

E-PARCC

COLLABORATIVE GOVERNANCE INITIATIVE

Syracuse University

Maxwell School of Citizenship and Public Affairs

Program for the Advancement of Research on Conflict and Collaboration

Learning about Individual Collaborative Strengths: A LEGO Scrum Simulation

Overview

The contemporary emphasis on collaboration presents both opportunities and challenges. The opportunity for collaboration is often discussed within the framework of organizational or sector outcomes. Collaboration across organizations and sectors offers, for instance: the opportunity to stretch limited resources, the opportunity to identify better solutions to intractable problems, the opportunity to generate additional organizational capacity, the opportunity for improved learning, and the opportunity to jointly create public value. While these opportunities are valuable, the challenges associated with collaboration must also be considered.

In contrast to some of the most prominent opportunities for collaboration, many of the key challenges associated with collaboration are individual in nature, including: the challenge of building trust, the challenge of resolving interpersonal and values-based conflicts, the challenge of balancing strong personalities, the challenge of overcoming entrenched mindsets, the challenge of translating organizational leadership behaviors into collaborative behaviors, the challenge of identifying individuals who are willing and able to collaborate effectively, and the challenge of developing collaborative skills and abilities.

To this point, this exercise is designed to help students better understand their strengths and the ways in which individual collaboration styles impact group processes and outcomes. This exercise draws upon Parker's work (1990, 2008), which identifies four primary teamwork styles: *contributor*, *communicator*, *collaborator*, and *challenger*. Parker describes each style (Appendix A) and notes that individuals can adapt and embody different styles at different times as needed. Further, Parker not

This simulation was a first place winner in E-PARCC's 2012-13 "Collaborative Public Management, Collaborative Governance, and Collaborative Problem Solving" teaching case and simulation competition. It was double-blind peer reviewed by a committee of academics and practitioners. It was written by Heather Getha-Taylor and Alexey Krivitsky of the School of Public Affairs and Administration, University of Kansas. This simulation is intended for classroom discussion and is not intended to suggest either effective or ineffective handling of the situation depicted. It is brought to you by E-PARCC, part of the Maxwell School of Syracuse University's Collaborative Governance Initiative, a subset of the Program for the Advancement of Research on Conflict and Collaboration (PARCC). This material may be copied as many times as needed as long as the authors are given full credit for their work.

only identifies the strengths of each style, but he also considers the ways in which strengths can become limitations when not used appropriately.

Growing research on individual collaborative strengths (Emerson and Smutko 2011; Getha-Taylor 2008; Getha-Taylor and Morse 2013; Morse 2008; O'Leary et al 2010) emphasizes the need to reconsider traditional approaches to development. Thus, this exercise presents an experiential learning opportunity that reveals insights on students' abilities and those of their collaborative partners. This exercise presents a deceptively simple directive: work together in small groups to build a city using LEGO blocks. This approach adapts Krivitsky's (2009, 2011) simulation for the purposes of illustrating lessons on collaboration for public management classes. While this exercise is primarily designed to provide students with insights on individual collaborative strengths, alternative teaching guides are offered for exploring other related collaborative topics.

Presenting and Adapting the LEGO Scrum Simulation

Krivitsky (2009, 2011) developed a simulation using LEGO bricks to help teams understand and utilize the "scrum" framework. "Scrum" is a rugby term that describes the ways in which players huddle together to make strategic decisions. The term has been applied to contexts in which individuals must work together in a short timeframe to address shared challenges (Lacey 2012; Sutherland 2012; Takeuchi and Nonaka 1986). "Scrum" has been used widely in corporate settings where individuals and teams must address complex tasks and produce innovative results. While the traditional use of this framework has focused on product development, there are valuable connections to public sector collaboration. This exercise adapts and applies the framework's principles and Krivitsky's original simulation for use in public administration classes.

A "scrum framework" starts with an "owner" who creates a "wish list" of expected outcomes, or products. While this applies most clearly to the business sector, and product development contexts specifically, there are connections to collaborative settings. For instance, instead of "owners," a variety of stakeholders help to define the end goals that apply to collaborative efforts. For this exercise, the "owner" is the instructor and the "wish list" includes the items comprising a city's infrastructure.

The second component of the framework is a "sprint planning session" in which team members prioritize items on the owner's wish list and then create a "back log" of the remaining items. The team members must work together to determine how to deliver the expected outcomes. One way to do this is to create "swimlanes" that prioritize components of the project and assign items to individuals or teams. The swimlanes mapping process encourages teams to think about the problem in piecemeal approaches: the goal is to overcome the swimlanes mentality and work together to build the city. Similarly, in public organizational contexts, collaboration represents a paradigm shift from silo-type approaches to joint problem solving methods.

The third component of the framework is the "sprint." This is a set amount of time to complete a portion of the work plan. In corporate settings, sprints are generally 2-4 weeks long. In this exercise, sprints are accelerated: each building session is seven (7) minutes long. Krivitsky notes that this experience is designed to be stressful: "under stress people will tend to fall back to their natural behaviors," (p. 7). This is an opportunity for students to consider their own collaborative strengths and observe the strengths of their collaborative partners.

The fourth and final component of the framework is a “sprint review” or “retrospective.” This is the opportunity to consider progress and needs for the next work session. This is also an opportunity for the owner to check in with team members to ensure the project is moving forward satisfactorily. For instance, this exercise provides the potential for “dictators” or “loud voices” to emerge in the groups (Krivitsky 2011). Instructors can help address this through careful observation and directed debriefing questions. Suggested questions are provided.

It is important to note that the Scrum approach is used in settings where teams are self-organized: where there is no formal leader, no absolute task delineation, and no clear answers about how to solve the problem at hand: all of which connect to collaborative realities. This exercise adapts Krivitsky’s simulation for the context of public administration education and is designed to provide participants with insights on individual collaborative strengths and the impact of those strengths on collaborative outcomes and processes.

Requirements:

- 1.5 - 2 hours of class time, including introduction, building (includes three 7-minute “sprints” or building sessions), debriefing after each building session, final debriefing discussion
- Large cleared space (table or floor) for the exercise
- Small groups of 4-6 people each (total of 12-36 student participants)
- 1 large tub of LEGOs per small group (similar to Basic Brick Set #6177)
- Sticky notes (approximately 6-9 notes per team)
- Whiteboard/markers or large writing pad/markers
- Copy of instructions for each team (Appendix B)

Roles:

- Owner/Project Planner (Instructor)
- Builders/Team members (Students)
- Optional: Observer/Facilitator (Teaching Assistant)

Expected Schedule: (1.5 - 2 Hours Total)

- | | |
|----------------------------------|---------------|
| • Introduction to the challenge: | 5-10 minutes |
| • Team planning session: | 7 minutes |
| • Sprint (Building Session) #1: | 7 minutes |
| • Sprint #1 Debriefing/Review: | 10 minutes |
| • Sprint (Building Session) #2: | 7 minutes |
| • Sprint #2 Debriefing/Review: | 10 minutes |
| • Sprint (Building Session) #3: | 7 minutes |
| • Sprint #3 Debriefing/Review: | 10 minutes |
| • Break (if needed): | 10 minutes |
| • Final Discussion: | 30-40 minutes |

Student Preparation:

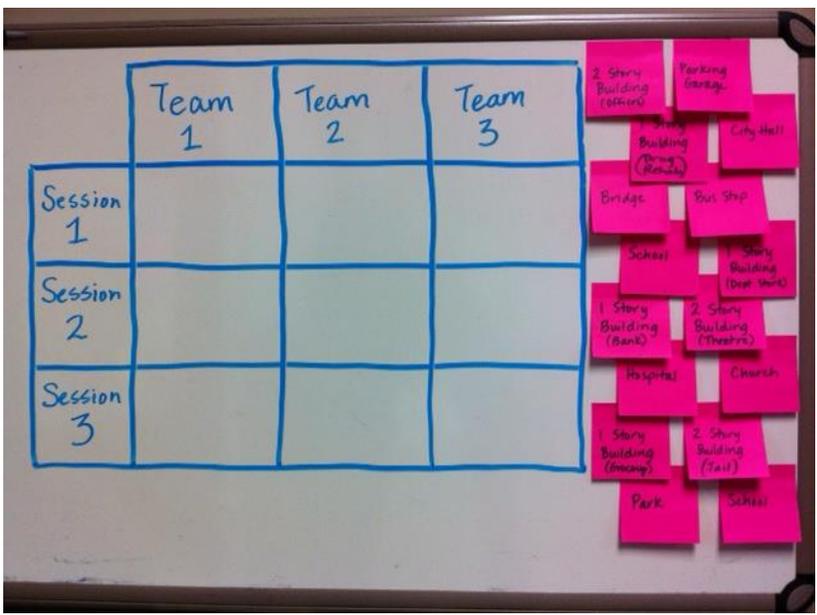
Students should reflect on their collaborative strengths ahead of time. One way to prepare is to instruct students to complete Resource C in Glenn Parker’s (2008) *Team Players and Teamwork: New Strategies for Developing Successful Collaboration*. Students should use Resource D in the textbook to interpret the findings for their self-assessment. To ensure preparation, instructors may ask students to write a brief reflective essay (3-5 pages) that summarizes their prominent collaborative strengths as well as presents an action plan for development that identifies ways to reduce ineffective behaviors and improve engagement with other team members. Chapter 4 in Parker is a valuable resource for completing this activity.

Instructor Preparation:

Pre-planning

On post-it notes, identify the “wish list” of city components you want the groups to build. Some examples include: City Hall, parking garage, park, office building, church, public safety department, schools, hospital, correctional institute, theater, grocery store, bank, bridge, church, etc. You may want to leave some notes deliberately vague (1-story building, 2-story building) or leave out key city components altogether to enhance the collaborative planning element of the challenge. It is recommended that you create more “wish list” items than the number of grid blocks to push teams toward ambitious goals.

For the purposes of this exercise, Krivitsky’s original approach of creating diagrams with “swimlanes” and an accompanying product “backlog” are adapted into a “planning grid.” The grid is where teams can claim and prioritize their selected components of the city. Prior to the start of class, draw the grid on the whiteboard or large writing pad to help students create building plans. The grid should identify each team and the three building (“sprint”) sessions. It should provide enough room to place the sticky note “owner wish list” items in each grid box (see Photo 1, below).



Implementation:

Introduction (5-10 minutes)

To get started, ask students to organize into teams of 4-6 students each. Alternatively, the instructor may choose to group students by their self-identified collaborative strengths (either a mix of strengths or a concentration of particular abilities). The room should already be flat and clear to allow room to plan and build the city. The planning grid and sticky notes should also already be in place at the front of the room. Each team should receive their box of LEGO bricks and their instruction sheet (see Appendix A).

The instructor should provide a brief overview of the exercise, including:

1. The end goal: a completed city with certain expected features.
2. The expected schedule: there will be an initial team planning session of 7 minutes, followed by three building “sprints” of 7 minutes each. There will also be a short debriefing session following each building session. The exercise will conclude with a final discussion (30-40 minutes) following the exercise.
3. The context: teams are working together to complete the task; they are not competing.
4. The building materials: the main building elements are LEGOs, but any other material can be used as well.
5. Questions? The instructor (and/or teaching assistant) is available to answer questions and provide feedback.

Team Planning Session (7 Minutes)

It may facilitate this process to tell teams to appoint one member to go to the grid on behalf of the group and select the building items of interest. Otherwise, the entire class may crowd the grid. Ideally, teams should work together to identify the most important elements and ensure there are sufficient resources to build those components. However, students may not consider the strategic planning or resource management elements of the exercise in their rush to get started (produced by the tight time constraints). It is likely that teams will not accomplish a complete plan during the brief initial planning session and will need to revisit their plans later in the exercise.

Three Sprints and Sprint Reviews (total of approximately 50 minutes)

The instructor should use a stopwatch or projected countdown clock to remind students of the time for each building (“sprint”) session. Sprint reviews/debriefing sessions should also be short (approximately 10 minutes).

Notes for Sprint 1:

The instructor may have to wear different “hats” at different times during the exercise. Sometimes, the instructor will answer questions in the role of “project planner/owner” while at other times, the instructor will make observations or ask questions in the role of educator. Instructors may choose to separate these roles if a teaching assistant or second instructor participates.

Teams may start conservatively and only select one item per building session (or “sprint”). See Photo 2 (below). If the “project planner/owner” has identified a sufficient number of “wish

list” items, this will result in an incomplete city by the end of the exercise. The debriefing after Sprint 1 is an ideal time to bring this up, if applicable.

	Team 1	Team 2	Team 3
Session 1	City Hall	2 Story Building (Office)	Hospital
Session 2	2 Story Building (Store)	1 Story Building (Camp)	Church
Session 3	School	1 Story Building (Dept. Store)	Park

Parking Garage
Bridge
2 Story Building (Theater)
1 Story Building (Retail)
School
Bus Stop
1 Story Building (Bank)

Debriefing questions after Sprint 1:

1. *How would you describe the process you used to identify building priorities? How did members of the team define and/or contribute to that process?*
2. *If teams are not on track to complete all items on the wish list, ask: Based on progress, I am concerned that all components may not be delivered. What are you doing to meet these expectations? It is expected that students will subsequently add elements to the planning grid to meet the owner’s expectations. (See Photo 3, below)*
3. *How have you utilized your collaborative strengths so far?*

	Team 1	Team 2	Team 3
Session 1	City Hall	2 Story Building (offices)	Hospital
Session 2	2 Story Building (Tail) School	1 Story Building (bicycle) 2 Story Building (Theatre)	Church School
Session 3	Parking Garage 1 Story Building (Drug Rehab) Bridge	1 Story Building (Dept store) 1 Story Building (Bank)	Park Bus Stop

Notes for Sprint 2:

At this point, students may realize there are key needed city aspects that are missing, such as: fire/police stations, post office, housing, stop signs/traffic lights, etc. If they do not automatically come to this conclusion, it is appropriate to mention this topic in the debriefing session.

Debriefing questions after Sprint 2:

1. *What's missing from the city? How have individuals helped identify gaps?*
2. *If resources are running low, ask students to think about how they might fill needs: How are you sharing resources or acting creatively to build the city?*
3. *To this point, teams may be working independently. Ask: Are you collaboratively considering the proper planning of components in the city (are they working together to think carefully about placement...should the school be next to the correctional facility, for instance?)*
4. *What strengths have you observed in yourself and your partners so far?*

Debriefing questions after Sprint 3:

1. *Is there a difference between your planned accomplishments and your actual accomplishments? How did individual members help plan and keep the group on task?*
2. *If you achieved less than expected, what happened? Similarly, if you were able to accomplish more than expected, what prompted that extra effort?*

3. *At any point, did personal strengths become liabilities to the team? What did members do to reduce ineffective behaviors? How did you push yourself to engage the team in new ways (i.e., develop weaker areas)?*

Notes for Sprint 3:

Following the third and final sprint review, you may choose to take a brief break before starting the final discussion. You may also wish to take a picture of your new city (see Photo 4, below).



Discussion (30-40 minutes)

The final debriefing allows students an opportunity to apply lessons learned to their collaborative skill development.

1. *What were your general observations on the experience? Specifically, what did you learn about the role of individual strengths in collaborative processes and outcomes? How did you utilize your collaborative self-assessment in this exercise?*
2. *Now that you've had a chance to work together to achieve a shared goal, consider the strengths you observed in your partners. Do the observed strengths match with their self-assessments?*
3. *Did you implement any part of your reflective action plan? How effective were you in that effort? Are there new things you learned today that you would incorporate into an action plan moving forward?*
4. *Overall, what did you learn about yourself and/or your partners from this experience? How did individual strengths impact collaborative processes and outcomes? Did strengths become liabilities? How did you resolve that problem?*
5. *What would you do differently if we did this exercise again?*

Variations

This exercise can be used to explore a variety of collaboration topics that connect to individual strengths. Three topics of interest (stages of collaboration, collaborative leadership, and trust) are considered below. The exercise could also be adapted to consider other topics that illustrate the value of individual strengths, including; collaborative conflict resolution, setting a vision and tone, and dealing with change.

Adaptation #1: Focus on Stages of Collaboration

1. Prior to this exercise, ask students to review readings on the developmental stages that apply to collaboration: forming, storming, norming, and performing. Recommended readings include: Bonebright 2010; Gajda 2004; Tuckman 1965.
2. Connect these stages to the individual styles (contributors, collaborators, communicators, and challenges) presented by Parker. Discuss using the following prompts:
 - a. *What are the key concerns for contributors, collaborators, communicators, and challengers in each collaboration stage? How was this illustrated in the exercise?*
 - b. *What positive actions can contributors, collaborators, communicators, and challengers take during each stage? How was this illustrated in the exercise?*
 - c. *In what ways can the strengths of contributors, collaborators, communicators, and challengers become limitations in each stage? How was this illustrated in the exercise?*
 - d. *How does a balance of styles and strengths contribute to moving the collaboration forward? What are the implications of unbalanced groups? What can individual members do to restore balance to the group? How was this illustrated in the exercise?*

Adaptation #2: Focus on Collaborative Leadership

1. Prior to this exercise, ask students to review readings on collaborative leadership styles and needs. Recommended readings include: Linden 2010; Silvia and McGuire 2010; Sullivan et al 2012.
2. Ask students to complete a leadership self-assessment to examine their own strengths. A recommended resource is Northouse's (2012) Leadership Styles Questionnaire that reveals authoritarian, democratic, and laissez-faire leadership tendencies.
3. Create a leadership intervention to implement during the exercise:
 - a. Option 1: Appoint one member per team to serve as the "leader" in Sprint 1. How did this appointment affect his/her behavior? Did he/she act in a way that was consistent with their leadership self-assessment? How did other team members respond to that leadership approach? In Sprint 2, change leaders and/or transfer the "leader" to another team. How did the exercise illustrate collaborative leadership (including impact of transitioning members and need to share leadership tasks, vision?)
 - b. Option 2: Appoint one member per team to serve as the "leader" in Sprint 1. Direct each leader to act in a specific leadership manner (authoritarian, democratic, or laissez-faire, for instance). Instructors may ask the selected "leaders" to act in congruence with their stated strengths or in a way that does not match their tendencies. For the leaders, how did this request reflect or change your typical behavior? For the other members of the group, how effective was the leadership approach for the collaborative context of the exercise?

Adaptation #3: Focus on Trust

1. Prior to this exercise, ask students to review readings on collaboration and trust. Recommended readings include: Edelenbos and Klijn 2007; Grey and Garsten 2001; Klijn et al 2010.
2. Ask students to complete an individual trust self-assessment (for example: TurningPoint's Building Trust Self-Assessment, available online).
 - a. As part of the assessment, ask students to identify their strengths in building trust in collaborative settings. Also, ask students to identify areas for improvement in building trust.
3. Create an intervention that facilitates or strains trust within or across teams during the exercise.
 - a. Suggestions to facilitate trust: give teams extra resources to be reserved for exchange with other teams; reward teams with extra time or LEGOs that choose to share information or resources voluntarily.
 - b. Suggestions to strain trust: appoint one member of the team the "supervisor" who will report to the "project planner/owner" on individual performance; ask one team member to distribute a set amount of individual performance rewards to a limited number of group members.
4. Follow up questions for students:
 - a. How did you react to the "intervention" and did your reaction match your self-assessment? If not, what can you do to provide greater alignment between your expected and actual trusting behavior/attitudes?

References

- Bonebright, D. (2010). 40 years of storming: A historical review of Tuckman's model of small group development. *Human Resource Development International*. 13(1); 111-120.
- Edelenbos, J. & Klijn, E. (2007). Trust in complex decision-making networks: a theoretical and empirical exploration. *Administration & Society*. 39(1), 25-50.
- Emerson, K., & Smutko, L.S. (2011). *UNCG guide to collaborative competencies*. Portland, OR: Policy Consensus Initiative and University Network for Collaborative Governance.
- Gajda, R. (2004). Using collaboration theory to evaluate strategic alliances. *American Journal of Evaluation*. 25(1): 65-77.
- Getha-Taylor, H. (2008). Identifying collaborative competencies. *Review of Public Personnel Administration*. 28(2), 103-119.
- Getha-Taylor, H. and R. Morse. (2013) Collaborative Leadership Development for Local Government Officials: Exploring Competencies and Program Impact. *Public Administration Quarterly*.
- Grey, C. & Garsten, C. (2001). Trust, control and post-bureaucracy. *Organization Studies*, 22(2), 229-250.
- Klijn, E., Edelenbos, J., and Steijn, B. (2010). Trust in governance networks: Its impact on outcomes. *Administration & Society*. 42(2); 193-221.
- Krivitsky, A. (2011). A Multi-Team, Full-Cycle, Product-Oriented Scrum Simulation with LEGO Bricks. Accessed via lego4scrum.com.
- Lacey, M. (2012). *The Scrum Field Guide: Practical Advice for Your First Year*. Addison-Wesley Professional.
- Linden, R.M. (2010). *Leading Across Boundaries: Creating Collaborative Agencies in a Networked World*. San Francisco: Jossey Bass.
- Morse, R.S. (2008). Developing leaders in an age of collaborative governance. In R. S. Morse & T.F. Buss (Eds.), *Innovations in public leadership development*. (pp. 79-100). Armonk, N.Y.: M.E. Sharpe.
- Northouse, P.G. (2012). *Introduction to Leadership: Concepts and Practice*. Second Edition. Sage.
- O'Leary, R., Bingham, L.B., and Choi, Y. (2009). Teaching collaborative leadership: Ideas and lessons for the field. *Journal of Public Affairs Education*, 16 (4), 565-592.
- Parker, G. M. (2008). *Team Players and Teamwork: New Strategies for Developing Successful Collaboration*. Second Edition. San Francisco: Jossey Bass.

Silvia, C. & McGuire, M. (2010). Leading public sector networks: An empirical examination of integrative leadership behaviors. *The Leadership Quarterly*, 21 (2), 264-277.

Sullivan, H., Williams, P., and Jeffares, S. (2012). Leadership for collaboration: Situated agency in practice. *Public Management Review*. 14(1); 41-66.

Sutherland, J. (2012). The Scrum Papers: Nuts, Bolts, and Origins of an Agile Framework. *Scrum Inc.*

Takeuchi, H. and Nonaka, I. (1986). The New New Product Development Game. *Harvard Business Review*. January.

Tuckman, B.W. (1965). Developmental sequence in small groups. *Psychological Bulletin*. 65(6); 384-399.

Turning Point (n.d.) Collaborative Leadership: Building Trust Self Assessment Exercise. Accessed online: http://www.turningpointprogram.org/Pages/pdfs/lead_dev/CL_self-assessments_lores.pdf

APPENDIX A:

DESCRIPTIONS OF TEAMWORK STYLES (PARKER 2008)

Contributor	Communicator	Collaborator	Challenger
Dependable, responsible, organized, efficient, logical, clear, systematic, relevant, proficient	Supportive, encouraging, relaxed, tactful, helpful, friendly, patient, informal, considerate, spontaneous	Cooperative, flexible, confident, conceptual, open, accommodating, generous, visionary, imaginative	Candid, ethical, questioning, honest, truthful, outspoken, principled, adventurous

APPENDIX B:
INSTRUCTIONS

Today we are building the city of Jayhawk Valley. You will need to work together to implement a master plan.

The instructor is the “project planner” (or “owner”) of this effort and has identified a number of key buildings and features that will be important for the finished city.

Following the introduction, teams will have a brief planning session. You will use the planning grid to identify which components your team will build during the exercise.

Building will take place during three short sessions known as “sprints.” There will be brief review discussions after each sprint. A wrap-up discussion will follow the end of the exercise.

Use the LEGOs supplied to build your team’s components. You may use other materials as needed to complete your tasks. Creativity is encouraged!