Strategies for Effective Teamwork

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About Me

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Industry Background

- US Air Force
  - 1999-2009
  - Communication Electronics Systems
  - Electrical and Environmental Systems
  - Project Engineering
- Engineering Consultant / US Army
  - 2009-2014
  - Technical Project Management, Leadership Development, Organizational Change

Academic and Research Background

- BS Industrial and Organizational Psychology
  - Human Factors
  - Cognitive Psychology
- Former PhD in Human Centered Computing
  - Teamwork Science and Collaboration Technology
  - Human Computer Interaction
- Currently pursuing MS Industrial Engineering
  - Optimization in Operations Research
  - Design of Human Machine Systems

Why do we care about teamwork?

Research across multiple domains shows that:

- Teams are not easy to implement

- Combining highly skilled people does not guarantee success

- Teamwork does not 'just happen'

There is a difference between **_team performance_** and **_team effectiveness_**

- Team performance: outcome of team's actions, regardless of how those actions were performed

- Team effectiveness: combination of the outcome of the team's actions (performance) + how the team interacted (process and teamwork)

Teamwork: A messy ordeal…..

Your team now….

Teamwork: A messy ordeal…..

Your team in six weeks….

Teamwork: A messy ordeal…..

Your team after your final presentation…

What is teamwork?

A *team* is two or more individuals with:

- Specified roles

- Adaptive, interdependent, dynamic interactions

- A common and valued goal

Teamwork is the ability (through coordination and cooperation) to establish a shared understanding of the team's:

- Resources (member's knowledge, skills, and abilities)

- Goals and objectives

- Constraints

Today we'll talk about important components of teamwork and their coordinating mechanisms.

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Teamwork: Shared Mental Model

A *Shared Mental Model* is the shared understanding (representation) of team goals, individual team member task, and coordination needed to achieve team goals

- Promotes common understanding
    - Team related mental model: team functioning and expected behaviors
    - Task related mental model: materials needed for the task, how equipment is used

- Provides the ability to anticipate and predict each other's needs

100% overlap of mental models is *not reasonable or desired*

- Initial: enough to guide team members toward the same team objectives

- Ongoing: constant update to shared understanding

Teamwork: Communication

Communication is the information exchange between two or more individuals

- Distributes needed information to other team members

- Facilitates continuous update of shared mental model

Barriers to successful communication

- Fails to occur (team member may become focused on individual task)

- Occurs, but is misinterpreted (individual perspective and bias, information overload)

- Common workaround (when communication fails) is to provide direct access to needed information to everyone

Strategies for Effective Communication

- Communicate: decide *how* team members will communicate with each other, with the project sponsor, and with the instructor/TA (i.e. messaging, google hangouts, email, etc), as well as the type and quality.

- Coordinate: decide *when* team members will communicate with each other, with the project sponsor, and with the instructor/TA (i.e. frequency of communication), and who is responsible for communicating what information.

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Teamwork: Mutual Trust

Mutual trust is the shared perception that individuals within the team will:

- Perform actions important to the team

- Recognize and protect the rights and interests of all team members

How trust influences teamwork

- Sharing and disseminating information
  - Lack of trust: fear of how information will be used; being perceived as incompetent; feeling that input is not valued
  - Mutual trust: willingness to disseminate information freely

- Interpretation of team behaviors
  - Lack of trust: more likely to interpret behaviors like disagreement or missed deadlines as intentionally damaging against the individual or team; leads to reciprocation of the misinterpreted behavior
  - Lack of trust: more likely to interpret teamwork behaviors (performance monitoring, backup behavior) as 'keeping tabs' or micromanaging
  - Mutual trust: understood and accepted by team members that others are looking out for each other and the good of the team

Teamwork: Mutual Trust, cont.

How trust influences teamwork, cont.

- Acceptance of team leadership behaviors
  - Lack of trust: fear of appearing uninformed

Strategies for Establishing Mutual Trust

- Submit work on time and to quality expectations.
- Initiate and respond to communication using the technologies and timelines established by your team.
  - If you need to make adjustments, renegotiate
- It is always harder to reestablish trust once it has been broken

Teamwork: Team Leadership

Team leaders facilitate problem solving through cognitive processes (thinking), coordination processes, and the team's collective motivation and behaviors

Importance to team effectiveness

- Role in creating, maintaining, and accuracy in shared mental model
  - Team objectives and constraints
  - Roles of team members
  - Resources available to the team
- Monitors internal (faulty team functioning) and external (behavior and interactions)
- Establishes behavior and performance expectations

Strategies for Establishing Effective Team Leadership

- Define team leader roles and expectations early on in the project
- Maintain consistency in management style

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Teamwork: Mutual Performance Monitoring

Ability to keep track of other team member's work while performing own work to:

- Ensure that everything is running as expected

- Ensure team members are following procedures correctly

Importance to team effectiveness

- Team member feedback can increase awareness of member's own performance (identify errors or lapses)

- Information from performance monitoring increases synergy and team effectiveness

- Requires shared understanding of the task and team responsibilities

- Requires open, trusting, and cohesive team climate

Strategies for Performance Monitoring

- Have all team members submit work with enough time for internal review and needed adjustments

- Pairs can be accountable for quality checking each other's work

Teamwork: Backup Behaviors

Use of resources and task-related effort by one team member to another when recognizing that there is a workload distribution problem in their team.

Importance to team effectiveness

- If tasks of overloaded team member are not distributed, performance will degrade
- Flexibility of team to compensate for one another leads to fewer errors
- Ability of team to self-assess and redistribute work leaders to greater adaptability
- Backup behavior is a response to a legitimate need for assistance

Strategies for Backup Behavior

- Provide feedback (verbal or written) and coaching to your teammates
- Help a teammate perform a specific task
- Complete a task for the teammate if an overload is detected

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Teamwork: Adaptability

Adaptability is the ability to recognize deviations from the expected action and adjust accordingly; a culture of adaptability requires a global perspective of:

- The team task

- How changes may alter team member's roles in the team task

- Ability to recognize when changes are occurring

Importance to team effectiveness

- Coordinated action relies on ability to adapt to individual team members and environment in which the team exists

Strategies for Adaptability

Must be focused and purpose driven:

- Identify the cues that the situation has changed

- Assign meaning to that change

- Develop and successfully carry out a new plan

Teamwork: Team Orientation

Preference for working with others, and the tendency to enhance individual performance through coordination, evaluation, and utilization of task inputs from other members while performing group tasks.

Collective vs team orientation

- Collective: general preference to achieve group goals rather than individual goals (culturally based, context free)
- Team: general preference to work in team settings

Importance to team effectiveness

- Improves individual effort, performance, and satisfaction
- Cooperation and coordination increases
- Willingness to accept and assistance from other teammates improves work processes

Strategies for Adaptability

- Discuss team member preferences early on in team formation

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Teamwork: Awareness and Empathy

Last but not least, awareness and empathy for the life situations and circumstances of your teammates.

Strategies for Awareness and Empathy

- Pay attention: to body language, to missed deadlines
- Communicate, communicate, communicate

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Questions?