



TEACHING SYSTEMS THINKING SKILLS

Tools and Techniques

April 14, 2023





Welcome & Introduction

MODERATOR: Meaghan Caruso,

M.Ed

Graduate Student - Environmental Science and Policy

PANELIST: Moe Ahmed

Center for Climate Change Communication (4C)

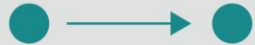
PANELIST: Dr. Jeremy Campbell

Institute for a Sustainable Earth (ISE)

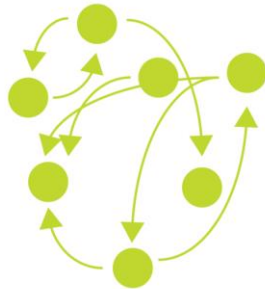
PANELIST: Dr. Ben Manski

Next System Studies

Traditional thinking

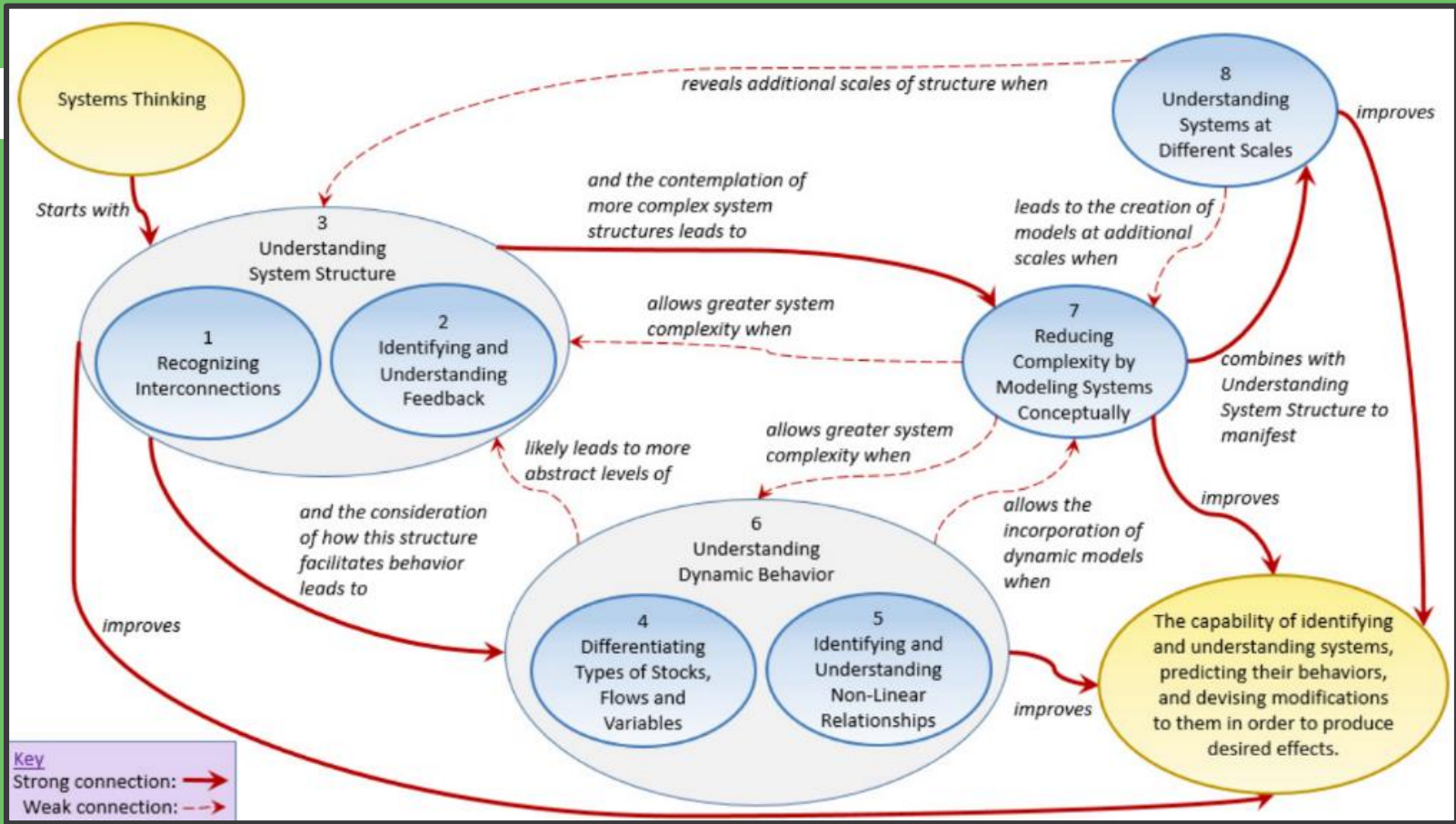


Systems thinking



Today's Agenda

1. Introduction and Goals of Webinar
 - a. Brief interactive activity
 - b. Three demographic poll questions
2. Three 10-15 minute panelist presentations
3. Audience responses, panelist Q&A



Arnold, R. D., & Wade, J. P. (2015). A definition of systems thinking: A systems approach. *Procedia Computer Science*, 44, 669-678.

Webinar Goals

01

Pedagogical Tools

Our panelists will offer practical ways to incorporate systems thinking into curricula.

02

Resource Collection and Distribution

We will be sharing resources collected through a workshop on systems thinking held this fall. Please consider adding to our collection.

Teaching Resources
for Systems Thinking



Edited Book Proposal: *Teaching Systems Thinking*

Illustrates the creative ways that university instructors have tackled teaching about systems and systems thinking from multiple disciplines.

- Learning outcomes and how they have changed
- Specific class activities with student experiences
- Different approaches to teach concepts like feedback loops, systems mapping, reducing complexity, etc.

Panelist Presentations



MOE AHMED

Growing Systems Thinkers: Enhancing Environmental Education with NetLogo Modeling



DR. JEREMY CAMPBELL

Community Engagement for Teaching Socio-Environmental Systems Thinking Skills



DR. BEN MANSKI

What Systemic Movements Can Teach: A Praxiological Approach to Next System Studies

Have resources to share?

Contribute to the collection of teaching resources
at: <https://ise.gmu.edu/teaching-resources-for-systems-thinking-a-crucial-21st-century-skill/>

Contact: Jeremy Campbell at jcampb30@gmu.edu



Contribute to an edited volume of teaching
resources

Contact: Kerri Lacharite at klachari@gmu.edu

Thank you!

This webinar was made possible by a Curriculum Impact Grant awarded through George Mason University.

Thank you to our panelists and attendees. We hope you will consider adding your expertise to our growing collection of resources.