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REFERENCE

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12.1. Concept Map



12.2 Learning Outcomes

- Define cooperative learning method.
- Identify theories that underpin cooperative learning in the classroom,
- Prepare for productive cooperative learning in the classroom,
- Discuss the advantages and disadvantages of cooperative learning.
- Explain what practices to avoid in a cooperative learning environment.
- Apply the techniques for effective cooperative learning in an English First Language classroom.,

12.3 Clarification of Key Terms

Cooperative learning: Cooperative learning is a technique in which learners collaborate in small groups to complete a predetermined task.

Learning strategy: A learning strategy is a way of organizing and applying a series of skills to understand specific contents or perform given tasks more effectively and efficiently in the classroom, school as well as in non-academic settings.

Jigsaw: In the jigsaw technique each learner is encouraged to take responsibility by performing assigned tasks and share is a cooperative learning team goal achievement (Thomas, Hegarty, and Holdsworth, 2012).

Social interaction: Engagement between two or more learners, and between learner(s) and teacher. Think-pair-share: Refers to the technique where learners are given challenging tasks, each learner is provided time to think and write an answer to the task. After this more time is given to the group to discuss their answers and then come up with an agreed response before presenting their conclusion to the class.

Zone of proximal development: A learner's zone of proximal development is the space between what they can do without any assistance and what they can do with adult supervision or in cooperation with more experienced peers.

12.4 Introduction to Cooperative Learning as a learning strategy

Cooperative Learning is one of the strategies in which learners work together in small groups to undertake tasks to achieve a common learning goal. Under corporative learning, the teacher provides clear instructions to achieve the given task. Teacher also guides individual members of the group to complete their assigned task to achieve the expected learning outcome. Cooperative learning when used effectively as a learning strategy develops the 21st century skills in learners. Learners are able to gain the core competencies necessary for developing the individual learner for the world of work. Rigacci (2020) attests that cooperative learning strategies offer learners the possibility to learn by applying knowledge in an environment more like the one they will encounter in their future work lives. Yassin, Razakand Maasum (2018) differentiated cooperative learning from group work and collaborative learning. In cooperative learning, learners are given equal opportunities to participate to produce the output; however, in group learning, tasks may be undertaken by specified members of the group without involving the entire group members. Collaboration is concerned with the process of working together. Cooperative learning has many advantages that promote inclusive learning and social justice in the classroom; however, the strategy also has some disadvantages if not effectively used. This chapter will consider techniques for an effective cooperative classroom, the advantages and disadvantages as well as the dos and don'ts in a cooperative learning classroom.

12.4.1. Cooperative Learning Frameworks

Several theories may be utilised as a framework for cooperative learning. Among these are social interdependence, behaviourism, cognitivism, and social constructivism theories. However, this chapter is underpinned by cognitivism, social constructivism and social interdependence theories. Piaget (1985) and Vygotsky (1978) made significant contributions to the development of social constructivism theory. Piaget emphasised that cognitive or individual constructivism is based on how individuals construct knowledge. This is anchored on the cooperative learning construction process. Piaget on the other hand opined that individual learners develop cognitively through conversations. Vygotsky further explained that the cognitive growth of an individual depends on the extent of their social interaction and that knowledge is formed when learners work together. Therefore, interacting with peers in cooperative learning can help learners understand concepts and improve their performance. Under the constructivism theory, Vygotsky introduced the zone of proximal development (ZPD). Vygotsky (1978) defines ZPD as the gap between the actual development when the learners perform tasks on their own and the potential development that takes place when guided by adults or working together with more knowledgeable others who can be peers or teachers. Vygotsky emphasised that the learner in the ZDP cannot excel in language learning, except through the social interaction with peers and teachers which involves the interaction between learners sharing knowledge and ideas. This demonstrates the importance of cooperative learning, According to Piaget (1953) and Vygotsky (1978), cooperative learning effectively encourages learners to generate new cognitive structures that allow them to work together with peers or those more knowledgeable others.

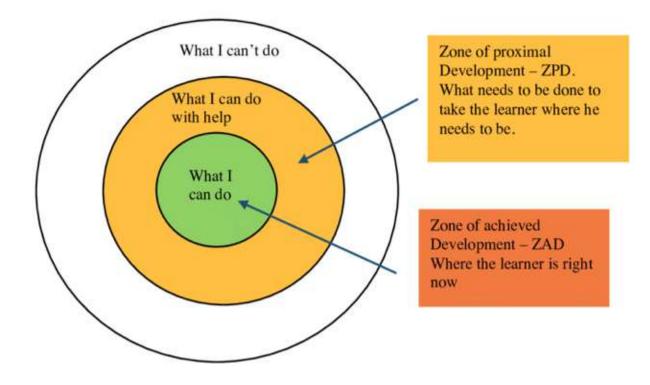


Fig 1. Frameworks & Theories Vygotsky's Zone of Proximal Development and Scaffolding Adopted from Frame Works and Theories Vygotsky's Zone of Proximal Development and Scaffolding (Kurt, 2020).

12.5 Cooperative Learning in Classrooms

The fundamental purpose of learning in a cooperative classroom is to enhance learning through cooperation in which knowledgeable individuals may encourage classmates to understand and complete the assigned work (Yassin, Razak, & Maasum, 2018). Cooperative learning in classroom provides the environment to use techniques in which learners work in small groups with the assistance of the teacher to complete shared learning objectives (Rigacci, 2020). The goal-achievement rates are positively high among learners, each member of the group believes they can meet their aims if the other members of the group do the same. Therefore, a learner seeks results that are favourable to both himself or herself and all other learners with whom they are cooperatively linked. Hence, learners maximize their own and each other's learning (Johnson, Johnson, & Holubec, 2013). Cooperative learning in the classroom is an example of the learner-centred approach, which sees learners as responsible and active participants in the learning process.

12.6. Preparing productive cooperative learning lessons

To achieve productive cooperative learning, before the class; the teacher needs to make adequate preparations. Cooperative learners are divided into diverse abilities and genders in pairs or small groups of four or five. Group members learn through cooperation in performing tasks by sharing ideas to achieve the learning objectives. It is the responsibility of the teachers who organise cooperative learning in classrooms to provide clear instruction on the assignment given. Traditional teaching can be used to explain the task, in which the teacher carefully explains the lesson objectives and any related concepts, and also assesses whether the learners have understood the concept by question-and-answer method. The teacher in a cooperative learning classroom oversees the distribution of the relevant materials for effective and efficient use. (Johnson & Johnson, 2014). Belmekki and Kebiri (2014) indicate that teachers should carefully monitor how each group member uses the materials while the learning takes place within the group.

12.6.1 The Role of the Teacher in A Cooperative Learning Classroom

Teachers act as the creators, promoters, and facilitators of cooperative learning (Hong, Chen, Huang, Tsai, and Chang, 2022). Classroom teaching is learner-centred, with group activities as the primary teaching mode. The teacher's function shifts from information provider to facilitator of learners' learning.

According to Alhebaishi (2019), the role of the teacher in cooperative learning is to:

12.6.1.1 Introduce cooperative learning to learners: Teachers should expose learners to knowledge on a variety of topics, such as team building, effective interaction with group members, role and responsibility assignments, and assessment processes.

12.6.1.2 Give clear instructions about the objective of the session: Teachers should give learners instructions and directions that clearly describe what they are expected to do, what skills they should develop, what signals and expressions to use when responding to their teacher, and what skills they should internalise during group work.

12.6.1.3 Establish a supportive climate: Cooperative learning needs teachers to offer a friendly, calm, and interactive environment in which learners may assist one another in learning freely, safely, and pleasantly.

12.6.1.4 Form groups: Learners should be divided into heterogeneous groups based on their academic ability, competence level, gender, and race. This group type is preferred because it allows for the inclusion of diverse abilities, styles, skills, and experiences, increasing learners' possibilities of gaining from one another.

12.6.1.5 Select the group size: The best solution for teachers to do is to keep groups small and inclusive. Smaller groups of four to five that caters for the differences of learners can complete tasks more rapidly than bigger groups. The utilization of smaller groups promotes learner involvement and participation while requiring fewer management tactics.

12.6.1.6 Assign roles: Teachers should assign duties to each member to ensure that each member understands what is expected of him or her.

12.6.1.7 Introduce tasks: Tasks should be designed so that learners work together to attain common goals. Learners, for example, can work in groups to solve a problem, debate an issue, share ideas, create a product, prepare a presentation, or design a project.

12.6.1.8 Setting a time limit: Time limitations are beneficial because they assist learners in learning time management skills, especially when one learner in each group serves as a time checker. If the time restriction is surpassed, the teacher may extend it; nevertheless, most groups operate within the time limit.

12.6.1.9 Adequate planning and resource mobilisation: adequate planning for the cooperative learning classroom should ensure availability of adequate resources will make for effective cooperative learning classroom. These are the things that the teacher should take note of for the success of the cooperative learning lessons.

12.6.10. The role of the learner in cooperative learning: The learners may assume specific roles in cooperative learning. Almuslimi (2016) defines the Learner's role in cooperative learning as one of the following:Academic roles

- a) Facilitator: Learners focus on the achievement of the given task,
- b) Questioner: one who asks questions,
- ii. Social roles
 - a) Reporter: presents the group's output to the other groups.
 - b) Praiser: encourages group members by using positive remarks.
- iii. Group processing roles
 - a) Recorder: records all activities within the group
 - b) Summariser: oversees summarising all learners' responses.
 - c) Timekeeper: monitors the length of each task.

12.6.2. Elements to consider in cooperative classroom

The elements and ideas listed below should be included when creating a lesson in cooperative learning classroom.

12.6.2.1 Positive goal interdependence: Positive interdependence occurs when there is mutual benefits among group members, a benefit to one member of the group results in a benefit to the other members. Individual learners' commitment to personal and group performance generates equal dependence among group members. Learners see that group success necessitates the efforts of each member of the group, thus, those of higher

ability can take the initiative to assist those of low ability. Both ability groups benefit, learners with higher ability sharpen their own learning, while those of lesser ability can learn more effectively with the assistance and encouragement of their peers. They can improve their understanding and improve their success rate by working with a more capable group in an equal ZPD (Erbil, 2020).

12.6.2.2. Positive role interdependence: In a cooperative learning environment, learners work as a team to create and learn, but ultimately, each learner is accountable for his or her own performance, therefore eliminating social loafing (Rigacci, 2020). The implication is that individuals are responsible for developing their own ZPD within the small group interaction. This is reflected when each member of a group is willing to accomplish their share of the task while also creating the circumstances for others to do their part.

12.6.2.3 Positive reward interdependence: Learner's assist, encourage, support and praise, each other's efforts to learn and contribute equally to the outcome. Learners interact and share what they have learned with one another and help one another understand and complete assignments (Zhou, 2017).

12.6.2.4 Cooperative Skills: Cooperative learning requires subject knowledge, interpersonal and small-group skills to function as part of a group. According to Jacobs and Seow (2015), other crucial skills necessary for cooperative learning, include asking for assistance, providing suggestions and feedback, reacting constructively to suggestions and feedback, providing justifications when asked, disagreeing to agree, and expressing personal grat-itude are encouraged. At the same time skills such as effective communication, interpersonal, group, leadership, decision-making, trust-building, friendship development, and conflict management skills are learned (Zhou, 2017). This is accomplished through interaction, dialogue, and politely listening to and commenting on others' opinions.

12.6.2.5 Positive task interdependence: Members of the group discuss how effectively they are meeting their objectives and keeping successful working relationships. Rather than competing, learners are given the opportunity to express their opinion on exceptional activities by member that was beneficial to the group as well as what each learner might have done to make the group even better. The goal is to improve on the effectiveness of the group's effort to attain its objectives (Zhou, 2017). Primary school learners associate group work activities with intellectual progress and the possibility of learning new things through interaction (Jakavonyt-Stakuvien, 2021). This increases self-regulated learning.

12.7 Advantages and Disadvantages of Cooperative Learning

Cooperative learning has advantages and disadvantages to learning.

12.7.1 Advantages of cooperative learning in classrooms

NEEDU (2018) and Keramati and Gillies (2021) highlight the benefits of cooperative learning as follows:

- Learners participate and enjoy secure learning atmosphere,
- A cooperative classroom environment provides an appropriate setting for deep learning,
- Increase learners' reading, comprehension, speaking, writing abilities,
- Enhance learners' social skills by promoting active participation and teaching them how to communicate or resolve conflicts,
- Enhances sense of accomplishment as each learner contributes to the success of his or her group,
- Reduces the degree of anxiety,
- Enhances abilities for teamwork,
- Increases sense of responsibility and desire for new tasks,
- Enhances the retention of relevant information,
- Improves communication abilities,
- Inspires positive relationships among learners,
- Help learners build general abilities that will prepare them for their future careers,
- Improves academic performance.
- Enhance learners' self-esteem by making them realize how vital they are to the success of a group,
- Improves the critical thinking skills of learners, when they talk with others in their group, learners hear various perspectives and viewpoints.

12.7.2 Disadvantages of cooperative learning in classrooms

Keramati and Gillies (2021) indicate some of the disadvantages of cooperative learning:

- Relying on the efforts of others for completion of a task or solution to a problem,
- constitutes hinderance to completion of the curriculum,
- Learners may lack cooperation skills,
- A lack of motivation among learners,
- It may be difficult to arrange classroom to suit cooperative learning,
- Learners require some time to adjust to cooperative learning resulting in low teaching effectiveness.
- It may be difficult to use a cooperative learning strategy in a multicultural classroom and classrooms that are overcrowded,
- Teachers may lack understanding of the cooperative learning procedure and fail to use it resulting in ineffective learning experience.
- Other disadvantages include
- Learners may raise questions that the teacher cannot answer,
- The method may prevent the teacher from showing his/her expertise in subject content,
- Students may resist cooperative learning,
- May result in conflict between fast and slow learners over unequal contributions,
- May result in stereotyping based on ability, gender, and race,
- The method prevents individualised attention by the teacher,
- It may be used as a way of avoiding teaching responsibilities.

Considering the advantages of the cooperate learning classroom, it is the responsibility of the teacher to minimise the disadvantages to make effective use of the method.

12.8 Techniques in Effective Cooperative Learning

There are several techniques to be used in cooperative learning. However, for this chapter, two techniques emphasized by Brame and Biel (2015) are highlighted.

12.8.1 Think-Pair-Share

The teacher poses a discussion question. Learners are urged to individually think or write about an answer to the topic before sharing the solution with a peer. Following that, groups present their findings to the class.

12.8.2 Jigsaw

With this method, groups of four or five members work together to become experts on a single section of new content while other expert teams in the class focus on different sections of new information. The class then rearranges itself into new groups with a representative from each expert team. The new team members then alternate, instructing one another in the subject areas they are knowledgeable about.

12.9 Don'ts in Cooperative Learning

In cooperative learning, several factors should be considered. Some of the don'ts of cooperative learning are itemized below:

12.9.1. Finding new concepts: Learners should not be expected to find new concepts for themselves in a cooperative learning classroom. Tricky and complex ideas generally need detailed instruction at the initial stage. One of the most common mistakes in cooperative learning is the method can replace teaching. However, this is not a cooperative learning idea.

12.9.2. Over-complicated duties: Group duties should not be overcomplicated. Group exercises with intricate or convoluted instructions can easily cause cognitive overload, resulting in little or no learning.

12.9.3. Cooperative learning not working: If a cooperative learning task is not working; considering the advantages of the method, teacher should strategize, develop new learning materials, and address shortcomings encountered during the lesson.

12.9.4. Temptations to be in charge: Teachers should avoid the temptation to take charge of the groups. In cooperative learning, A teacher's position has shifted from knowledge transmitor to thought facilitator. Praising and encouraging team members who are less academically proficient is beneficial.

12.9.5. Learners' questions: Teachers should not respond to learners' questions unless the group members are unable to handle the issue on their own (Oxford, 1997).

12.10 Case Study in Cooperative Teaching

12.10.1 Case study

Mr Letlhaka is a primary English First additional language teacher. He desires to prepare and choses to use strategies to prepare his learners for work life. He considered enhancing positive interdependence, individual and mutual accountability, social skills, and team spirit in the EFAL learners by using a debating activity. He started by creating space on the teaching schedule by blocking a one-and-a-half-hour time slot for this process. He divided the class into groups of five learners. He let learners choose to debate in support or against the motion. He then distributed the guiding material prepared for the theme and encouraged them to share ideas using the library resources, and even interview the persons they think can provide them with the information they needed. He guided them to write down their facts or points and come back to the class to discuss the information they gathered in their groups and write down their findings.

In the next stage, Mr Letlhaka merged all groups who supported the motion together into one group and all the negative side groups also did the same. He let each group merge similar information and help each other construct authentic arguments for debate. Both sides chose five speakers: a chairperson, a timekeeper, a judge and the rest became the audience. The above process applied to both sides (positive and negative). During the debate process, every learner in the audience participated by noting down what they thought needed attention during debriefing as listening to debaters. He organised a debriefing session where the judges provided feedback and the outcome of the process. The judges let the learners in the audience comment or ask questions they felt were not covered during the debating session.

12.10.2. Reflections

- 1. Identify the skills acquired by the learners because of the different roles played by learners in the case study.
- 2. Dew to the roles played by the teacher, discuss the effectiveness of the cooperative learning method in the case study.

12.11 Conclusion

The chapter commenced with clearly stated objectives and the detailed description of cooperative learning as a method used by teachers to impart knowledge, and develop competencies and skills needed to survive in the society. The chapter identified the advantages and the disadvantages of cooperative learning, the roles of the learner and the role of the teacher in a cooperative classroom were discussed. The chapter also elucidated on the theories and considerations for cooperative learning as well as the don'ts of in a cooperative learning environment for effectiveness.

12.12 Reflective Questions

- 1. Define cooperative learning strategy.
- 2. Identify theories that underpin cooperative learning in the classroom,
- 3. Prepare for productive cooperative learning in the classroom,
- 4. Discuss the advantages and disadvantages of cooperative learning
- 5. Apply the techniques for effective cooperative learning in an English First Language classroom.
- 6. Explain practices to avoid in a cooperative learning environment.

12.13 References

- Alhebaishi, S. M. (2019). Investigation of cooperative learning techniques and attitudes in language learning classrooms. International Journal of Applied Linguistics and English Literature, 8(2), 219-230. http://dx.doi.org/10.7575/aiac.ijalel.v.8n.2p.219.
- Almuslimi, F. (2016). The effect of cooperative learning strategy on English reading skills of 9th Grade Yemeni students and their attitudes towards the strategy. International Journal of Research in Humanities, Arts and Literature, 4(2), 4158.
- Belmekki, A., and Kebiri, A. (2014). Cooperative learning in EFL classes: A students' grammar competence enhancement process. European Journal of Research and Reflection in Educational Sciences, 2(3), 28-33.
- Brame, C. J., & Biel, R. (2015). Setting up and facilitating group work: Using cooperative learning groups effectively. Vanderbilt University Center for Teaching. http://anderbilt.edu/guides-sub-pages/ setting-up-and-facilitating
- Dendup, T., and Onthanee, A. (2020). Effectiveness of cooperative learning on English communicative ability of 4th Grade students in Bhutan. International Journal of Instruction, 13(1), 255-266. https://doi.org/10.29333/iji.2020.13117a.
- Erbil, D. G. (2020). A review of flipped classroom and cooperative learning method within the context of Vygotsky theory. Front. Psychol, 11, 1-9. https://doi:10.3389/fpsyg.2020.01157
- Hong, Y., Chen, L. G., Huang, J. H., Tsai, Y. Y., & Chang, T. Y. (2022). The impact of cooperative learning method on the oral proficiency of learners of the training program for English tourist guides. Front. Psychol. 13, I-13. https://doi.org/10.3389/fpsyg.2022.866863
- Jacobs, G., and Seow, P. (2015). Cooperative learning principles enhance online interaction. Journal of International and Comparative Education, 4(1), 28-38.
- Jakavonytė-Staškuvienė, D. (2021). The benefits of cooperative learning of language in different subject lessons as seen by primary school pupils: The case of one Lithuanian city school. Education Research International, 1-11.https://doi.org/10.1155/2021/6441222
- Johnson, D. W., and Johnson, R. T. (2014). Cooperative learning in 21st century. Annals of Psychology, 30(3), 841-851. https://doi.org/10.6018/analesps
- Johnson, D. W., Johnson, R. T., & Holubec, E. J. (2013). Cooperation in the classroom (9th ed.). Edina, MN: Interaction Book Company.
- Keramati, M. R., and Gillies, R. M. (2021). Advantages and challenges of cooperative learning in two different cultures. Education Sciences, 12(1), 2-14. https://doi.org/10.3390/educsci12010003
- Kurt S. (2020). Vygotsky's Zone of Proximal Development and Scaffolding https://educationaltechnology.net/vygotskys-zone-of-proximal-development and-scaffolding
- National Education Evaluation and Development Unit (NEEDU). (2018). Cooperative learning: How learners work together and support one another for mutual benefit.
- https://www.education.gov.za/Portals/0/Documents/Publications/NEECooperative%20learning
- 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.
- Piaget, J. (1953). The origins of intelligence in children. Basic Books.
- Piaget, J. (1985). The equilibration of cognitive structures: The central problem of intellectual development. University of Chicago Press.
- Rigacci, A. (2020). What is cooperative learning? Five strategies for your classroom.
- https://www.teacheracademy.eu/blog/cooperative-learning-strategies/.
- Tharby, A. (2019). Dos and don'ts in cooperative learning.
- https://classteaching.wordpress.com/2019/05/09/the-dos-and-donts-ofcollaborative-learning/ Thomas, I., Hegarty, K., & Holdsworth, S. (2012). The education for sustainability jigsaw puzzle:
- Implementation in universities. Creative Education, 3(06), 840.
- Vygotsky, L. (1978). Interaction between learning and development. From: Mind and society. Cambridge, MA:
- Harvard University Press. Reprinted in: Readings on the development of children. M. Gauvain & M. Cole (2nd ed.). W.H, Freeman and Company.
- Yassin, A., Razak, N. A., & Maasum, N. R. M. (2018). Cooperative learning: General and theoretical background. Advances in Social Sciences Research Journal, 5(8), 642-654. https://doi.org/10.14738/assrj.58.5116
- Zhou, Z. (2017). On the strategy to enhance the efficiency of the cooperative learning method in college English teaching in China. Theory and Practice in Language Studies, 7(11), 1091-1096. http://dx.doi.org/10.17507/tpls.0711

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