



Systems Thinking: Redesigning Education

What is it?

Enacting systems thinking to address the needs of an increasingly specialized society, Mary Lou Fulton Teachers College's [Next Education Workforce](#) (NEW) initiative leverages teams of educators with distributed expertise to provide more personalized instruction through grouping students with the educators who are best suited to their unique needs. The initiative demonstrates this PI practice of systems thinking (Practice I1) in both pedagogy and physical space by crossing the boundaries between classrooms and within schools and redistributing teachers and students between these spaces.

How does it support Principled Innovation?

PI Practice I1, "Develop habits of an informed systems-thinker" is described in the framework in this way:

Use evidence-based resources and data to inform flexible thinking and appreciation of emerging insights and multiple perspectives, allowing one to recognize how the individual parts are influenced by their environment and interact to form a complex whole.

The PI practice of systems thinking leads principled innovators to look across boundaries within and between organizations and reconfigure those boundaries to create solutions to social problems. As illustrated in this video, the NEW approach engages multiple PI character assets in carrying out the PI practice of systems thinking at classroom, school, and systems levels.

Schools—and educators—shoulder a large and growing burden for preparing students for a workforce that is becoming increasingly specialized and citizens for a world that is becoming increasingly connected and more aware of our diversity. In this context, the skills and dispositions students require for a future of civic and professional success are multiplying, placing pressure on educators to prepare student populations who are themselves becoming increasingly diverse. By bringing teachers together into teams and working with larger shared rosters of students, the NEW model seeks to allow teachers to focus on what they do best with the students who need them the most, improving student learning outcomes and decreasing the pressure on individual teachers to be all things to all students.

Teams by nature reach across all four dimensions of character, drawing especially upon the Performance asset of collaboration, which in turn depends on Civic assets such as civility, perspective-taking, and inclusivity and on Moral character assets such as humility and fairness. Intellectual character is strengthened as teachers work together to solve problems through critical reflection about what's happening across a large shared roster of students. In the collaborative environment of a team that builds directly on its character assets, the diversity of teams can create healthy divergent thinking rather than destructive division, fueling creative and courageous solutions to student-by-student challenges. Systems thinking in this context requires seeing teams as an inclusive system—as a group of diverse educators who can work together to serve a complex whole.

Use this video to highlight the role of systems thinking on the team level and to highlight the role of character in helping teams to thrive.

What do I need?

- Time: 20 minutes
- Classroom or virtual setting

How do I use it?

Step 1: Prepare

Watch the video and read the “What is it” and “How does it support Principled Innovation” sections above. Read through the discussion questions provided below and consider how you yourself would respond.

Prepare for distributing the [PI Character Assets document](#) to all participants.

Step 2: Situate

Following the “How does it support Principled Innovation” section above, begin by providing the following description of PI Practice I1, “Develop habits of an informed systems-thinker”:

Use evidence-based resources and data to inform flexible thinking and appreciation of emerging insights and multiple perspectives, allowing one to recognize how the individual parts are influenced by their environment and interact to form a complex whole.

Ask students what parts comprise an educational “system,” pushing them toward conceiving of teacher teams as a small-scale system. Explain that they are going to watch a short video that highlights the role of systems thinking in the daily work of teachers. Distribute the [PI Character Assets document](#) to all participants, asking participants to watch the video with attention to the way that Practice I1 brings some of these character assets together through the Next Education Workforce.

Step 3: Present

Present the video for the participants or have them watch it on their own.

Step 4: Discuss

Discuss the video in a group discussion (in-person or online).

Here are some questions to consider using:

1. How might the diversity of individual team members strengthen a team of specialists working in a single content area, such as three teachers working in Algebra I? Apart from collaboration itself, what character assets might be important in leveraging that diversity, and why?
2. Teams are normally led by a single individual, drawing attention to the character of team leaders. Consider these questions about working with leaders on teams:
 - a. How is power different from leadership?
 - b. How might power structures disrupt creativity within teams?
 - c. What character assets might be the most important for you when you disagree with the decision of a team leader?
3. How can team-based models create more equitable learning environments for teachers and students? How, in contrast, could a teaching team fail to display the character asset of fairness, and how should other character assets inform the way that this shortcoming is addressed?
4. In practicing systems thinking, what would be some of the hardest barriers to making a Next Education Workforce model successful in your learning community? What character assets might play a role in helping to remove those barriers?