

A Cooperative Approach Towards Reinforcing Learning

Vinay Nadgir

Reinforcing learning is usually, and rightly, construed as a process in which positive or negative reinforcement is deployed in the class to shape behaviours through rewards and punishments. But there are other ways in which learning can be reinforced. Reinforcement can also happen by designing a learning experience that is not predicated on the product but rather on the process. This article is about cooperative learning that helps in reinforcing learning.

Learning can be conceived in many ways. One way is to construe it as an individualistic enterprise. This conception is based on the principle that every individual can learn independently. But at the other end of the learning spectrum, we can also say that learning is a social process. The word social entails that learning is about cooperation. In this article, I would like to unpack the idea of cooperative learning. I would like to go one step further and say what makes cooperative learning a superior activity is not just its ability to help a learner gain knowledge in the epistemic sense but also the normative and social value that lies behind it. In the second part of the article, I will give general tips and pointers a teacher can keep in mind while designing a cooperative learning experience for students. Finally, I will briefly touch upon what I feel is the value inherent in a cooperative learning activity.

What is cooperative learning?

A proverb which best epitomises reinforcement of learning is 'Whoever teaches, learns twice'. Nowhere can this be seen better than in cooperative learning where students unknowingly teach each other yet reinforce their own learning.

Cooperative learning contributes to the reinforcement of learning by doing the following:

- Actively engaging the learner
- Promoting peer learning and teaching
- Giving scope for reviewing, repeating and recalling
- Providing opportunities for discussion and clarification

- Giving space for autonomy to the learner

When we say that children should learn to cooperate, the one word that usually comes to mind is 'grouping'. Through this grouping of students, we assume that children learn from each other. The second idea that we usually associate with cooperative learning is the process of peer learning. While both of these are necessary for cooperative learning, we need to broaden our understanding of what actually makes cooperative learning what it is. Johnson and Johnson (1999) state that cooperative learning has five basic components.

1. Positive interdependence: This is nothing but the idea that 'I cannot succeed unless everybody else succeeds' or 'All for one and one for all'. So not just individual learning goals, but also mutual learning goals for the group as a whole need to be specified. To increase positive interdependence, a teacher might assign parts of a large project to members of a group. We can think of it as a part of a jigsaw puzzle given to different members of the group who need to work together to complete the puzzle.
2. Individual accountability: When students work as discrete individuals, decoupled from the larger picture, accountability is much more difficult to assess. But in a cooperative learning structure, it is difficult to escape accountability. Students are held individually accountable while achieving group goals.
3. Face-to-face interaction: Students support and assist one another to reach a collective goal when they are told to work cooperatively, as for a class project. In this, certain attitudes, thought processes, and cognitive activities are sparked through each other, such as when they question each other or transfer the knowledge they have to others.
4. Social skills: One of the basic elements of cooperative work is that it nourishes social skills in students. For learning to happen in a group, a student must exhibit the ability to communicate,

defuse conflicts, build trust and be a team player.

5. Group processing: This is a meta-level element of cooperative learning. Here the students in the group reflect on the process involved and articulate the effectiveness and drawbacks they encountered. Reflecting on the group process is a reflection on the relationships that were forged in the process.

Some guidelines for designing a cooperative learning experience

To make the cooperative learning experience effective, a teacher can follow some of these pointers while engaging the students. These are broad guidelines, and the list may be expanded to include more.

1. The objectives of the cooperative learning activity should be made explicit to the students. The activity should ideally begin with the teacher explaining the benefits of the activity. This is especially helpful while revising what has been taught in class.
2. A teacher should complement in-class cooperative learning with outdoor games. Sports and games are the best ways to help students learn the value of cooperation. Group games and sports help students explicitly see how their cooperation can result in the achievement of a goal. Teachers can also use board games and puzzles and convert them into a cooperative activity.
3. Teachers must encourage students to engage in discussions without hesitation or fear; they can facilitate the question-asking process by promoting open-ended questions and hypothetical situations with 'what-if' scenarios. Through these higher-order questions and hypothetical situations, children's critical thinking skills and language skills are also reinforced.
4. A cooperative learning activity can slip into chaos if the teacher does not structure it well. The teacher must set ground rules for the activity,

including the use of language, turn-taking, asking for assistance when required, showing dissent without disruption, time limits, etc.

5. To reinforce learning through cooperation, one of the most fundamental prerequisites is that the teacher must have a meaningful relationship with the class, that is, the teacher must know the strengths of the students and their standing among their peers. While grouping students, skills and strengths must be carefully distributed, so as to avoid situations where certain students dominate the discussion/activity. Hence, the teacher must find balance when forming a group. For some teachers, assigning roles to students can help the groups coordinate their work better. For others, it might be best left to the group members to deliberate and decide.

As teachers, we understand that the most effective learning activities are those that fulfil two criteria: firstly, they are level-appropriate yet demanding and secondly, they are relatable. However, reinforcement through a cooperative group activity should satisfy a third criterion – a student should only be able to do the activity in a group. Group reinforcement can prove to be very effective because it is collaborative.

Reinforcing learning through cooperative activities requires active engagement by both the students and the teacher. Hence, these can be time-consuming in the class for the students, and tedious to design and assess for teachers. While they may require a lot of planning, there are too many strengths in the concept for us not to use it. Such a method will raise the confidence and motivation levels of students and learning with their peers and clarifying misconceptions, increases their understanding. The lasting benefits of this type of engagement go beyond the immediate and will serve a student in good stead as they prepare to be one with society.

References

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Vinay Nadgir is part of the Teacher Education group at Azim Premji University, Bengaluru. He teaches the BSc BEd programme, and his areas of interest are language and literacy. He has previously worked in a school for over a decade and is deeply interested in the idea of teacher identity and conflicts in school spaces. He may be contacted at vinay.nadgir@apu.edu.in

Another component of the open-book assessment was the open-ended questions. Children's opinions were sought on a given situation such as, 'If you were the minister of finance and desired to increase revenues what would you increase: the tax on salt or the tax on cars?' The idea was to elicit their answers and the reasoning behind them rather than match them with the text or the view of the teacher. It took some practice to internalise this aspect.

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