Systems Thinking: Triangles
ACTIVITY DESCRIPTION

NOTE: This activity is adapted from the version in *The Systems Thinking Playbook*, by Linda Booth Sweeney and Dennis Meadows.

Activity Objective

Understand how the relationships binding together the structure of a system can impact its behavior. This exercise will help demonstrate how behavior can be changed by an outside influence, and what happens when people with high (or low) leverage in a system are impacted by those influences.

Participants

Your group should have a minimum of 10 people and maximum of 50 people.

Duration

Approximately 30-40 minutes.

Facilitator

We recommend having a facilitator to orchestrate this activity and deliver instructions. The facilitator doesn't participate in the larger group circle.

Materials

- A large room or space without obstacles in which participants can move around freely.
- A large flip chart or writing surface and writing implements.
- Sticky tags – enough for each participant, and numbered. About one-quarter of the tags should be marked with something distinct from the rest of the tags (for example, they might be a different color tag, or marked with a blue dot).

Activity

Step 1: To set up, first draw a circle diagram composed of equally spaced numbers, with enough numbers to go up to the total numbers of participants.

Step 2: Gather up your group in the large space and, before doing anything, ask the group: "What was a time when you planned for something to happen, but you got a very different result?" After sharing stories, explain that this exercise will help us create "our own working system," in order to understand how systems can make things turn out differently than we expected.

Step 3: Have the entire group stand in a big circle and hand out numbered sticky tags to each participant and instruct them to wear the tag on their shirt. Explain that each participant will choose two other people to be their "reference points." Participants can choose whomever they want, but must follow 2 rules:

- Everyone wearing an odd number on their tag MUST choose the person with #2 on their tag as one of their reference points.
- Nobody can pick a person as a reference point whose numbered tag has the distinct marking you chose before (for example, marked with a blue dot).

Step 4: Instruct everyone in the group to memorize who their two reference points are.

Step 5: Next, explain that everyone will start to move around the room to see how the system works. Explain that once the system "starts moving," every person must move to a point in the room so that they are standing equidistant from their two reference points – but there are no limits to how far or close a distance each participant must be. The system will move "in action" several rounds and each round will have a different set of rules to see how those rules influence system behavior.

Step 6: Start the system "in action" by saying, "Go!" Try the following sets of rules, speculating first among the group what is thought will happen, and reflecting on each round afterwards.

- *Round 1:* First, people with numbers 1, 2, and 3 will move around the room, but everyone with 4 and higher must stay in place and not move.
- *Round 2:* Everyone participates.
- *Round 3:* Everyone participates; when the facilitator says, "Stop!" those with a blue dot (or other marker) on their tag will be the only ones who stop moving. *(Outcome hint: There will not be much impact, since those with a blue dot on their tag do not have anyone referencing them – they do not have a big influence on the system's behavior.)*
- *Round 4:* Everyone participates; when the facilitator says, "Stop!" only those with numbers 1 and 2 stop moving. *(Outcome hint: Half the participants have person #2 as a reference, so when he or she stops based on some outside influence, there is a major impact on the whole system.)*
- *Round 5:* Everyone participates; but each person must have only one reference point, and they must be at least 5 feet away from that reference.

Step 7: After completing each round and reflecting on the outcomes, circle back up as a group and explore the following reflection questions.

Reflection

- What principles or general rules would help you explain and predict the behavior of the system to a newcomer entering it for the first time?
- What real life behaviors does this exercise remind you of?
- Where have you seen high- and low-influence individuals or policies in your own organizations?
- If you were trying to promote stability or change in your own organization, what general principles in this exercise would help you attain your goal?

Sharing

In the comments section of the online activity post, we encourage you to share something that you learned or something that surprised you.