COOPERATIVE LEARNING: THE ANSWER TO A BORING MATH

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Children nowadays are very much engaged with peers, buddies or “barkadas” where they influence each other.

So to change the notion that Mathematics is a boring subject, why not try strategies that will involve groupings where peers collaborate with each other in order to gain pupils’ interest.

In an action research conducted, Cooperative Learning is one of the best strategies in improving mathematical performance of pupils.

Cooperative Learning is a teaching strategy used by teachers to help students to process information more quickly by having them work in small groups to accomplish a common goal. Each member that is in the group is responsible for learning the information given, and also for helping their fellow group members learn the information as well (Cox, 2017).

The five common cooperative learning techniques that can be used are: Jigsaw, Think-Pair-Share, Carousel, Numbered Heads Together and Team-Pair-Solo.

The cooperative learning strategy known as the “jigsaw” technique helps students create their own learning. Teachers arrange students in groups. Each group member is assigned a different piece of information. Group members then join with members of other groups assigned the same piece of information, and share ideas about the information. Eventually, students return to their original groups to try to ‘piece
“together” a clear picture of the information at hand. Then solve together the word problem.

Think-Pair-Share. The teacher will give a word problem for the pupils to solve. Each member in a group will think and solve the problem independently, then, they pair-up with a member in the group to discuss their answers. Finally, they share their answers and solutions to the group.

Carousel. Divide students into groups. Assign each group a starting number. Each group of students will begin at their assigned spot. They will work together to solve the problem on the card, and record their answers on the recording sheet. Set a timer for 2-3 min. Once the timer rings students will rotate (like a carousel) and solve the next problem. Students will continue rotating until they have answered each question.

Numbered Heads Together is a cooperative learning strategy that holds each student accountable for learning the material. Students are placed in groups and each person is given a number (from one to the maximum number in each group). The teacher poses a question and students “put their heads together” to figure out the answer. The teacher calls a specific number to respond as spokesperson for the group. By having students work together in a group, this strategy ensures that each member knows the answer to problems or questions asked by the teacher. Because no one knows which number will be called, all team members must be prepared. The group work together as cooperative group. The group must come to a consensus on the problem solving steps, computation, and the final answer.

Team-Pair-Solo works well for problems and concepts that students would either be too intimidated or just incapable of doing on their own. First, students work as a team to solve a problem or accomplish a task. Next, the teams break into pairs and
students work on either the same problem, or a related one. Finally, the pairs break up and the students work individually to complete the same or a related task.

Based from the study, Cooperative Learning has a significant effect on pupils’ mathematical performance. This implies further that Cooperative Learning creates an environment of active, evolved, exploratory learning where it enhances student satisfaction with the learning experience so it increases student retention and promotes a positive attitude toward the subject matter which leads to high level of performance. It also promotes teamwork among pupils as they develop collaborative and mutual helping attitude.

References:
