A “Simple” Network Collaborative Process
Teaching Note

Simulation Purpose and Use:
It is well documented that government increasingly relies on networks of providers to deliver goods and services. Service delivery networks include multiple, autonomous organizations working together toward a goal. While there is a large literature on network governance and management\(^1\), there is relatively little empirical work and few teaching simulations are focused on collaborative processes within networks. Understanding how to collaborate successfully in multi-organizational settings is a critical professional skill for today’s public and nonprofit managers.

The purpose of this simulation is for students to experience a collaborative network process and to discuss rewards and challenges of the collaborative process. Groups will be assigned a scenario with varying levels of commitment to collaboration and goal clarity. Each scenario will produce a different group experience. After completion of the simulation, the entire class should discuss the collaborative process for each group including what made some experiences more positive or negative than others did. The entire simulation can be completed in a 75-minute class. This simulation requires at least 24 participants (four groups of six). For larger classes, multiple groups can be given the same scenario. In smaller classes, the instructor may serve as the monitor for all or some groups, reducing the groups by one member.

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This simulation was written by Julia Carboni of Indiana University-Purdue University-Indianapolis and was awarded Honorable Mention in E-PARCC’s 2012-13 Competition for Collaborative Public Management, Governance, and Problem-Solving Teaching Materials. The simulation is intended for classroom discussion and not to suggest either effective or ineffective responses to the situation depicted. It may be copied as many times as needed, provided that the authors and E-PARCC are given full credit. E-PARCC is a project of the Collaborative Governance Initiative, Program for the Advancement of Research on Conflict and Collaboration- a research, teaching and practice center within Syracuse University’s Maxwell School of Citizenship and Public Affairs. https://www.maxwell.syr.edu/parcc_eparcc.aspx

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\(^1\) See the following for practitioner friendly readings: Provan and Kenis 2008; Agranoff 2003; Agranoff and McGuire 2003; Goldsmith and Eggers 2004; Milward and Provan 2006; Agranoff 2007; O’Leary and Bingham 2007; O’Leary and Bingham 2009
This simulation is meant for management courses that cover interorganizational collaboration. The intentionally generic nature of the simulation allows instructors to use it across a wide variety of courses that deal with interorganizational collaboration. Networks can be framed as cross sector or within sector interorganizational collaborations. The simulation is best used when discussing the collaborative process but before discussing managing conflict and other problems in networks (see O’Leary and Bingham 2007 for an excellent practitioner resource). It has been tested with success in both public and nonprofit management courses at the graduate and undergraduate level.

Simulation Description:
This simulation includes a simple network of five actors with a shared governance structure (see Provan and Kenis 2008). Each team also includes a monitor to observe and report on the group’s collaborative process. Network members must complete a simple task – putting together an 8-piece puzzle. Unlike “wicked problems” that government increasingly uses networks to tackle, this task is easy. However, like “wicked problems”, simulation participants cannot solve the simulation on their own because they do not hold all pieces of the puzzle. To increase complexity, participants do not have adjacent puzzle pieces, meaning they need to work together from the beginning to complete the puzzle - they cannot simply put their individual sections together and then join the parts to solve the puzzle.

There are four “collaborative process” scenarios in the simulation. Scenarios vary along two dimensions- level of commitment to the collaborative process and goal clarity. Both of these dimensions are likely to affect the collaborative process. Commitment to the collaborative process refers to the level of interest each player has in collaborating. This is given in each role in the “Motivation and Commitment to Collaboration” section. In two scenarios, commitment to collaboration is high. In one scenario, commitment to collaboration is low. In the remaining scenario, commitment to collaboration is mixed. Groups with high commitment to collaboration are likely to put the puzzle together more quickly. Goal clarity refers to whether the group understands what the finished puzzle looks like prior to completing it. In two scenarios, each player is provided with a picture of the entire puzzle so they understand what the finished product looks like. In the remaining two scenarios, players are not provided with a picture of the finished puzzle. They are only provided with their own puzzle pieces. Groups with a picture of the finished puzzle are likely to finish more quickly.

Specifically, the first scenario (Alpha Network) is a network with high levels of commitment among participants and clear goals. The second scenario (Beta Network) is a network with high levels of commitment among participants and unclear goals. The third scenario (Gamma Network) is a network with mixed levels of commitment among participants and unclear goals. The fourth scenario (Delta Network) is a network with low commitment to collaboration among participants and clear goals.

Groups typically finish this simulation in a consistent pattern. Groups with the first scenario generally finish well in advance of all other groups and are most satisfied with the process.

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2 Graduate students typically produce a much more thoughtful and lively discussion about collaborative processes and are likely to bring their own experiences into the conversation.

3 Do not share this information with groups prior to the simulation.
Groups with the second and third scenarios generally finish around the same time, though groups with the second scenario are typically a little quicker. In the second scenario, groups may report being frustrated with not having a picture of the finished product but will likely praise their group for working together. In the third scenario, groups may report being frustrated with alliances and not having a picture of the finished product but that they worked out these issues quickly. Groups with the fourth scenario typically finish last and are often frustrated by the end of the scenario because the collaborative process did not go smoothly and they were unsure what the finished product was supposed to look like. They are also more likely to “spy” on what other groups are doing to see if they are on the right track.

**Summary of level of commitment and goal clarity in scenarios:**

<table>
<thead>
<tr>
<th>Scenario</th>
<th>Level of Commitment to Collaboration</th>
<th>Goal Clarity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scenario 1</td>
<td>high for all members</td>
<td>goal clear – picture of finished puzzle</td>
</tr>
<tr>
<td>Alpha Network</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Scenario 2</td>
<td>high for all members</td>
<td>goal unclear- no picture of finished puzzle</td>
</tr>
<tr>
<td>Beta Network</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Scenario 3</td>
<td>mixed</td>
<td>goal unclear- no picture of finished puzzle</td>
</tr>
<tr>
<td>Gamma Network</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Scenario 4</td>
<td>low for all members</td>
<td>goal clear – picture of finished puzzle</td>
</tr>
<tr>
<td>Delta Network</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Simulation Instructions:**

This simulation is meant to be completed with a discussion of management in networks and/or collaborative processes to give students experience with collaboration among independent entities. This simulation is a good segue for discussing how to manage conflict and other problems in networks.

Prior to the simulation, the instructor should prepare a packet for each group. Groups include five network members and one monitor. Each network member should receive a role sheet (included in simulation packet) and 1-2 puzzle pieces (see page 6 of the teaching note for assignment of puzzle pieces to roles). Role sheets and puzzle pieces may be clipped together or placed in individual envelopes. Each network member’s role sheet includes instructions, information about the network, individual role information that includes level of commitment to the collaborative process and a strategy for putting together the puzzle. The monitor’s role sheet includes instructions and specific items the monitor should consider when observing the collaborative process. These questions are consistent for each monitor and may guide the class discussion after the simulation is complete. The instructor may also add questions germane to assigned course readings.

In class, the instructor should pass out packets to each group. The instructor should assign a monitor for each group and give the packet to the monitor to pass out roles to network...
Once packets are handed out, students should be given 3-5 minutes to read over their role before the simulation begins. As noted above, the amount of time it takes to complete the simulation will vary by group. The maximum amount of time given to groups should not exceed 20 minutes. After the 20 minute mark, groups who have not finished (usually scenario 4) become extremely frustrated. During the simulation, the instructor should walk around the room to observe group processes and note observations to share during the full class discussion.

After the simulation is complete, each monitor should report his or her observations of the collaborative process. It is best to begin with scenario 1 and end with scenario 4. Monitors from scenario 4 will probably have the most to say about the process. Following this, the instructor should guide a broader conversation about benefits and challenges of commitment to the network and goal clarity for the collaborative process. The class may also discuss ways to overcome challenges such as low levels of commitment, goal uncertainty or conflict if there is sufficient time.

The Puzzle:
The puzzle consists of 35 rows and 37 columns of random letters on a standard 8.5”x11” sheet of paper. It is intentionally abstract so that it is not readily apparent to students how to put together the puzzle. The following three pages include the finished puzzle. The first page is the puzzle without any lines. This is the image given in network participant role sheets. The second page is the puzzle with lines to show the instructor where to cut and numbers that refer to participant roles. For example, pieces marked with a 1 should go to participant 1 in each group. The third page includes the puzzle with cut lines but not numbers. Instructors should use this as a template when preparing puzzle pieces for groups.

Learning Outcomes:

- Experience collaborative network process that includes collaborative problem solving, negotiation and joint outcome
- Compare experience to “ideal” collaborative process
- Understand and discuss benefits and challenges of collaboration
- Understand how level of commitment to collaboration can facilitate or hinder the collaborative process
- Understand how goal clarity can facilitate the collaborative process

Because monitors report to the entire class, it is advisable to give this task to students who need to work on public speaking or confidence building skills.
Works Cited:


