



CPSC 2910 – Lesson 9

Teamwork

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Agenda

- **Why do we care so much about teamwork?**
- **Teamwork – it's a messy ordeal**
- **What is teamwork, and what is not?**
- **Shared Mental Model**
- **Communication, Performance Monitoring, and Backup Behaviors**
- **Mutual Trust**
- **Leadership**

Why do we care about teamwork?

First, some statistics -

- Team collaboration statistics - <https://fitsmallbusiness.com/team-collaboration-statistics/>
- Collaboration software worldwide - <https://www.statista.com/outlook/tmo/software/productivity-software/collaboration-software/worldwide#key-players>

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**With so many minds and billions of dollars
invested, why is teamwork
STILL SO DIFFICULT?**

Teamwork is a messy ordeal...

Teamwork is a messy ordeal

- 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)

Some teamwork terminology

- **What is teamwork?**
- **Shared Mental Model**
- **Communication and Coordination**
- **Mutual Performance Monitoring**
- **Backup Behaviors**
- **Mutual Trust**
- **Leadership**

What is teamwork and what is not?

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

There is a difference between team communication and team coordination

- Communication – information exchange
- Coordination – timing of information exchange

What is a shared mental model?

A shared mental model is the shared understanding (representation) of –

- Team goals
- Individual team member tasks
- Coordination needed to achieve team goals

Why is it important?

- 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 is not reasonable or desired

- Initial - enough to guide team members toward the same team objectives
- Ongoing - constant update to shared understanding

The role of 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 a client or 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 a client or project sponsor, and with the instructor/TA (i.e. frequency of communication), and who is responsible for communicating what information.

The role of 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

The role of mutual performance monitoring

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

- Ensures that everything is running as expected
- Ensures team members are following procedures correctly

How mutual performance monitoring influences 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 adjustments
- Pairs can be accountable for quality checking each other's work

The role of backup behaviors

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

How backup behaviors influence 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 leads 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

The role of leadership

Team leaders facilitate problem solving through –

- Cognitive processes (thinking)
- Coordination processes
- Team's collective motivation and behaviors

How team leadership influences 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 in the project
- Maintain consistency in management (YOUR management) style

My Top 5

1. Be yourself

- Develop a leadership style that compliments your personality, experiences,

2. Be consistent

3. Pay attention and be adaptable

- Recognize deviations from the expected action and adjust accordingly
- 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

4. Understand and motivate your team

5. Be a leader, not a member