Facilitating Team Communication Using the Toolbox Dialogue Method

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The Toolbox Project
http://toolbox-project.org/

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The Plan

• **Introducing the Toolbox approach**
  – Preamble – 15 minutes
  – Complete Toolbox instrument – 10 minutes
  – Dialogue session – 25 minutes
  – Debrief – 10 minutes
Event Purpose

• Introduce you to a dialogue method – the *Toolbox method* – that operates on the micro level, facilitating reflection on disciplinary differences
  – Describe the history and nature of the Toolbox Project
  – You will have the opportunity to participate in a Toolbox activity
The Toolbox Project

• What is the Toolbox Project?
  – An Michigan State-based, NSF-funded research initiative
  – We aim to enhance communication and collaboration in cross-disciplinary partnerships through structured, dialogue-based workshops
  – We collect data – Likert responses, dialogue audio, post-workshop survey responses – for research and reporting purposes
The Toolbox Project

• **The history of the Toolbox Project**
  
  – Began at the University of Idaho
  
  – Emerged from an NSF Integrative Graduate Education and Research Traineeship project
  
  – Focused on making it easier for teams of science Ph.D. students to communicate with one another
The Toolbox Project

- 180+ workshops around the world
The Toolbox Project

• Collaboration with many initiatives
The Toolbox Project

- Multiple publications and presentations, and an international conference
The Toolbox Dialogue Method

• Interacting with people from other disciplines is difficult
  – Different languages
  – Different beliefs about knowledge and the world
  – Different values

• The Challenge of Different Worldviews
The Toolbox Dialogue Method

• Idea for addressing the challenge:
  
  *Enhanced understanding → Enhanced communication*

• Operationalizing the idea: Structure a dialogue that
  
  – Highlights disciplinary values and beliefs
  – Reveals differences and similarities
  – Facilitates teaching and learning
The Toolbox Dialogue Method

• **The integrative power of dialogue**

  “Researchers...desiring to work on interdisciplinary research, education, and training projects should immerse themselves in the languages, cultures, and knowledge of their collaborators” (NAS 2004, p. 81)

The Toolbox Dialogue Method

- **Two Parts:** Instrument & Dialogue Session

- A structured set of prompts, grouped by module

- Each module has a core question that announces the theme and probing statements that develop it

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**Motivation**

**Core Question:** What are the personal motivations behind my research?

1. Knowledge generated by research is valuable even if it has no application.
   - **Disagree** 1 2 3 4 5
   - **Agree**
   - I don’t know
   - N/A

2. My research questions are determined by funding opportunities.
   - **Disagree** 1 2 3 4 5
   - **Agree**
   - I don’t know
   - N/A

3. Research, service, and teaching are equally important to me.
   - **Disagree** 1 2 3 4 5
   - **Agree**
   - I don’t know
   - N/A

4. Applied research is more important to me than basic research.
   - **Disagree** 1 2 3 4 5
   - **Agree**
   - I don’t know
   - N/A

5. Solving stakeholder problems should be the primary objective of academic research projects.
   - **Disagree** 1 2 3 4 5
   - **Agree**
   - I don’t know
   - N/A

6. Researchers who collaborate with policy makers should be professionally rewarded.
   - **Disagree** 1 2 3 4 5
   - **Agree**
   - I don’t know
   - N/A
Two Parts: **Instrument** & Dialogue Session

- They are abstract and locate you on common ground
- Typically designed for the partner’s context
- Likert scales associated with each statement

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The Toolbox Dialogue Method

• **Two Parts: Instrument & Dialogue Session**
  
  – The main element is a dialogue about the instrument
  – Prompts stimulate dialogue
  – Begin with any prompt you wish
  – Follow your interests around the instrument

http://images.clipartpanda.com/discussion-clipart-06219978_CLIPART_OF_15186_SM_2_xlarge.png
The Toolbox Dialogue Method

• Two Parts: Instrument & Dialogue Session
  
  – It is *your* dialogue and is typically only lightly facilitate (not today)
  
  – No right answers
  
  – Normally, it ends with a second instrument and a debrief/reflections on workshop
The Toolbox Dialogue Method

• Terms may be vague or ambiguous, e.g., application, basic, success, scientists

• Productive, engaged dialogues typically involve:
  – Even distribution of speaking turns
  – Careful and respectful listening
  – Attention to the issues raised by the prompts
  – Consideration of all the modules, if not all the prompts
Next Steps

• Divide into groups of 5 or 6
• Fill out the Toolbox instrument (both sides)
• When everyone is done, start talking about the issues raised by the prompts
• You can start wherever you’d like and move through the instrument along any path
• Remember to take charge of the dialogue, moving to a new prompt if discussion lags
Questions?
Session Debrief

• Debrief questions:
  – What issue revealed the most difference in your discussion?
  – What comments do you have on the experience?