Teams: The Secret Ingredient for Innovation

UAB CCTS TIERS
Training Interdisciplinary Emerging Research Scholars
Thursday July 13, 2017

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PhD Prep

Objectives: At the conclusion of this workshop, participants will be able to identify and describe:

- Differences between
  - Teams and Groups
  - Creativity
  - Innovation
  - Entrepreneurship
  - Strategy
- Primary types of conflict in teams
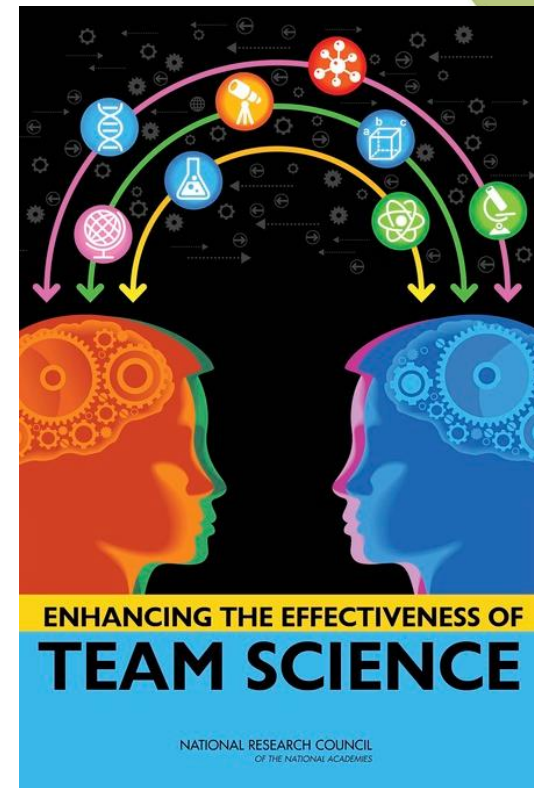 - Task
  - Relationship
 - Process

What is a team?

What is a team?

- "**Two or more individuals** with **different roles and responsibilities**, who **interact socially** and **interdependently** within an **organizational system** to **perform tasks** and accomplish **common goals**" (NAP report, p. Sum-1).

Committee on the Science of Team Science, Cooke, N., Hilton, M., Editors. Enhancing the Effectiveness of Team Science. Washington, DC: The National Academies Press; 2015 Apr 24.

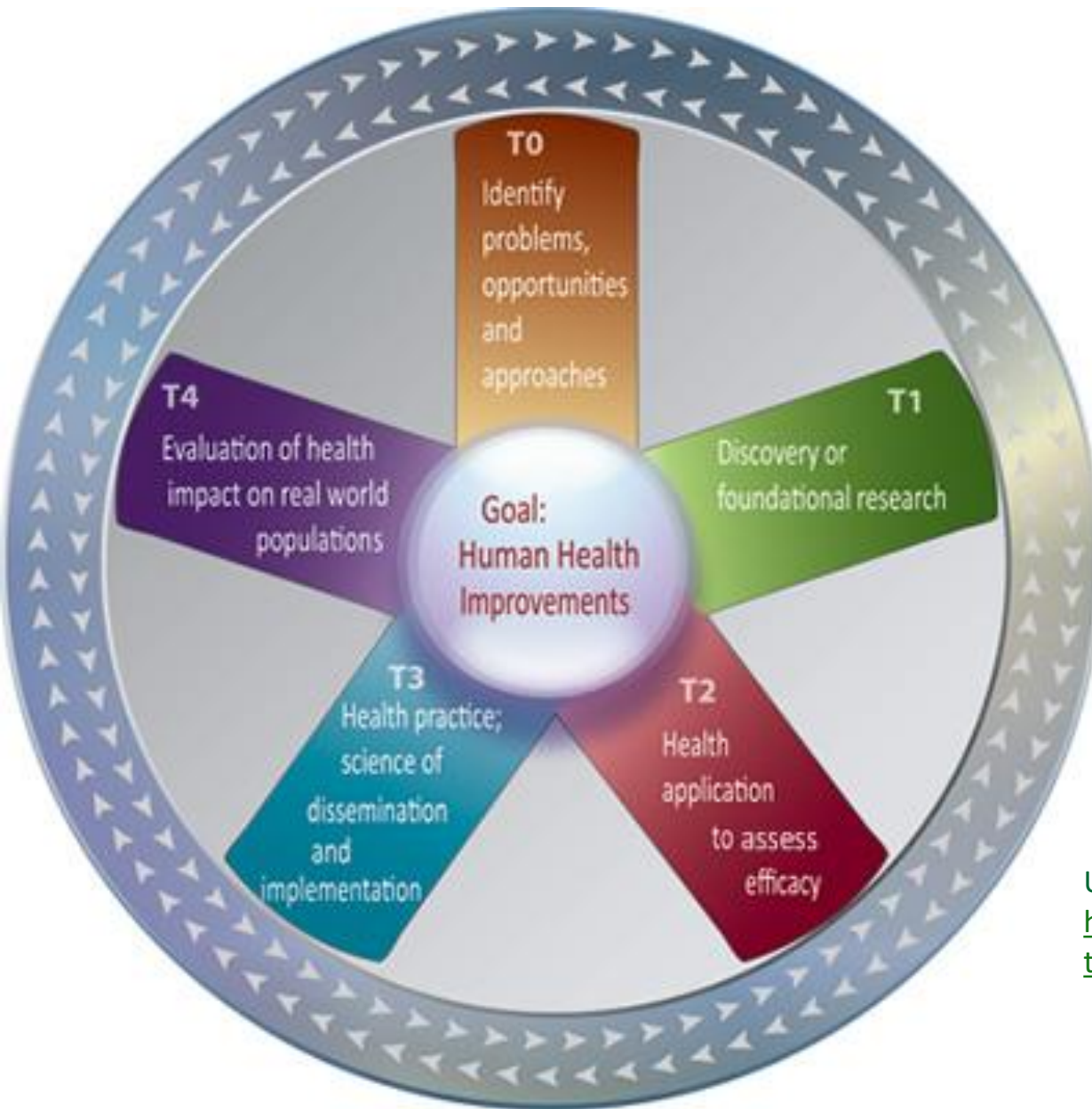Knowledge that will change your world

Current trends in scientific research

- 90% of all science and engineering pubs are by 2 or more authors

- Most pubs authored by 6-10 researchers across multiple institutions

- Researchers are not always academics

- Team size continues to increase
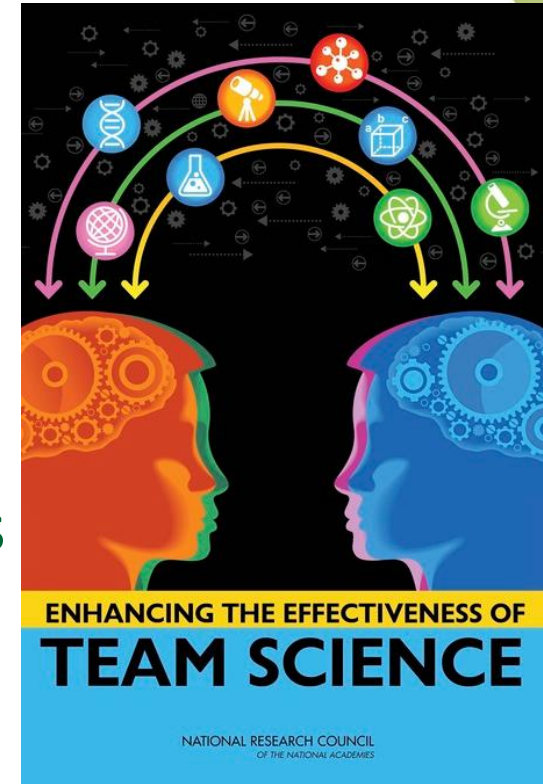
Committee on the Science of Team Science, Cooke, N., Hilton, M., Editors. Enhancing the Effectiveness of Team Science. Washington, DC: The National Academies Press; 2015 Apr 24.

Translational Science Paradigm

U. Of Washington, T-Phases
https://www.iths.org/investigators/definitions/translational-research

Patient Centered Outcomes Research Institute (PCORI)

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Community-Based Participatory Research

Source: https://ui.uncc.edu/story/geographers-doctors-and-community-members

Source: http://cssr.gmu.edu/cssr-capabilities/community-based-participatory-research
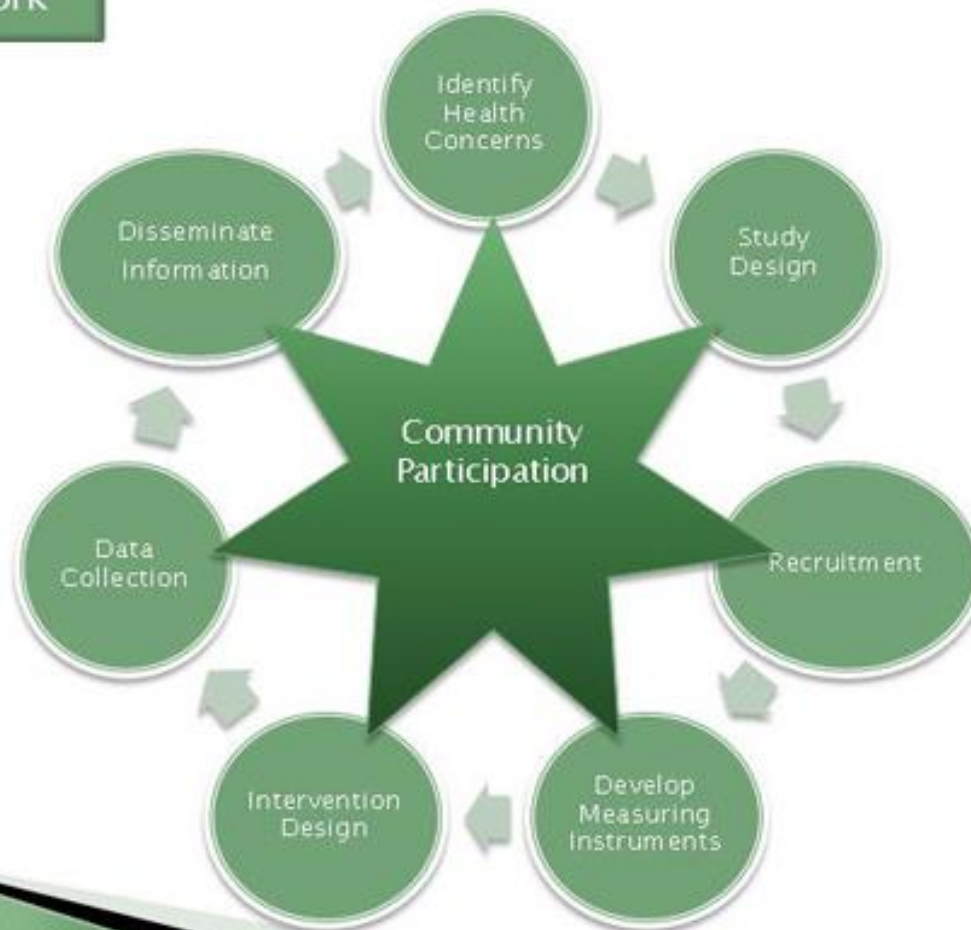
Building Interdisciplinary Teams

Team-Based Creativity

- The **exchange** and **combination** of **divergent** yet **complementary** bits of information between 2 or more team members that produces something that is both **novel** and **potentially useful** (Amabile, 1983; Amabile et al., 1996; Gino et al., 2010; Nahapiet & Ghoshal, 1998)

Team-Based Innovation

- Implementation of a novel or useful discovery or product (Hulsheger et al., 2009)

- Translation (taking action to move and transform the idea from one phase to another)

Building Interdisciplinary Teams

Team-Based Entrepreneurship

- Opportunity-seeking behavior.

- Commercialization. Tech transfer. Start-up activity. University spin-offs. Intellectual property. Licensing. Patent protection. Business incubation.

- Income generation. Profit maximization. Wealth creation.

Team-Based Strategy

- Advantage-seeking behavior.

- How to out-perform and out-compete others. (e.g. Ireland, Hitt and Simon, 2003)

- Sustainability. Long-range planning.

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What is conflict?

3 Primary Sources of Conflict

Task conflict

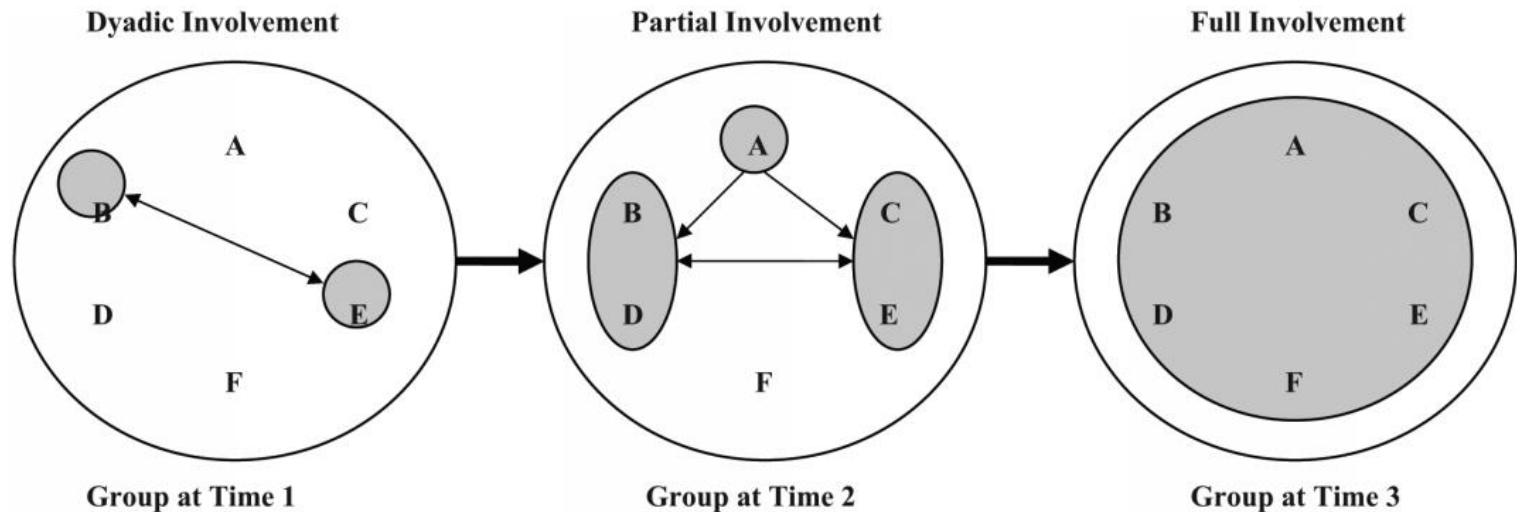- Ideas, viewpoints and opinions (Jehn, 1995)

Relationship conflict

- Interpersonal incompatibilities, annoyance, frustration (Jehn, 1995)

Process conflict

- Task delegation, resource allocation, workload sharing (Jehn & Bendersky, 2003)

Conflict can be *Contagious*

	Dyadic Involvement	Partial Involvement	Full Involvement
	Group at Time 1	Group at Time 2	Group at Time 3
Mechanisms for Conflict Contagion		Coalition Formation Emotional Contagion Threats to Outcomes	Coalition Formation Emotional Contagion Threats to Outcomes
Conflict Dynamics			
Resolution Potential	High	Low	Moderate
Competitive Tactics	Moderate	High	Moderate
Outcomes			
Performance	High	Moderate	Low
Efficiency	High	Low	Low
Creativity	High	Moderate	Low
Turnover	Low	Moderate	High
Satisfaction	Moderate	Low	Low

Jehn, K., Rispens, S., Jonsen, K., & Greer, L. (2013). Conflict contagion: a temporal perspective on the development of conflict within teams. *International Journal of Conflict Management, 24*(4), 352-373.

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Conflict can be *Multiplex*

Team A
Friend & Non-Friend Conflict

Team B
Non-Friend Conflict Only

Team C
Friend Conflict Only

Friend Tie
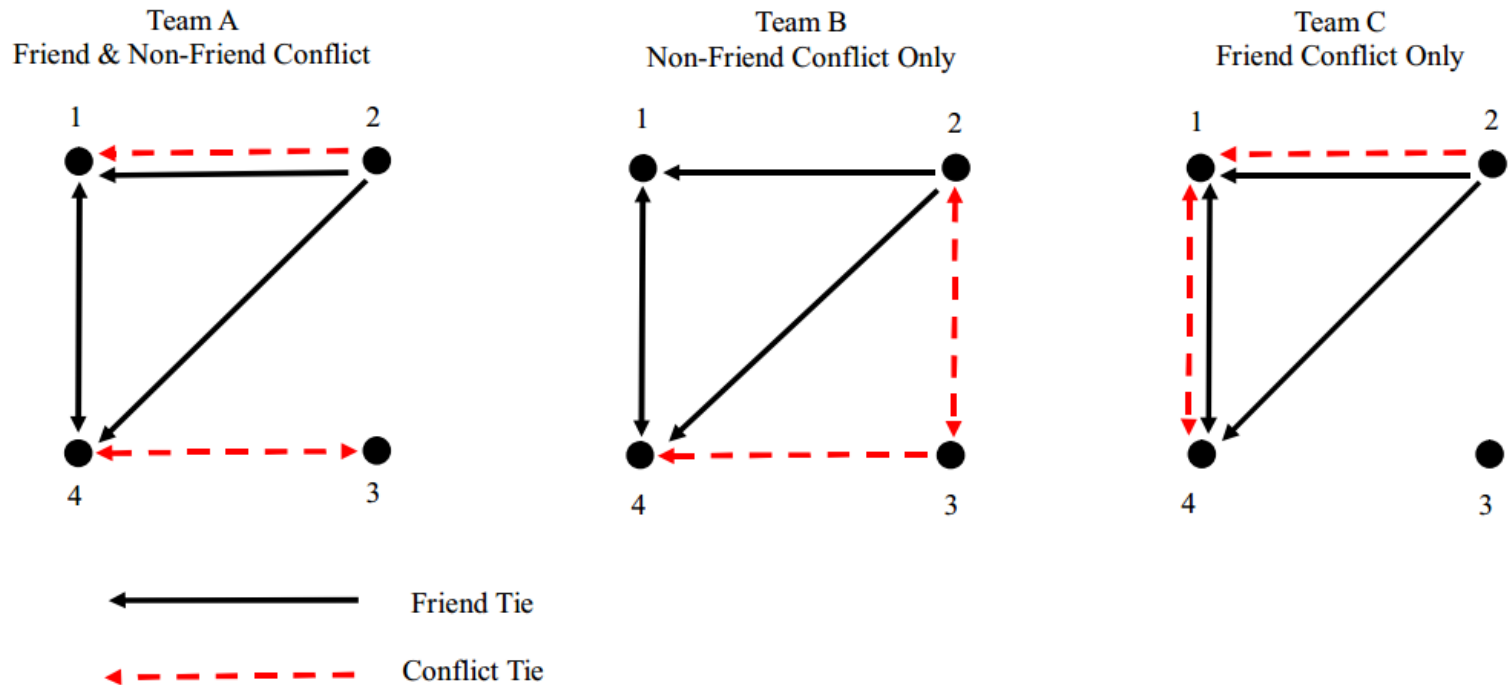
Conflict Tie

Fig. 1 Illustration of the multiplex view of friendship and conflict in teams

Hood, A. C., Cruz, K., & Bachrach, D. G. (2016). Conflicts with friends: A multiplex view of friendship and conflict and its association with performance in teams. *Journal of Business and Psychology*. doi:10.1007/s10869-016-9436-y

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Psychological Safety in Teams

- "In the context of teams, psychological safety (PS) refers to team members' assessment that the team's environment is safe for interpersonal risk-taking (Edmondson, 1999)."

- "PS influences willingness to engage in potentially threatening behaviors, such as many of those associated with creativity and learning in groups."

Hood, A. C., Bachrach, D. G., Zivnuska, S. and Bendoly, E. (2015) Mediating effects of psychological safety in the relationship between team affectivity and transactive memory systems. *Journal of Organizational Behavior*. http://dx.doi.org/10.1002/job.2050.

Psychological Safety (Edmondson, 1999; Edmondson & Lei, 2013)

Do team members feel comfortable engaging in potentially risky interpersonal behaviors such as:

- Admitting errors

- Asking for help

- Speaking up

- Challenging/Questioning/Vetting

Without concern for:

- Devaluation, distortion or discounting of expertise

- Rejection

For Discussion/Next Steps

- What are you going to differently as a result of this information?

- Can conflict be avoided?

- How can you create a psychologically safe team environment?

Questions?

Transactive Memory Systems (TMS)- Mental Model of Tasks, Expertise and People

Tasks	Expertise	People

Brandon, D. P., & Hollingshead, A. B. (2004). Transactive Memory Systems in Organizations: Matching Tasks, Expertise, and People. *Organization Science, 15*(6), 633-644. doi:10.1287/orsc.1040.0069

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Transactive Memory Systems (TMS)- Mental Model of Tasks, Expertise and People

Tasks	Expertise	People
Grantsmanship	??	Susan
Data analysis	Biostats	??
Comm Organizing	Church Leader	??
??	Health Disparities	Karen
Publish	??	John
Health Screenings	Clinician	Chris
Qualitative Surveys	CBPR	??

Brandon, D. P., & Hollingshead, A. B. (2004). Transactive Memory Systems in Organizations: Matching Tasks, Expertise, and People. *Organization Science, 15*(6), 633-644. doi:10.1287/orsc.1040.0069
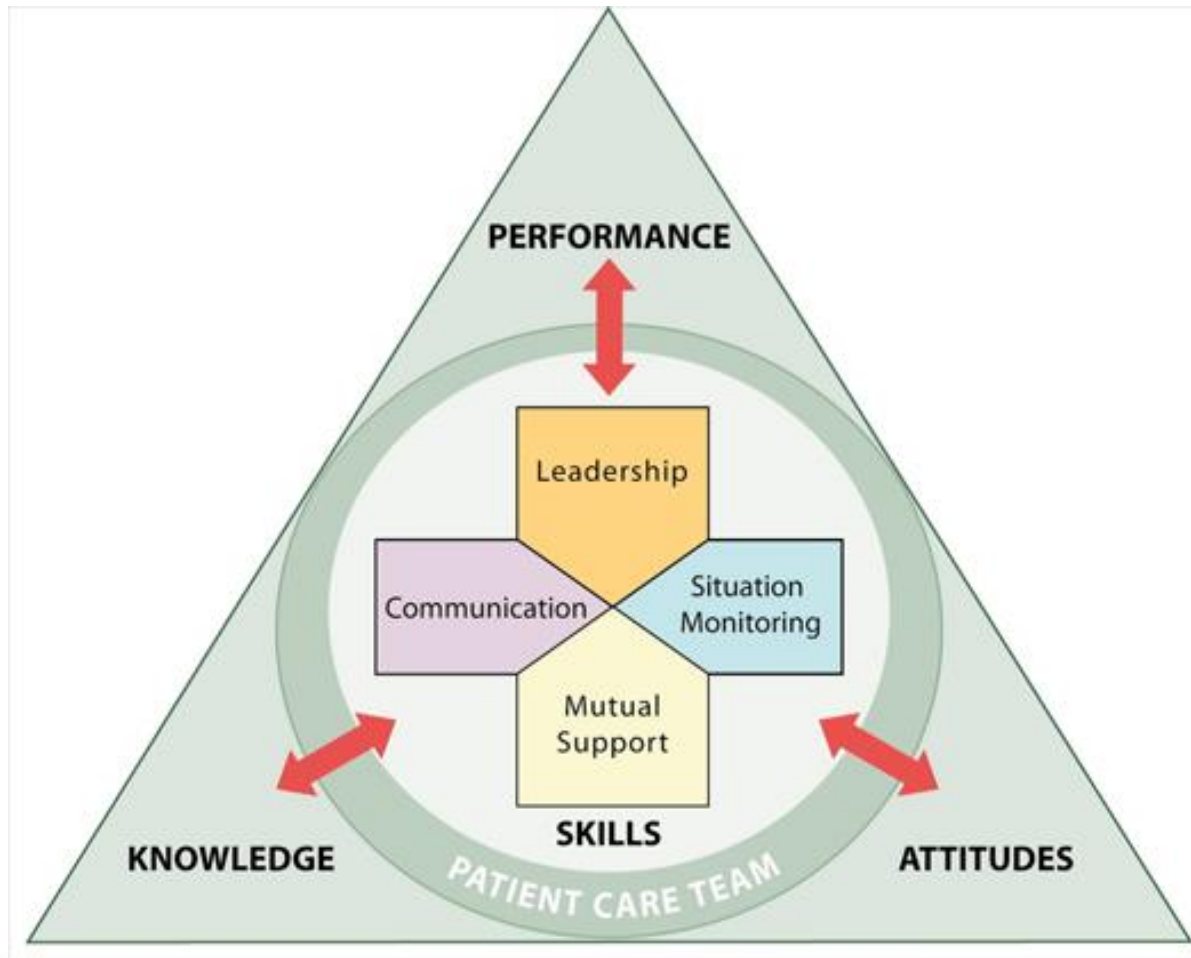
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Agency for Healthcare Research and Quality (AHRQ) TeamSTEPPS®: Strategies and Tools to Enhance Performance and Patient Safety

UAB Office of Interprofessional Simulation for Innovative Clinical Practice
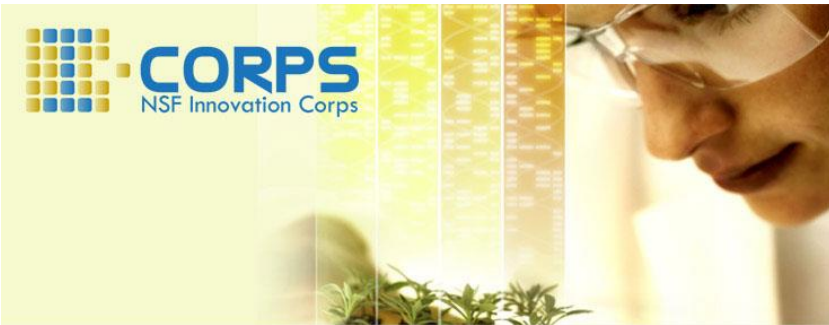
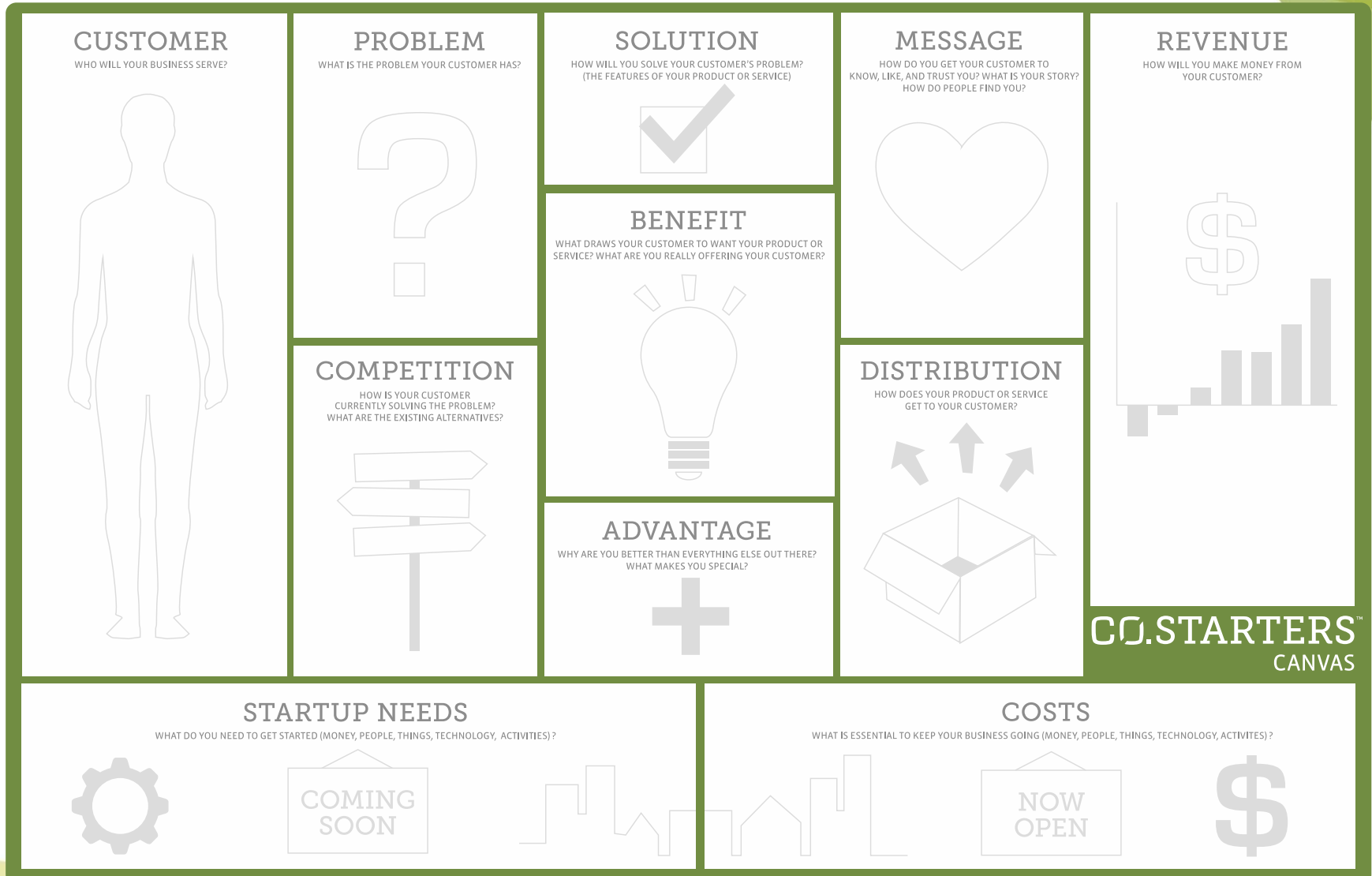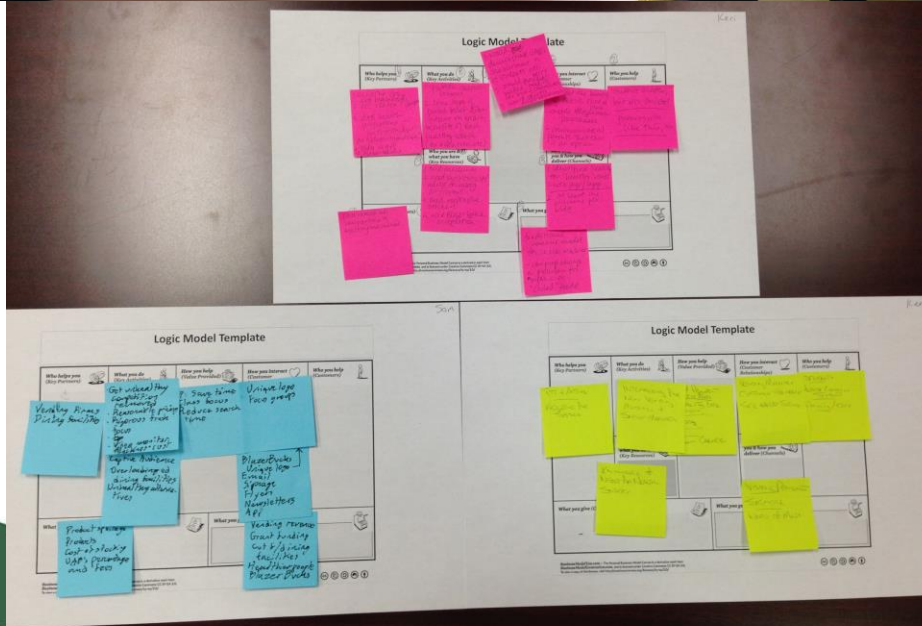# UAB Office of Interprofessional Simulation for Innovative Clinical Practice

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NSF Innovation Corps and I-Corps™ at NIH

Business Model Canvas: A Tool for Teams

CUSTOMER
WHO WILL YOUR BUSINESS SERVE?

PROBLEM
WHAT IS THE PROBLEM YOUR CUSTOMER HAS?

SOLUTION
HOW WILL YOU SOLVE YOUR CUSTOMER'S PROBLEM? (THE FEATURES OF YOUR PRODUCT OR SERVICE)

MESSAGE
HOW DO YOU GET YOUR CUSTOMER TO KNOW, LIKE, AND TRUST YOU? WHAT IS YOUR STORY? HOW DO PEOPLE FIND YOU?

REVENUE
HOW WILL YOU MAKE MONEY FROM YOUR CUSTOMER?

BENEFIT
WHAT DRAWS YOUR CUSTOMER TO WANT YOUR PRODUCT OR SERVICE? WHAT ARE YOU REALLY OFFERING YOUR CUSTOMER?

COMPETITION
HOW IS YOUR CUSTOMER CURRENTLY SOLVING THE PROBLEM? WHAT ARE THE EXISTING ALTERNATIVES?

DISTRIBUTION
HOW DOES YOUR PRODUCT OR SERVICE GET TO YOUR CUSTOMER?

ADVANTAGE
WHY ARE YOU BETTER THAN EVERYTHING ELSE OUT THERE? WHAT MAKES YOU SPECIAL?

STARTUP NEEDS
WHAT DO YOU NEED TO GET STARTED (MONEY, PEOPLE, THINGS, TECHNOLOGY, ACTIVITIES)?

COMING SOON

COSTS
WHAT IS ESSENTIAL TO KEEP YOUR BUSINESS GOING (MONEY, PEOPLE, THINGS, TECHNOLOGY, ACTIVITES)?

NOW OPEN

CO.STARTERS
CANVAS

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Business School Faculty

Research Coordinator Training

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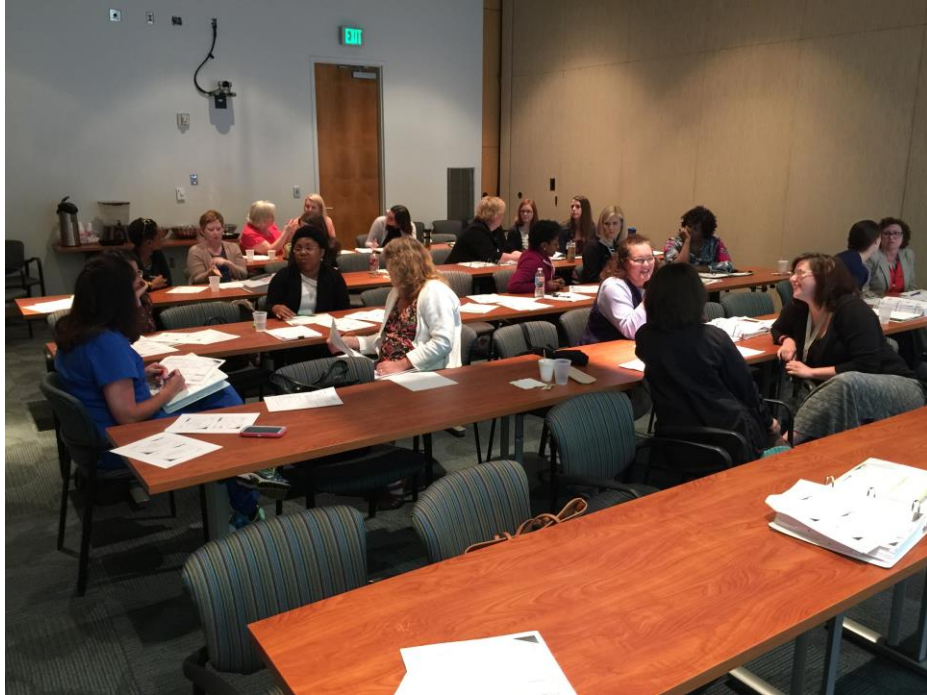
8th Graders Innovating at Phillips Academy

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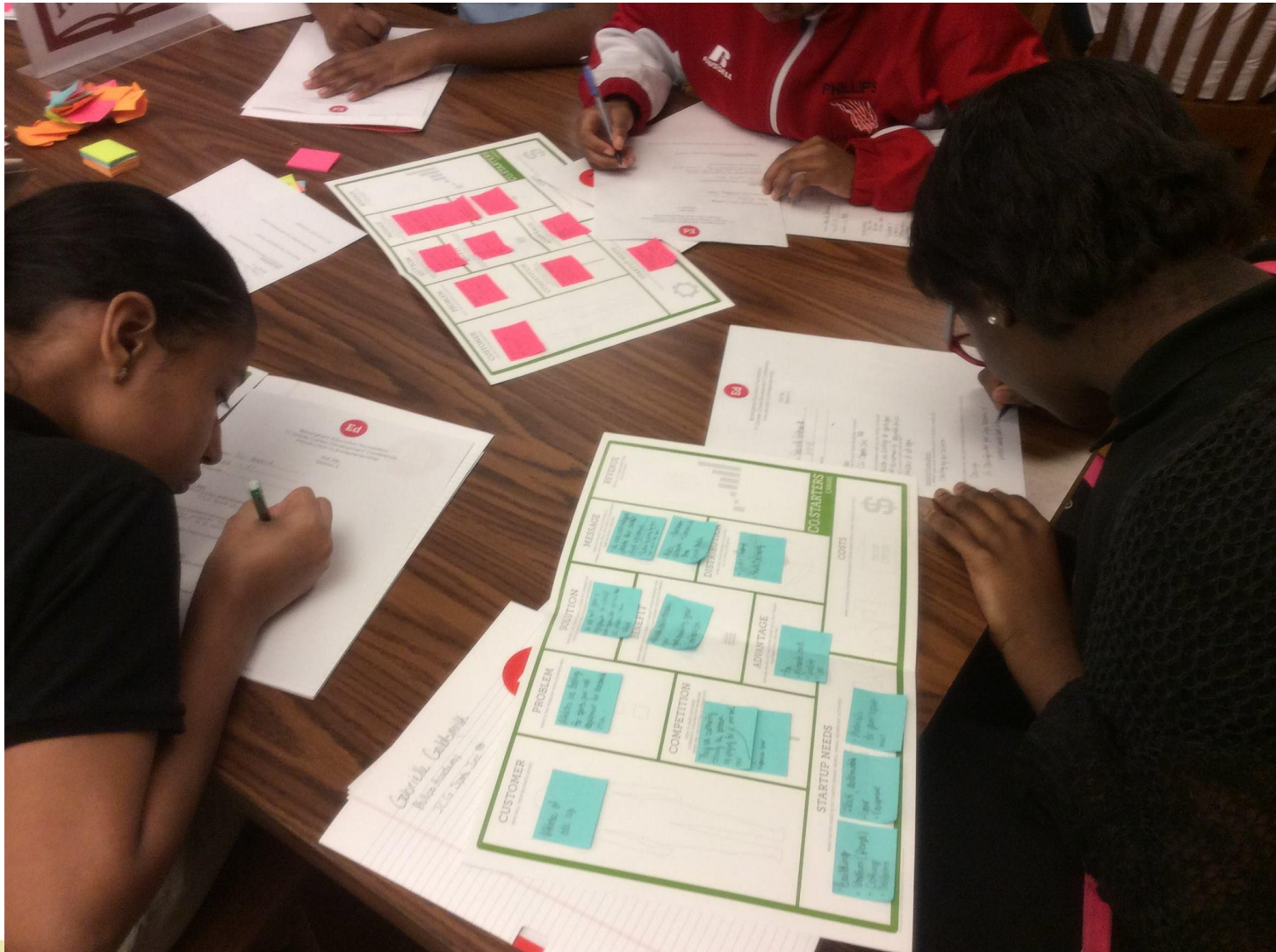
Daddy's Pooh Pooh (Web-Based Morning Show for Kids)

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