Exploring Leadership



PROBLEM SOLVING: PROBLEM SOLVING

Problem-solving skills are necessary in all areas of life, and classroom problem solving activities can be a great way to get young people prepared to solve real-life problems. Problem Solving skills help young people boost their self-esteem and self-confidence, become more independent, and have a positive impact on their mental health.

CONVERSATION STARTER:

• In real life, why do we sometimes wait for help when we could solve our own problems? Probably fear. Sometimes the first solution isn't correct, but we have to keep trying.

Show YouTube video of a Broken Escalator. Whether in school, work, or their social relationships, the ability to critically analyze a problem, map out its elements, and prepare a workable solution is one of the most valuable skills one can acquire in life.

KEY OBJECTIVES:

- Solve a problem using critical thinking.
- Offer possible solutions even though they may not be correct.

WHAT YOU'LL NEED:

- Computer/Projector to show a YouTube video: https://www.youtube.com/watch?
 - v=VrSUe_m19FY
- Copies of the handout (Appendix)
- Scissors to cut the shapes out (could be pre cut-out ahead of time).

EXPLORATION ACTIVITIES:

Break participants into small groups.

- Give each group a set of arrowhead shapes (cut from the handout).
- Instructions: Using the seven puzzle pieces shown here, simultaneously assemble five arrowheads. One is already complete and provides a size template for the remaining arrowheads. Each of the four remaining arrowheads will be the same size as this one. When you are finished, you will be able to see all five arrowheads at the same time.

FACILITATOR TIP:

- Read over the entire Arrowheads Activity handout for background and purpose.
- If time is an issue, considering cutting out puzzle piece shapes ahead of time.

- When a group believes they have completed the puzzle, ask them to raise their hands. They have 8 minutes.
- When time is up, allow groups to share solutions. If none have done it correctly, reveal the solution on the handout. (The four properly assembled arrowheads, when placed strategically next to one another, form the shape of the fifth arrowhead.)

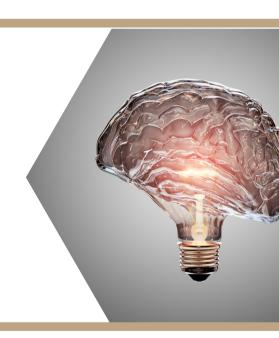


REFLECTION QUESTIONS:

- Did your group solve the puzzle in time?
- What strategies did you use to come up with the solution?
- What mistakes did you make?

APPLICATION DISCUSSION:

- In what real life situations do you have to solve problems with limited resources and time?
- Are you willing to make mistakes?
- · How did working with a team help?



CONCLUSION:

Sometimes, you might feel "stuck" when facing problems. This activity should encourage you to embrace challenges, use your critical thinking skills, and work through problems instead. Don't get stuck on the escalator.

Utah State University is an affirmative action/equal opportunity institution and is committed to a learning and working environment free from discrimination. For USU's non-discrimination notice, see equity.usu.edu/non-discrimination.

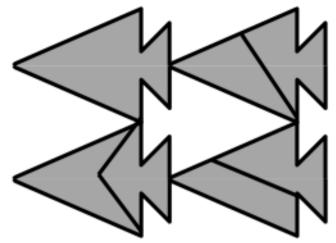
REFERENCES

- https://resilienteducator.com/classroom-resources/5-problem-solving-activities-for-the-classroom/
- https://www.youtube.com/watch?v=VrSUe_m19FY
- $\bullet \quad \underline{\text{http://www.teamworkandteamplay.com/resources/tt_arrowhead.pdf} } \\$



APPENDIX:

Solution: Don't share this image with the participants until after the activity. When you use the pieces to create four identical arrowheads and align them as below, they form the shape of a fifth arrowhead facing the other direction.



Activity: One copy (seven shapes) for each group.

