

Collaborative Learning in Social Constructivism: Promoting English Learning in a Secondary Classroom in China

Zhengqi Zhang *

Shenzhen Hualang International Academy, Shenzhen, China

* Corresponding author Email: zhengqizhang11@gmail.com

Abstract: Social constructivism, a major theory of learning, emphasizes social interactions as crucial for children's learning. The zone of proximal development (ZPD) is the focal point for learning within this theory. Collaborative learning, viewed as a bridge for social interactions, is situated within social constructivism and the ZPD. While some argue for the misuse of the ZPD, proposing the intermental development zone (IDZ), this paper explores the application of collaborative learning in my English as a second language classroom. Collaborative learning promotes motivation and critical thinking, benefiting students by engaging them in group tasks and encouraging mutual support. However, two challenges, cultural barriers and group size, need to be addressed to effectively implement collaborative learning.

Keywords: Social Constructivism; ZPD; Collaborative Learning; English as a Second Language.

1. Collaborative Learning in Social Constructivism

Vygotsky, a Russian psychologist, established the theory of social constructivism [18]. He argued that children develop basic perceptions through social interactions and gradually acquire more complex mental functions, such as language, math, and problem-solving skills. This process, known as internalization, involves perceiving information in a social setting and internalizing it to form mental functions. Social constructivists emphasize the role of social interactions in cognitive development [11]. Vygotsky [18] also believed that cognitive development does not occur through solitary learning; it requires the involvement of others. Therefore, learning takes place through social interactions. [2]

Collaboration is seen as the bridge for social interactions [2]. Collaborative learning involves students of different performance levels working together in small groups to achieve a common goal [3][19]. According to Vygotsky [18], when children work with objects in a social setting, their thinking becomes expressed and eventually abstracted. Through collaborative work with peers, students communicate their opinions and develop conceptualized ideas, leading to knowledge acquisition.

1.1. Collaborative Learning in the Zone of Proximal Development

Vygotsky emphasized the zone of proximal development (ZPD) as the space where learning takes place [18]. The ZPD represents the gap between an individual's current developmental level and their potential development with the guidance of a teacher or collaboration with more capable peers. Learning occurs when assistance is provided within the ZPD.

Social interaction is a crucial aspect of the ZPD, as Vygotsky highlighted the importance of interacting with others for knowledge acquisition [19]. Through social interaction, individuals internalize the knowledge gained and apply it to their own behavior. The ZPD is not limited to the

learner or the teacher alone; instead, it necessitates active engagement in collaborative activities within a social setting.

In a group setting, students communicate and interact with one another to solve problems or understand complex concepts, creating unique ZPDs for each member [11]. This allows students to serve as "more capable peers" by sharing their knowledge and providing assistance to others in the group. Positive interdependence is another crucial aspect of the ZPD, as all group members rely on one another to achieve a shared goal [18]. Students actively participate in collaborative problem-solving tasks, with the teacher providing appropriate tasks and resources.

Collaborative learning emphasizes working together to achieve common goals, fostering positive interdependence [14]. Each group member recognizes the value of cooperation, understanding the interdependence between individual goals, roles within the team, and the unique skills each member brings. Positive interdependence motivates group members to collaborate effectively when the outcome relies on the engagement of each member. It serves as the foundational element for both the ZPD and collaborative learning.

1.2. Critique of the Zone of Proximal Development

Critics argue that the zone of proximal development (ZPD) is often misused and misunderstood. One common misconception is that the ZPD can be used by teachers to easily help students master any subject [1]. However, Chaiklin [1] points out that if the ZPD were intended for learning, Vygotsky would have named it "the zone of proximal learning." Instead, the ZPD is meant for children's overall development rather than specific skill acquisition, suggesting that it should not be applied solely to subject learning.

Additionally, Mercer introduced a different zone called the intermental development zone (IDZ), which emphasizes the joint effort of teachers and learners in creating a shared communicative space [10]. The IDZ is continuously constructed through dialogue between the teacher and

students. While similar to the ZPD in terms of the focus on improvement with assistance in a social setting, the IDZ directly relates to the contributions of both students and teachers. Mercer [10] asserts that teachers play a significant role in student learning, as the quality of intermental help provided by teachers varies, and students respond differently to different teachers. Thus, in the IDZ, the teacher serves not only as a guide but also as a crucial factor in students' learning.

2. Collaborative Learning

Collaborative learning, rooted in the theory of social constructivism, is an effective approach in language learning [20]. Regardless of the specific type, collaborative learning involves small groups of students working together towards a shared task, engaging in purposeful discussions to solve problems [15].

In my English classroom, I apply collaborative learning as a means to teach secondary school students English as a second language in an international school in China. The course syllabus covers speaking, listening, reading, and writing skills, with the aim of enabling students to use English effectively in practical situations. To achieve this, I design guided group activities that focus on specific language components or combine multiple components. Students are required to collaborate within their groups, and their performance is assessed collectively.

Through collaborative learning, students engage actively in the learning process, develop their language skills, and learn how to work effectively in a team. It provides them with opportunities to apply their English knowledge and practice using the language in real-world contexts.

2.1. Benefits

2.1.1. Motivation

One of the major benefits of collaborative learning is the motivation it fosters in students to successfully complete tasks, leading to effective learning outcomes [17]. When students are rewarded based on the performance of the whole group, the key to achieving their personal goals lies in achieving the group's collective goal. This dynamic creates a sense of shared responsibility and motivates everyone in the group to assist and encourage each other in putting forth their best efforts. In my own classroom, I have observed how collaborative group work enhances students' motivation to learn English.

For instance, in my reading class, after student's finish reading a passage about ocean pollution, I assign them to small groups consisting of 3 to 4 members. These groups are then tasked with the following assignments:

- 1) Identify the main idea of the passage.
- 2) Answer detailed questions about the passage, such as:
 - a. How many species are disappearing every year?
 - b. What are the causes of pollution?
 - c. Why does the author mention human activities?
- 3) Give a group speech to the class and discuss what can be done to protect the ocean.

These tasks are carefully designed to promote deep comprehension, critical thinking, and the practical application of knowledge gained from the passage. By working together in their groups, students are motivated to engage in purposeful discussions, seek solutions collaboratively, and present their findings collectively.

According to Johnson and Johnson [7], establishing ground rules for effective group work is crucial. In the context of

these tasks, the ground rules are as follows:

- 1) All group discussions need to be conducted in English.
- 2) Active participation from every group member is expected.

- 3) All answers must be agreed upon by all group members.

Before students begin their work, I provide them with detailed instructions to ensure they have a clear understanding of the tasks at hand. I allocate 20 minutes for group work, during which time students can seek my assistance if needed.

These tasks serve multiple purposes. The first two tasks aim to help students fully understand and internalize the content of the passage. By working together, students with varying English proficiency levels can support and assist each other in overcoming individual challenges. The collaborative nature of the group work motivates individuals to interact and collaborate, fostering social constructivism and providing an authentic context for English language use [8].

The third task goes beyond comprehension and encourages the application of learned knowledge. In this task, group members apply the vocabulary, phrases, and ideas from the passage to prepare and deliver a group speech. Students are enthusiastic about this task because ocean protection is a topic that resonates with their interests and values. The group's collective goal is to deliver an impressive speech to the class, and this shared objective motivates all group members to actively support and assist each other. By collaborating on the speech, students have the opportunity to practice their oral English skills, reinforce their understanding of the passage, and collectively strive for success.

In contrast, a traditional classroom environment with competitive grading tends to discourage collaborative learning efforts among classmates [17]. When tasks are approached individually, students tend to compete with each other rather than cooperate. This competitive mindset often leads to a lack of support and a reluctance to help peers. On the other hand, collaborative learning creates an environment that fosters academic achievement. Students are more motivated to learn and support others when working together toward a shared goal.

By engaging in collaborative group work, students not only enhance their learning experience but also enter the Zone of Proximal Development (ZPD) as proposed by Vygotsky [18], where they can benefit from the guidance and assistance of their peers and the teacher. The collaborative nature of the tasks promotes the exchange of ideas, the development of critical thinking skills, and the cultivation of a supportive learning community. Through collaboration, students can overcome challenges, explore different perspectives, and ultimately achieve higher levels of English language proficiency.

2.1.2. Critical Thinking

Critical thinking plays a crucial role in collaborative learning, as it involves thoughtful and goal-oriented thinking before reaching conclusions [4]. Research indicates that collaborative learning activates critical thinking in learners, enabling them to contribute effectively to group work [5]. In particular, clear group goals and plans enhance critical thinking and decision-making within the group, as task completion requires rational judgments [16].

An illustrative case study conducted at Darmaraja Junior High School explored the impact of collaborative learning on students' critical thinking [12]. The study focused on a topic considered difficult by students, which was traditionally taught through lectures, resulting in low student engagement.

The researchers aimed to assess whether teaching the topic through a collaborative learning approach could improve students' critical thinking. The evaluation of students' critical thinking encompassed factors such as focusing questions, problem analysis, questioning and answering, oral or written presentation, observation and consideration of observational reports, interaction with others, and drawing conclusions. The study demonstrated that collaborative learning led to significant improvements in all these aspects of critical thinking [12]. Therefore, the findings substantiate the effectiveness of collaborative learning in enhancing critical thinking even in challenging subject areas.

Moreover, collaborative learning proves to be an effective approach for improving critical thinking in writing tasks [13]. For example, when assigning an argumentative essay on a highly debated topic such as the continued development of artificial intelligence (AI), individual work often leaves students unsure of where to begin. However, research suggests that students derive inspiration and knowledge from their group members' ideas and thoughts. Active participation in group discussions and sharing opinions allows students to gain valuable information from one another [13]. During group work, members engage in debates and express their perspectives, presenting their explanations and supporting evidence. Each group member possesses a different scope of knowledge, resulting in a diverse Zone of Proximal Development (ZPD) for each individual in the group [11]. This collaborative environment facilitates the exchange of ideas, enabling students to absorb and learn from their peers' reasoning and explanations.

Collaborative learning also encourages students to critically analyze new ideas and freely express their thoughts, leading to the identification of appropriate and relevant arguments [13]. For instance, in a discussion about the development of AI, one student may argue in favor of its continuation based on the absence of harmful consequences thus far. Another student may counter this argument, emphasizing the potential risks AI could pose in the future. This exchange prompts the first student to reconsider their position and strengthen their argument by refining their reasoning. Through group discussions, students gain clarity regarding their stance and learn to provide persuasive evidence and facts to support their position. Additionally, students enhance their oral and listening skills by communicating and understanding others' ideas in English. Students often report that this type of collaborative group work helps them generate more reasons for their argument while providing an opportunity to apply English in real-life situations.

Collaborative learning is also beneficial in the revision process of essays. After completing their individual essays, students engage in group work to revise each other's papers. They provide valuable suggestions for improving writing, offer critiques, ask questions, and share their thoughts. If an individual overlooks including a conclusion or has an incomplete one, fellow students remind and encourage them to address this aspect. As a result, the implementation of collaborative learning enhances students' critical thinking skills in writing. When writing an argumentative essay, students need to explore their thoughts thoroughly. Discussing ideas and opinions with their peers fosters critical thinking by helping students make decisions, formulate persuasive arguments, and overcome writing obstacles.

2.2. Challenges for Implementation

2.2.1. Cultural Barriers

Implementing collaborative learning in the classroom presents certain challenges that need to be addressed. Throughout my experience with collaborative learning, I have encountered various challenges, some of which are relatively easy to overcome, while others pose more significant obstacles. One notable challenge is the cultural aspect of shyness and reluctance to engage in collaborative learning, particularly prevalent in Chinese culture. In traditional Chinese culture, children are often shy and hesitant to communicate their problems openly [21]. Additionally, some students are accustomed to the traditional lecture-based teaching format and may struggle to actively contribute to group discussions. In one of my classes, three students came from traditional Chinese public schools where they had limited exposure to collaborative learning. While one student quickly adapted and actively participated in group work, the other two students (referred to as student A and student B) responded differently to the new learning approach.

Student A and student B demonstrated hesitance and fear in expressing their opinions or asking questions when placed in groups. Initially, I assumed that their reluctance stemmed from concerns about their English language skills, as they might have been hesitant to make mistakes or appear foolish in front of their peers. However, after speaking with them individually outside of class, I discovered that their shyness was deeply rooted. These students believed that disagreeing with others was disrespectful and needed time and a supportive environment to become more outspoken. To address this issue, I encouraged them to speak up more and actively participate in class discussions. As the teacher, it is crucial to guide and motivate students to engage in collaborative learning [17]. If I noticed that they were not participating in group work, I would specifically ask for their thoughts and opinions on the topic. For instance, during a group discussion on what makes people happy, other students were sharing their ideas such as money, good grades, and friendship. Student A was silently shaking his head, indicating his disagreement but not voicing his own perspective. When I specifically asked for his opinion, he shared that helping others makes people happy because it gives them a sense of achievement. The positive aspect is that these two students are gradually improving and becoming more willing to contribute to group work. Since social constructivists emphasize the importance of social interaction as the foundation for cognitive development [11], it is evident that these two students benefit less from collaborative learning compared to their peers. They still require ongoing encouragement to interact with other students and feel comfortable asking questions to both their peers and the teacher.

In addition to cultural and individual barriers, another challenge in implementing collaborative learning is managing group dynamics and ensuring equal participation. It is not uncommon for some group members to dominate discussions, leaving others with limited opportunities to contribute. To address this issue, I incorporate strategies such as assigning specific roles within the group, rotating leadership responsibilities, and setting clear expectations for active participation from all group members. These strategies help distribute responsibilities and encourage each student to engage in critical thinking and decision-making within the group.

Moreover, time management can be a challenge when

implementing collaborative learning. Group work often requires more time compared to individual work, as students need to engage in discussions, brainstorm ideas, and reach consensus. To mitigate this challenge, I allocate sufficient time for group activities, ensuring that students have ample opportunities to collaborate effectively without feeling rushed. Additionally, setting clear deadlines and checkpoints throughout the collaborative process helps students stay on track and manage their time efficiently.

Furthermore, assessment and evaluation of individual contributions within a group can be complex. It is important to establish clear criteria for evaluating both group and individual performance to ensure fairness. Rubrics that assess both collaborative skills and individual contributions can be used to provide comprehensive feedback to students and recognize their efforts.

2.2.2. Group Size

Another challenge in implementing collaborative learning is determining the optimal group size for effective group work. According to Vygotsky [19], children acquire knowledge through interactions with others, necessitating the assignment of students into groups. However, it can be difficult to determine the ideal group size for collaborative learning. Smaller groups consisting of 2 to 3 members often result in increased group involvement, but these groups may lack the necessary skills and abilities to tackle complex problems [9]. For instance, when I assigned students to work in pairs on a task, the group members were consistently engaged, but they sometimes struggled to find a solution. During a reading activity focused on the book "A Man Called Ove," three pairs had difficulty knowing where to start or how to create a video. In response, I rearranged the groups to include more members (6 members per group), which led to an increase in creative ideas. One group used drawings to present the book's storyline, while another group decided to act out key plot points, with each member assuming one or two roles.

However, it is important to note that larger groups are not inherently superior to smaller groups. As the group size increases, individual group members may contribute less [9]. This can result in decreased group performance due to limited participation from certain members. For example, in one of my classes comprising 40 students, I occasionally assign them to larger groups consisting of 8 to 10 members. I have observed that some group members do not fully engage in the group work. Instead, they rely on others to complete the assigned tasks. On one occasion, when I asked groups to design a poster based on a reading passage they had just completed, only three members of a group actively worked on the poster while the rest engaged in unrelated conversations. In line with social constructivism, where guidance from the teacher is crucial, I designated a group leader who began assigning specific tasks to each member. Leadership plays a significant role in group performance, particularly when the group size is large [9]. Therefore, it is evident that no single group size can be universally suitable for all collaborative learning activities.

To address the challenge of group size, it is important to consider the nature of the task and the specific needs and abilities of the students. For complex tasks that require diverse skills and perspectives, larger groups may be beneficial. However, it is crucial to monitor group dynamics and ensure active participation from all members. Group leaders can be appointed to distribute responsibilities and maintain group cohesion. In contrast, for tasks that demand

individual accountability or in situations where students may feel more comfortable in smaller groups, it may be appropriate to assign them to pairs or smaller teams. Ultimately, the key is to strike a balance between group size and the objectives of the collaborative learning activity, ensuring that all students have opportunities to actively engage, contribute, and learn from one another.

3. Conclusion

collaborative learning, rooted in social constructivism, fosters social interactions and positive interdependence, promoting English language learning in my classroom. Group work increases student motivation as they are collectively assessed, encouraging support and cooperation among group members. Critical thinking skills are nurtured as students work towards a common goal, allowing them to make informed decisions. Expressing thoughts freely within groups sparks new ideas and enhances critical thinking, particularly in writing. While some argue limitations to these benefits, they hold significant value in my practice. However, implementing collaborative learning faces challenges, including Chinese cultural barriers and group size considerations. Nonetheless, collaborative learning has proven effective in enhancing English learning outcomes in my classroom.

References

- [1] Chaiklin, S. (2003). "The zone of proximal development in Vygotsky's analysis of learning and instruction." In A. Kozulin, B. Gindis, V. S. Ageyev, & S. M. Miller (Eds.), *Vygotsky's educational theory in cultural context* (pp. 39–64). Cambridge University Press. doi:10.1017/CBO9780511840975.004.
- [2] Feryok, A. (2017). Sociocultural Theory and Task-Based Language Teaching: The Role of Praxis. *TESOL Quarterly*, 51(3), 716–727. <http://www.jstor.org/stable/44987017>.
- [3] Gokhale, A. (1995). Collaborative Learning Enhances Critical Thinking. *Journal of Technology Education*, 7(1), 22.
- [4] Halx, D., & Reybold, E. (2005). A pedagogy of force: Faculty perspectives of critical thinking capacity in undergraduate students. *Journal of General Education*, 54(4), 293-315.
- [5] Heyman, D. (2008). Children's critical thinking when learning from others. *Current Directions in Psychological Science*, 17(5), 344–347.
- [6] Hmelo-Silver, C., et al. (2013). *The International Handbook of Collaborative Learning*. Taylor and Francis. doi:10.4324/9780203837290.
- [7] Johnson, D., & Johnson, R. (1994). *Learning Together and Alone: Co-Operative, Competitive, and Individualistic Learning*. 4th edition, USA: Allyn and Bacon.
- [8] Larsen-Freeman, D., & Cameron, L. (2008). *Complex systems and applied linguistics*. Oxford, UK: Oxford University Press.
- [9] Lim, J., & Yingqin Zhong (2005). Cultural Diversity, Leadership, Group Size and Collaborative Learning Systems: An Experimental Study. *Proceedings of the 38th Annual Hawaii International Conference on System Sciences*. IEEE, p. 11a–11a. doi:10.1109/HICSS.2005.179.
- [10] Mercer, N. (2000). *Words and Minds: How We Use Language to Think Together*. Taylor & Francis Group, London. Available from: ProQuest Ebook Central. [3 July 2022].
- [11] Morgan, D., & Skaggs, P. (2016). Collaboration In the Zone Of Proximal Development. In *International Conference on Engineering And Product Design Education*, 8 & 9 September, Aalborg University, Denmark.

- [12] Ratnasari, Supriatna, A., & Hendayana, S. (2020). Critical Thinking Development in Collaborative Learning. In Proceedings of the 2020 9th International Conference on educational and information technology (pp. 50-54). ACM. doi:10.1145/3383923.3383948.
- [13] Rokhaniyah, H. (2016). The Implementation of Collaborative Learning to Enhance the Students' Critical Thinking in Writing. *AT TA'DIB*, 11(1). doi:10.21111/at-tadib.v11i1.627.
- [14] Sakamoto, M. (2018). How Effective is Interactive Learning? Investigating Japanese University Students' Language Patterns in a Collaborative Writing Task. *IAFOR Journal of Language Learning*, 3(2), 115–139. doi:10.22492/ijll.3.2.05.
- [15] Salma, N. (2020). Collaborative Learning: An Effective Approach to Promote Language Development. *International Journal of Social Sciences & Educational Studies*, 7(2), 57–61. doi:10.23918/ijsses.v7i2.p57.
- [16] Schamber, F., & Mahoney, L. (2006). Assessing and Improving the Quality of Group Critical Thinking Exhibited in the Final Projects of Collaborative Learning Groups. *The Journal of General Education*, 55(2), 103–137. <http://www.jstor.org/stable/27798043>.
- [17] Slavin, R. (2015). Cooperative learning in elementary schools. *Education 3-13*, 43(1), 5-14. doi:10.1080/03004279.2015.963370.
- [18] Vygotsky, S. (1978). *Mind in society: The development of higher psychological processes*. Massachusetts: Harvard University Press.
- [19] Vygotsky, L.S. (1981). "The genesis of higher mental functions." In J.V. Wertsch (Ed.), *The concept of activity* (pp. 144-188). Armonk, New York.
- [20] Wang, L. (2007). Sociocultural Learning Theories and Information Literacy Teaching Activities in Higher Education. *Reference & User Services Quarterly*, 47(2), 149–158. <http://www.jstor.org/stable/20864842>.
- [21] Xiao, B., et al. (2021). Exploring the relations between parenting practices, child shyness, and internalizing problems in Chinese culture. *Journal of Family Psychology*, 35(6), 833–843. doi:10.1037/fam0000904.