

# Managing Difference and Conflict in Cross-disciplinary Research Teams

*Shalini Misra, Ph.D. (she/her)*

School of Public and International Affairs

ISCE Administrative Fellow

Virginia Tech, Arlington, VA

shalini@vt.edu

2023-24 ISCE Workshop Series

April 12, 2024

# *Workshops 1 and 2 Recap*

○ Recording and slides available at:

<https://www.isce.vt.edu/events/isce-2023-2024-team-science-workshop-series.html>

- Distinguish between different types of cross-disciplinary research
- Identify team science skills and competencies for successful research outcomes
- Recognize team science competencies and skills needed for leading cross-disciplinary research teams
- Implement strategies for leading cohesive teams (collaboration planning and team debriefs)

# *Key Takeaways and Tips*

- Consider your own transdisciplinary orientation and collaborative readiness
- Devote considerable time to team composition
- Consider including convergence research / SciTS expertise in your team
- Create facilitating conditions for team effectiveness
  - Co-create a compelling vision
  - Co-develop integrative team tasks
  - Provide an enabling structure
  - Engage in reflexivity
  - Manage difference and conflict

# *Workshop Learning Objectives*

- Identify **ways to leverage diversity** in team science
- Identify the different **sources of conflict** in cross-disciplinary research teams
- Learn how to **engage with conflict**
  - Skillful listening
  - Principled Negotiation
  - Setting Conflict Management Norms

## ***Case 1: Diagnose the team dynamic challenge***

- Dr. Chin, a new postdoc, recently joined Dr. Smith's laboratory. She has been working diligently on her project and has been very productive. She is well spoken and presents her data clearly at laboratory meetings but is generally very quiet and difficult to engage in casual conversations. Dr. Smith has been pleased with her work thus far but is disappointed that she fails to propose new directions for her project. Dr. Clark, the other postdoc in the lab, has been in the laboratory for several years and has become good friends with Dr. Smith. He is very self-assured and enthusiastic and often speaks up at lab meetings, contributing suggestions and new ideas that enhance the lab's projects. He and Dr. Smith often eat lunch together and go out after work to discuss new ideas for his project. They also leave the lab together to play tennis during the day. Dr. Chin's previous lab had a very strict hierarchy and her former PI dictated the entire project. She has had numerous ideas for her project but because she is only a junior postdoc she does not feel it is her place to present these suggestions to Dr. Smith.

# *Sources of Diversity in Cross-disciplinary Research Teams*

- **Social category differences:** race, gender, ethnicity, age, religion, physical abilities, sexual orientation
- **Knowledge and skills:** education, functional knowledge, expertise, training, experience, abilities
- **Values and beliefs:** culture, ideology
- **Personality:** cognitive style, affective disposition, motivational factors
- **Power/status:** tenure, title, special relationships with organizational leaders
- **Social and network ties:** friendship, community, in-group membership, work/discipline

# *What do we know about diversity and team performance?*

- Diverse teams outperform homogenous teams in problem solving
  - Only if there is not great pressure to conform and agree
- Informational diversity is positively linked to team performance
  - Science teams perform better when is at least a moderate level of conflict over scientific matters
- Knowledge and skills diversity (not just expertise) linked to team performance
  - More proportion of experts, the more likely to disintegrate into non-productive conflict or stalemate
- Provide explicit opportunities to learn about each other to modulate effects of stereotypes and biases.

## ***How do you know when diversity is not being managed well?***

- There are high levels of inter-personal or inter-group tensions among team members
- Rivalries among members or groups within the team
- Social faultlines: Team members with the same perceived identity groupings cluster together
- Members either withdraw (don't participate) or confront others in meetings
- Different identity groups discuss concerns among themselves rather than raising them with the entire team
- People seem too busy to attend to inter-group problems



# *What can leaders do encourage and leverage diversity?*

- Create a **strong team identity**
  - Collaboration planning
  - Psychological safety, trust, learning, reflexivity (team debriefs)
- Some other ways to create a strong team identity
  - Openly acknowledge and share differences among team members
  - Assume that every team member has something important to contribute
  - Ask many questions; be curious about scholarly domains in which you are not trained
  - Recognize that different perspectives are essential for a better outcome



# Sources of Conflict in Teams

- **Task-related conflict:** Knowledge-based disagreements pertaining, for example, to theory and constructs and/or to methodologies for problem solving.
- **Team-related conflict:** Degree to which team members manifest animosity toward each other based upon assessments of different attitudinal factors.
- Science teams can benefit from conflict when they have:
  - cultivated a **cohesive environment that is open and tolerant of diverse viewpoints.**
  - Established **cooperative norms** within the team that prevent disagreements from being perceived as personal attacks that help reverse the negative impact of conflict.

# ***Fear of Conflict***



## *What is your conflict resolution style?*

- **Competing:** You use whatever power seems appropriate to win your own position.
- **Accommodating:** Neglect your own concerns to satisfy the concerns of others.
- **Avoiding:** Side step the conflict altogether.
- **Collaborating:** Attempt to work with others to fully satisfy the concerns of both.
- **Compromising:** Attempt to find an expedient and mutually acceptable solution that partially / fully satisfies the concerns of all parties.

# Engaging with conflict



# *How can you engage with conflict?*

- Diagnose the conflict:
  - Understand the sources and context of the conflict
  - Seek out the meaning of the conflict for yourself and / or others
- Questions to ask yourself when facing conflict:
  - Who is involved and what are their personalities, emotions, thoughts, motivations, values, ideologies, and/or identities?
  - What are the interpersonal dynamics?
  - How are the organizational structure and dynamics contributing to the conflict?

## ***Jam board activity: Diagnosing the source of conflict in your team***



- Write down in two/three words conflicts you have seen/experienced/heard about in teams
- Categorize your experience next to the type of conflict that you believe it **BEST** represents
  - Task-related conflict
  - Team-related conflict

# *How can you engage with conflict?*

- Practice skillful listening
  - Ask the person/s to explain to you what has happened and listen
  - Seek out others and ask them for their account
  - If you do not understand, ask questions
  - Focus exclusively on the person who is speaking
  - Make efforts to be open to what others say/need
  - Acknowledge emotions
  - Paraphrase the person's point to assure that you understand
  - Restate the issue or problem and request feedback on your understanding
  - Be transparent about what you will do next and follow up about your process



## *Let's practice skillful listening*

- Dr. Lewis, a PI, who recently assembled a new research team to address a thorny scientific issue, announces that she wants everyone to focus their energies on their research and that she does not want to be bothered with petty personal disputes that arise among members. “I expect you to work out among yourselves whatever differences may arise”, she explains in her introductory discussion with the team. After an initial period of harmonious interactions, two postdocs with different supervisors begin to quarrel about access to the electron microscope and other team resources. Unable to resolve their differences, the two begin to have disagreements about cleaning the shared equipment and usage and purchase of reagents. The tension between the two begins to negatively affect the overall group dynamic and functioning until one of the postdoctoral researchers approaches Dr. Lewis to inform her that he is leaving the team.

# *How can you engage with conflict?*

- **Principled negotiation:** a shared interest-based approach to negotiation that focuses primarily on finding a mutually shared outcome.
  - Where interests conflict, decisions are based on some fair and independent standards
  - Seeks mutual gains
- **Principled negotiation steps**
  - Discover interests (not positions)
  - Invent options for mutual gain
  - Use objective criteria to evaluate options

## *Let's apply principled negotiation*

- A new cross-disciplinary initiative includes team members who think they have the best paradigm and methodology to address a complex problem. However, there are other newer team members, trained in different disciplines and belonging to different scholarly and professional cultures, who challenge and question this paradigm and methodology. The PI of the initiative senses this tension and wants to avoid unproductive conflict and poor team outcomes. What might he do?
  - How might skillful listening and principled negotiation apply here?
  - What steps could the PI take to engage with this tension for better team outcomes?

## ***Group Activity: Setting Conflict Management Norms***

- Write down your preferences for acceptable & unacceptable behaviors around discussions & debates (e.g., tone of voice, use of language, participation, etc.)
- After sharing, develop a list of no more than 5 items that represent your group's idea of productive discussion
- At completion of the activity, share some of your rules of engagement

## *Key takeaways*

- Creating a strong team identity is single most effective way to benefit from diversity
- Conflict can be productive and provide opportunities for creativity (if handled skillfully)
- Ignoring conflict is a sure way to guarantee that it will remain alive and worsen
- Understanding and diagnosing the sources and context of conflict is key step in the conflict resolution process
- Team leaders must develop skillful listening skills to thoughtfully and fairly intervene in conflicts
- Teams should be proactive and establish processes to handle conflicts
- Team members can benefit from becoming aware of their own and others' conflict resolution styles and learn from difficult behaviors

*References available at*

