Enhancing Effectiveness in Diverse Teams: Leadership Approaches

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Leadership to Enhance Team Effectiveness: *Presentation Outline*

- The promise of team science
- Team diversity as a challenge to team effectiveness
- Role of leadership for team effectiveness
  - Team processes impact performance
  - Leading and managing science teams
  - Managing faultlines in diverse teams
- Emerging models
The Promise Of Team Science

- Working at intersections of disciplines can create new science while fostering a higher plane of enquiry — unearthing solutions to complex human health and societal problems.

- Diverse teams (in particular) need effective team leadership (and management) in order to reap the “promise” of cognitive diversity.

- Diverse teams require diversity of leadership approaches.
Seven Features that Create Challenges for Team Science
National Academies Report on the Science of Team Science: April 2015

High Diversity of Team Membership

- Deep Knowledge Integration
- Large Size
- Goal Misalignment
- Permeable Team and Group Boundaries
- Geographic Dispersion
- High Task Interdependence

Promoting Innovation in the Science of Diversity
Team Processes Impact Performance

- **Team mental models**: Shared understanding of requirements, procedures, roles, responsibilities
- **Team climate**: Shared perceptions of strategic imperatives
- **Psychological safety**: Shared perception of a climate that supports risk taking and learning
- **Team cohesion**: What keeps members “in”
- **Team efficacy**: Higher when teams are interdependent
- **Team conflict**: Group faultlines need to be managed
Leaders Enhance Team Processes

- **Team mental models**: Leader provides pre-briefs, debriefs, feedback (Zaccaro and Mathieu, 2000)
- **Team climate**: Leader communicates mission, goals
- **Psychological safety**: Leader coaches, reduces power differentials, promotes inclusion (Nembhard and Edmondson, 2006)
- **Team cohesion**: Leader defines social structure, models open communication
- **Team efficacy**: Leader enables individual self-efficacy, then shifts to team focus (Kozlowski and Ilgen 2006)
- **Team conflict**: Leader recognizes, manages conflict (Marks 2001; Bennet & Gadlin 2012)
Leading and Managing Science Teams

- Most leaders of science teams
  - Chosen for scientific expertise
  - Lack formal leadership training
- Multifunctional team science leaders
  - Have both project management skills and deep expertise in at least one of the disciplinary areas
  - Promote research value to team members and to institution/stakeholders
  - Promote diversity value to team members and to institution/stakeholders
“Fifty years of research on team and organizational leadership in contexts other than science provides a robust foundation of evidence to guide professional development for leaders of science teams and larger groups.”
Leadership: Managing Team Faultlines

• Build superordinate team identification and team goals
  - Cultural misalignment >> negative performance (Bezrukova., 2012)
  - Culture-specificity, diversity awareness

• Anonymous contributions to team discussions (Fussell & Setlock 2012)
  – Some cultures discourage public disagreement with leaders

• Finding common ground:
  – Fuels self-regulated forms of motivation
  – Leads to perceived competence, autonomy, and relatedness (Ommundsen, et. al. 2010)

• Create a cross-cutting strategy (Rico et al., 2012)
  – Engineers and scientists working together on a prototype
  – Involvement in shared task decreases bias and psychological distance
Emerging Team Science Models And Leadership

- Integrative capacity model - Building capacity for deep knowledge integration (Salazar et al., 2012)
  - Building consensus - experiential learning, appreciative inquiry (Stokols, 2006)
  - Clarification - communicate knowledge across geographic boundaries (Olson and Olson, 2000)
  - Affect management - facilitation of trust (Gray, 2008)

- Another (four-phase) model provides a roadmap enhance the development, management, and evaluation of transdisciplinary research (Hall et al. 2013)
Conclusions

• Science teams are often diverse teams

• Managing diverse teams benefits from a mix of leadership styles
  – No one “best” leader type
  – Good leaders integrate, provide compassion, are “not the smartest person in the room”

• Emerging team science models provide a roadmap, but no one-size-fits-all approach
“Leadership researchers, universities, and leaders of team science projects should partner to translate and extend the leadership literature to create and evaluate science leadership development opportunities for team science leaders and funding agency program officers.”

National Academies Report on the Science of Team Science: April 2015
Recommendations on Team Leadership

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