led to ameliorated academic performance among students. By actively immersing in the material through teaching and learning from their peers, students obtained a deeper understanding of the subject matter and kept information in mind more effectively. In addition, students involved in Jigsaw activities derived greater motivation, amusement, and satisfaction with their learning processes [3, p.64].

The collaborative essence of the technique created a supportive and inclusive learning environment that strengthened a positive attitude towards learning and academic field. Therefore, Aronson's primary experiments on the Jigsaw technique

assured empirical evidence of its productiveness in fostering positive intergroup relations and upgrading learning outcomes. Upcoming research has further explored and confirmed the advantages of collaborative classroom strategies like the Jigsaw technique across numerous educational settings.

Dr. Robert Slavin, a prominent figure in educational research, is recognized for his extensive application of the Jigsaw technique in classrooms. His research emphasizes evidence-based educational strategies targeting enhanced academic performance, especially within marginalized communities. According to Slavin's experiments, we can mention several key findings. First and foremost, by uniting students from dissimilar racial, ethnic, and socioeconomic backgrounds to work cooperatively towards a common goal, the Jigsaw technique remarkably decreased the level of negative stereotypes in groups [4, p.30].

Dr. Slavin's implementation of the Jigsaw technique in classrooms follows a structured approach. Initially, teachers undergo comprehensive training in cooperative learning principles, including the Jigsaw technique. Subsequently, the technique is incorporated into the curriculum, with carefully selected materials divided into manageable segments. Students are then placed in diverse groups, considering factors like academic proficiency and social dynamics, to foster mutual reliance and collaboration. Within these groups, students assume specific roles as "experts" in different topics, collaborating to comprehend the material through research and discussion. Upon mastery, students form mixed "jigsaw" groups where they teach their peers, fostering an interactive learning atmosphere. Finally, continuous assessment and feedback mechanisms are integrated to monitor progress and offer support when needed, utilizing various evaluative methods such as quizzes and presentations. Therefore, Dr. Slavin's application of the Jigsaw technique in classrooms showcases its efficacy in enhancing students' word stock, boosting academic performance, and nurturing favorable social dynamics among students. His commitment to evidence-based educational strategies serves as a beacon for educators globally, inspiring them to cultivate inclusive and fair learning settings [5;785].

The next researcher who is recognized for substantial contributions to cooperative learning, particularly regarding the Jigsaw technique - Dr. Elizabeth Cohen, a professor in education at Stanford University. Her research not only explores the theoretical foundations but also emphasizes practical application in educational settings. First and foremost, Dr. Cohen advocates for structured groups, where students from diverse backgrounds collaborate on tasks to promote positive interdependence and meaningful contribution. Tasks are designed to be intellectually challenging yet manageable, with components assigned to expert groups for in-depth study. These groups specialize in specific topics and work together to master the material through research and discussion. Afterward, students form mixed "jigsaw" groups to teach their peers, fostering engagement and critical thinking. Dr. Cohen underscores the teacher's pivotal role in facilitating this process, providing guidance and promoting a culture of cooperation [6;16].

Moreover, continuous assessment and reflection are integral, with students evaluated individually and as a group, encouraging self-assessment and goal-setting. Therefore, through her research and classroom practices, Dr. Cohen showcases the transformative potential of the Jigsaw technique in promoting cooperative learning, academic success, and positive social interactions [7;78].

As English teachers passionate about nurturing our students' language skills, we have explored innovative teaching methodologies. In our English class, we have implemented the Jigsaw technique with a focus on the theme "Exploring Healthy Eating," which resulted in a significant improvement in vocabulary acquisition among students of eighth grade at Z.Kosmodemyanskaya school-lyceum №23, Shymkent, Kazakhstan.

While students were enthusiastic about learning and discussing the topic, the extensive vocabulary related to nutrition and wellness presented a challenge. To create a vibrant learning atmosphere, we have chosen to utilize the Jigsaw technique

for its potential to encourage collaboration, critical thinking, and vocabulary enrichment. As we have explored different facets of healthy eating, students were assigned specific vocabulary related to their allocated topics, including terms related to food products and cooking techniques.

We have divided the class into groups, ensuring each group had a mix of students with varying linguistic skills, and assigned specific subtopics related to healthy eating. These subtopics included "Healthy Product Examples," "The Importance of Healthy Eating," "Daily Healthy Eating Practices," and "Cooking Tips." Each subgroup was responsible for becoming proficient in their assigned topic area. During the application of the Jigsaw technique, we have observed a notable shift in our students' participation and vocabulary skills. As they immersed themselves in their designated topics, conducting research and crafting presentations, their vocabulary knowledge expanded significantly. Terms like "harvest," "whole grains," and "quenching a thirst" seamlessly integrated into their vocabulary, enabling them to express themselves with clarity and accuracy.

The collaborative dynamics inherent in the Jigsaw techniques were integral in fostering this linguistic competence. Students didn't merely receive knowledge passively; instead, they actively engaged in a collective pursuit of comprehension. Through interaction with peers and mutual assistance, they navigated the complexities of vocabulary related to healthy eating, solidifying their understanding through meaningful discussions.

Furthermore, the interdisciplinary nature of the topic facilitated connections across different subjects, enhancing students' vocabulary with terms from fields like science, biology, and chemistry. Concepts such as "seed," "fat-free dairy," and "calcium" transcended the confines of the English classroom, embedding themselves in the broader cognitive framework of the students. As the conclusion of our Jigsaw activity drew near and each subgroup presented their findings to the class, we have observed a profound sense of achievement and confidence among our students. Their

adeptness in articulating intricate ideas, supported by a rich vocabulary, underscored the effectiveness of the Jigsaw technique in enhancing language dexterity.

Upon reflection, the incorporation of the Jigsaw technique in our English class proved to be a transformative journey, not solely in terms of vocabulary expansion but also in fostering collaboration, critical thinking, and comprehensive learning. By embracing collaborative learning and integrating real-world instances, we surpassed conventional teaching methods, arming our students with the linguistic skills necessary to navigate the complexities of contemporary society.

As teachers who have effectively integrated the Jigsaw technique into our classroom, we wish to offer guidance based on our experiences.

Firstly, it's crucial to thoroughly grasp the principles and advantages of the Jigsaw technique, tailoring its application to your unique classroom environment.

Secondly, you should select relevant topics that can be segmented effectively, ensuring each segment is substantial for comprehensive exploration by student groups.

Thirdly, when creating groups, you have to strive for a variety of student abilities, backgrounds, and learning preferences. Then, you need to clearly define roles within groups and provide explicit instructions to ensure students comprehend their responsibilities. Moreover, you must remain accessible to offer assistance, monitor group progress, and address any challenges promptly. Of course, you need to emphasize active engagement and collaboration among students, fostering a culture of teamwork and shared accountability. Also, you may incorporate regular opportunities for reflection and peer feedback to enhance learning outcomes. Finally, reflect on your own practice and seek student input to refine the implementation of the Jigsaw technique and continuously improve the learning journey for all involved.

In summary, the integration of Jigsaw techniques presents a comprehensive learning approach that transcends traditional methods. By encouraging collaborative learning, engagement, and deeper comprehension, the Jigsaw method enables students to assume responsibility for their learning and cultivate crucial skills like

communication, empathy, and teamwork. Through its systematic division of complex subjects into manageable segments and promotion of interdependence among students, the Jigsaw techniques not only improve academic achievement but also foster holistic growth. Thus, integrating Jigsaw techniques into educational strategies can serve as an effective means of establishing vibrant and inclusive learning settings where students excel academically and personally.

### References

- 1 Alqahtani, M. The Importance of Vocabulary in Language Learning and How to Be Taught // International Journal of Teaching and Education. 2015. № 3(3). P. 21-34.
- 2 Graves M., August D., Mancilla-Martinez J. Teaching vocabulary to English language learners (language and literacy series). New York: Teachers College Press, 2012. 176 p.
- 3 Waring R. Assessing receptive and productive vocabulary: explorations in second language vocabulary acquisition. Saarbrücken: LAP Lambert Academic Publishing, 2011. 388 p.
- 4 Newton J. Options for vocabulary learning through communication tasks // ELT Journal. 2001. № 55(1). P. 30-37.
- 5 Slavin, R. Cooperative Learning and Academic Achievement: Why Does Groupwork Work? // Anales de Psicología. 2014. № 30(3). P. 785-791.
- 6 Nguyen T., Khuat T. The effectiveness of learning vocabulary through games // Asian EFL Journal Quarterly. 2003. № 5(4). P. 16-22.
- 7 Cohen, E., Lotan, R. Designing Groupwork. Strategies for the Heterogeneous Classroom. Teachers College Press, 2014. 257 p.