TUBE SWITCH

This activity (just a working idea at the time) was first shared on the FUNdoing Blog site on Nov. 23rd, 2014

FACILITATED OBJECTIVES:

Explore behaviors related to task management and planning (especially planning ahead), cooperation, and efficient and effective communication. Explore concepts of problem solving, awareness and working smarter.

Challenge/Problem Solving

Activity Objective

With limited access to the materials, the group is challenged to match all the numbered tubes with the numbered index cards

NEEDS & NUMBERS:

First you (or you could have your students help) will need to make a set of tubes and index cards. The more tubes there are to move the longer the activity. You can use paper towel rolls or toilet paper rolls for ready-to-use tubes (each tube for the activity should be about four to five inches long).

You can also use a regular (8.5 by 11 inch) piece of paper to make tubes. Cut your paper in half (13 sheets of paper will provide the materials for 26 tubes). Each piece of paper you end up with should be 5.5 by 8.5 inches in length. Roll each piece of paper from one 5.5 inch side to the other leaving about a two inch diameter opening on each end. Tape up the paper anywhere along the edges to make it structurally sound. Make enough tubes sets to accommodate your needs.

For a group of 10 to 12 participants I like to use a "26 set" – 26 tubes and 26 index cards. You can use numbers on your set (1 to 26), or letters (A to Z). Write the numbers/letters (one number/letter on each tube) on the sides of the tubes, nice and big. Then, write the numbers/letters on the index cards so that when you place the tube over the number/letter no part of the number/letter on the card can be seen – your participants will only be able to see the number/letter on a card when they look down through the tube.

You will also need a timing device for this one (or, maybe someone in the group will have a Smartphone and they can be assigned to the "timer" role), and some boundary markers.

Tube switch works well with six to 12 participants in a group. You can play with multiple groups – each group will need their own set of tubes and index cards.

TIME:

20 to 30 minutes depending on how many attempts the group is allowed.

PROCEDURE:

Set up a boundary area (with markers like cones or an activity rope) large enough to spread out the materials (in the picture we used the basketball jump circle). Participants will need to be able to move around the materials easily (i.e., not trip or step on anything).
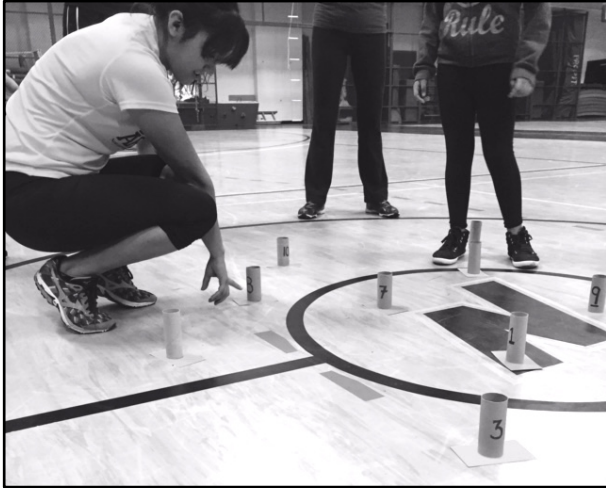
First place down the index cards within the boundary area with the numbers facing up. Then set a tube down on each card, in the vertical direction, so the number on the card cannot be seen – the opening of the tubes are over the numbers on cards. Be sure when setting up the materials that the number on the tube does not match the number on the card it is being set upon. When each card has a tube covering its number you are ready to play.

Bring your group over to the activity material and ask them to stand around outside of the boundary area as you give them the challenge.

The Challenge: This timed challenge requires players to match up each numbered tube with its numbered card.

Guidelines of Play:
- Only two participants can enter the tube/card area at any one time (as soon as the first person steps into the tube/card area the time will start).
- Only participants inside of the tube/card area can touch the tubes.
- Number cards must stay in the position they are in (cards may not be moved).
- Each participant inside of the boundary area can only pick up (and set down) one tube.
- Tubes must be set down over the top of the number on a card (the number on the card may not be visible when the tube is on the card).
- After setting down a tube the participant must exit the boundary area.
- When all the tube numbers match up with the card numbers the time stops (the last participant(s) do not need to be outside of the boundary area for time to stop).

Before the time is verified someone from the group must look down through all the tubes to see if the numbers match up. If all the numbers on the tubes match with the numbers on the cards the time stays in the record book. If the numbers do not match the attempt is not recorded. Allow time for a few attempts to see how the group performs. (Keep in mind, it's not always about getting a faster time. It might be about something else.)

SAFETY:

Since leading this activity the only possible safety issue has been the two participants inside the boundary area bumping into each other (from a lack of efficient communication). I always do my best to warn the group(s) of this possibility and remind them during the action.

FACILITATION:

Since I've been using this activity I have found there is very little facilitation needed – the guidelines are pretty straight-forward. What I've found most interesting is that there is a very simple solution and a much more complex solution – most groups in my experience get locked into the more complex solution (not working together) and then try to get their best time without changing the process. Some groups make the shift to the more simple solution and put in an exponentially better time (once you try this one a few times you will see for yourself – I don't want to spoil all the fun). Hint: It's all about pairs of participants going "in" with a plan versus making decisions once they're inside the boundary area.

I like to focus the processing discussions after the first two (or three) rounds on what problems the group encountered (i.e., what took up time) and how they can solve the problems to shave off time. This usually gets the wheels turning towards improvement. And, three attempts (sometimes four) will be enough to pull out some wonderful lessons (and, more often than not, a better time than the first round).

When I work with multiple groups I let them keep their own time. After an attempt I help each group think about their process and how they might want to improve – how will they solve some of the problems they have discovered. So far the groups I've worked with do not end their rounds at the same time so I have the opportunity to process with one group at a time. (If groups do finish a round at the same time it would be great to pull them all together to share experiences and maybe even solutions to the problems they've encountered.)

OBSERVATIONS/QUESTIONS:

- Think about when planning took place during the activity. Describe where you noticed planning take place – When did it happen? Who was involved? What did it sound like? What did it accomplish?

- Was there any point in time where you had to plan ahead? When did this happen? Why did it happen? If there was no planning ahead, think back on the activity and determine where planning ahead might have been helpful to you. Share your thoughts.

- How many of you believed you were cooperative during the activity? In your mind what does cooperation look like? Did you notice anyone being uncooperative? What did that look like to you? How did the uncooperative behaviors impact the group's performance? How could you be even more cooperative in the future?

- Think back at how people talked to you during the activity. Describe the things you liked about how people talked to you. Describe the things you didn't like about the way people talked to you. How do we want to talk to each other in the future?

- What problems did you encounter during the activity – focus mainly on the problems that took up time for the group? How did you solve some of these problems? Looking back, can you remember some problems you didn't recognize at the time – problems that took up time? How might you have solved these problems if you would have recognized them?

- What is involved in problem solving? How do you define it?

- How would you describe "awareness" – what does this mean to you? Was awareness a problem during the activity? If you think so, how was it a problem? How could being more aware during the last activity lower you time? What's important to be aware of as we work together in the future?

- What does "working smarter" mean to you? Did you work smarter or harder during the last activity? What would you change about your approach to the task if you could? What would working smarter look like?

VARIATIONS:

- As a give-away option (especially if you make your own tubes), have each participant in the group choose a numbered tube (maybe a number that has some significance). Pull out the markers. Have everyone write a few words on his/her tube in relation to what they will want to remember about their program experience. Things like "listen better," "have a plan," or "be helpful." Let them take the tubes home.

- Allow four participants into the boundary area at a time. This will enhance the complexity of the planning, but will also produce faster times (if they are working together as a unit when they are inside the boundary area).

- With adult groups I've set up all the materials on a tabletop. This makes it a little less physically demanding, but still complex enough for a challenge.

PHYSICAL EDUCATION GRADE LEVEL OUTCOMES:
(www.shapeamerica.org/standards/pe/)
- <u>Middle School</u>: S4.M1 – Exhibits responsible social behaviors; S4.M5 – Cooperates and problem-solves with a small group of classmates.
- <u>High School</u>: S4.H2 – Uses communication skills and strategies that promote team/group dynamics; S4.H4 – Accepts other's ideas.

21st CENTURY LEARNING:
(www.p21.org)
- <u>Creativity and Innovation</u>: Incorporate group input and feedback into the work. Value failure as an opportunity to learn.
- <u>Critical Thinking and Problem Solving</u>: Analyze how parts of a whole interact with each other [pairs within a large group] to produce overall outcomes in complex tasks.
- <u>Communication and Collaboration</u>: Communicate effectively in diverse environments; Assume shared responsibility for collaborative work.
- <u>Flexibility and Adaptability</u>: Incorporate feedback effectively [especially different pairs of participants].

- <u>Initiative and Self-Direction</u>: Utilize time and manage workflow efficiently [this can be related to awareness].
- <u>Social and Cross-Cultural Skills</u>: Respond open-mindedly to different ideas and values.
- <u>Productivity and Accountability</u>: Participate actively, as well as be reliable [this can be related to being cooperative].

ADDITIONAL IDEAS: