## Cooperative Learning Strategies in the Classroom

## Research-Based Strategies for Increasing Student Achievement

Classroom Instruction That Works!
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## 21ST CENTURY SKILLS

HOW TODAY'S STUDENTS CAN STAY COMPETITIVE IN A CHANGING JOB MARKET

Learning Skills
Critical Thinking



Technology


Life Skills
Flexibility


Leadership


## Skills that all

 students need to compete in a highly technical society

## The Four C's of 21st Century Learning



Communication
Sharing thoughts, questions, ideas, and solutions


Working together to reach a goal - putting talent, expertise, and smarts to work


Critical Thinking
Looking at problems in a new way, linking learning across subjects \& disciplines


Creativity
Trying new approaches to get things done equals innovation \& invention

Our goal is to provide access to technology and show how to effectively harness its power to prepare students for college and career.

Cooperative learning is more than just placing students in a group and having them work together, it is the process of building learning communities.

Students are responsible not only for their learning, but for the learning of others. Throughout the process of cooperative learning, students work in small groups to achieve a common goal.

## The Color Trader

## Objective

This activity was designed for the purpose of creating an atmosphere where students are required to think about the ethical ramifications of the decisions they make. During the implementation of this activity, students will need to be placed into teams of two or three and grouped around the parameter of a table

Team One
(2-3 players)

Team Three
(2-3 players)


Team Four
(2-3 players)

Team Two
(2-3 players)

## The Color Trader

## Scoring

- 4 White Chips:
- Each team loses \$2,000.
- 4 Green Chips:
- Each team wins \$1,000.
- 1 White Chip and 3 Green Chip's:
- White chip wins $\$ 3,000$.
- Green chips each lose $\$ 1,000$.
- 1 Green Chip and 3 White Chips:
- Green chip wins \$4,000
- White chips each lose $\$ 2,000$.
- 2 White Chip's and 2 Green Chip's:
- White chip's each win $\$ 2,000$.
- Green Chip's each lose \$1,000.

The Color Trader Results Sheet

| Round | Reward | Balance |
| :---: | :---: | :---: |
|  |  | \$2,000 |
| 1. |  |  |
| 2. |  |  |
| 3. |  |  |
| 4. |  |  |
| 5. |  |  |
| 6. |  |  |
|  |  | x 2 |
| 7. |  |  |
| 8. |  |  |
| 9. |  |  |
| 10. |  |  |
|  |  | x 2 |
| Total: |  |  |

## The Color Trader

## Procedure

- Each team will start the activity with $\$ 2,000$,
- Each team should calculate their score at the completion of each round,
- Conversation between teams is not allowed during rounds 1-5,
- Conversation between teammates on one team is always allowed,
- Conversation between teams is allowed in rounds 5-10,
- You will have 2-3 minutes between rounds for planning you next move and the calculating your total score,
- All teams must place their selected item on the table simultaneously,
- Round six and ten are bonus rounds. At the completion of rounds six and ten, teams will total their scores and then double them (For example, if your total score at the end of round six is negative $\$ 4,000$, you will double it to negative $\$ 8,000$ ),
- After completing round ten, teams should calculate their total scores and share that information with the remainder of the class.


## The Color Trader

## Teacher Summary

At the conclusion of this activity, ask the teams to share their team scores. Typically, you will find that a number of the teams lost a significant amount of money. This loss is caused by a lack of cooperation among the teams. If all teams cooperated, each team would complete the activity with a total of $\$ 40,000$. However, most of your teams will probably not complete the activity with this total. This lack of cooperation between teams is very common. You may wish to calculate the total amount of money that could have been earned by the class if all teams had cooperated. The lesson: Cooperation between competitors is not always a negative. Too often, we teach students that in order to win, they must defeat their competition-this is most often not true in the "real-world".


Instructions: Move a marble across given course without touching the marble or the floor. Each team member will receive a differing length of track. The team must develop a system for transferring the marble from one team member to another to move the marble across a given race track seamlessly. As the teacher, you can add obstacles between the start and end points to make the activity more challenging. Break the group into teams, let them come up with a plan, then measure the amount of time it takes for the marbles to traverse the course. The team that keeps the marble going for the longest time wins.
Limitations: Team members cannot move their feet while the marble is in their individual piece of track. If the marble drops to the floor, or a team member touches it, the team


