Improving Transdisciplinary Communication: An Introduction to the Toolbox Dialogue Method

Length: 1.5 hours

Addressing intercultural problems collaboratively requires interaction with members of multiple, heterogeneous communities, e.g., researchers from other disciplines, government officials, community members. In order to ensure just responses to these problems, transdisciplinary collaboration should involve the meaningful participation of as many of the affected communities as possible. Since complex, heterogeneous projects such as these typically include multiple perspectives and differences in belief and value, the potential for misunderstanding is rife, and the consequences of misunderstanding can be great.

The Toolbox Dialogue Initiative, a US NSF sponsored project, has developed an approach – the “Toolbox dialogue approach” – that is an established way of enabling heterogeneous groups to avoid debilitating misunderstandings. This method uses structured, dialogue-based workshops to enhance communication and collaboration in cross-disciplinary teams. Grounded in philosophical analysis, the Toolbox workshop enables collaborators to engage in a structured dialogue where they share their research and practice worldviews.

An evidence-based approach, the Toolbox dialogue method has both proximal and distal effects. Proximally, structured dialogue about research assumptions enhances self-awareness and mutual understanding, strengthening the collective epistemic foundation needed for effective collaborative research. Distally, these cognitive effects can increase team cohesion and communication effectiveness by enabling collaborators to avoid both unreasonable agreement and unreasonable disagreement.

In a Toolbox workshop, structured dialogue enables participants to achieve three learning outcomes:

1. Identify habits that guide research, influencing it in ways that can reflect differences in concept and value that are grounded in training and experience,

2. Share habits by articulating them – perhaps for the first time – and subsequently enabling their collaborators to learn more about how they operate, and

3. Coordinate habits by harnessing the differences among them through dialogue, negotiation, and compromise.

The agenda for a Toolbox workshop at ITD Conference 2017 is as follows:

(1) Preamble. Initial plenary presentation highlighting the motivation, background, and procedures of the Toolbox dialogue method. (15 min.)

(2) Breakout dialogue sessions. Participants will divide into breakout dialogue groups. These sessions begin and end with participants filling out the Toolbox instrument (i.e., scoring the Likert scales associated with the survey items) using the new Toolbox web interface, with a 90-minute dialogue in between. These sessions will be facilitated by members of
the Toolbox Project. Participants can opt to receive a copy of their pre and post-dialogue Toolbox instruments. (45 min.)

(3) Workshop co-creation activity and debrief. Small group discussions (with report out) of ways in which structured dialogue can work to support transdisciplinary research and teaching projects that are both effective and just will precede a general workshop debrief discussion (30 min.)

Workshop Facilitators:

Dr. Michael O’Rourke is Director of the Toolbox Dialogue Initiative and Professor of Philosophy at Michigan State University. His research interests include the nature of epistemic integration and communication in collaborative, cross-disciplinary research, the nature of linguistic communication between intelligent agents, and environmental philosophy. He has published extensively on the topics of communication, interdisciplinary theory and practice, and robotic agent design. Since its inception in 2005, the Toolbox Dialogue Initiative has conducted over 200 workshops around the world with more than 1,700 participants.

Dr. Julie Thompson Klein has been a key advisor to the Toolbox Dialogue Initiative (TDI) since 2008 and has experience as a Toolbox workshop facilitator. Klein is Professor of Humanities Emerita in the English Department at Wayne State University and Affiliate of the TdLab at the ETH-Zurich. Her books include Interdisciplinarity (1990), Crossing Boundaries (1996), Humanities, Culture, and Interdisciplinarity (2005), Creating Interdisciplinary Campus Cultures (2010), and Interdisciplining Digital Humanities (2015). She was also Associate Editor of The Oxford Handbook on Interdisciplinarity (2010, 2017).