

TIDEE

Transferable Integrated Design Engineering Education



UNIT 1: Getting Started

Creating the First Team

- **Responsibilities of Functional Team Roles**
- **Roles for Effective Teams**
- **Student Availability Times**
- **Creating a Team Symbol and Name**

Session 2: Creating the First Team

Announcements and Objectives for the Day (10 minutes)

- Understand what roles and responsibilities are needed for effective teamwork.
- Form the first design teams using non-verbal communication skills.
- Learn how individual characteristics can be assimilated into a functioning team.
- Teams develop creative solutions.

Forming Teams (8 minutes)

- During this exercise you will be asked to use non-verbal communication skills to learn who your first design team members are.

Roles for Effective Teams (23 minutes)

Creating a Team Symbol and Name (26 minutes)

Reflectors Report (5 minutes)

- Team members during the previous activity will help the reflector prepare their team's reflector's report, which completes the following statements:
 - Our primary strength as a team was . . .
 - An area in which our team could improve is . . .
 - An insight I personally gained from this activity is . . .

Responsibilities of Functional Team Roles

Team Manager

- **The Team Manager is responsible for ensuring that the team achieves its goals on time.**
 - maximizing overall performance of the team
 - achieving team goals by systematic use of process
 - setting meetings and meeting details
 - planning project schedule and intermediate mileposts to achieve timely results
 - maintaining team focus
 - ensuring member perform their roles
 - keeping everyone involved in the learning and problem solving processes
 - keeping the process enjoyable and rewarding for everyone
 - ensuring that every team member can explain what has been learned
 - participating in the learning and problem solving process

Team Recorder

- **The Team Recorder is responsible for documenting group activities.**
 - effectively document team member interactions
 - capturing essence of ideas
 - clearly communicating complex ideas
 - assessing information and raising questions as needed for clarification
 - legibly and articulately recording information for permanent record
 - actively participating in the learning and problem solving process

Team Reporter

- **The Team Reporter is responsible for disseminating group consensus.**
 - organizing information for orderly presentation
 - synthesizing multiple ideas into coherent whole representation
 - clearly and concisely communicate orally complex ideas
 - assessing information to identify most important parts
 - effectively use visuals to communicate information
 - actively participate in the learning and problem solving process

Team Reflector

- **The Team Reflector is responsible for development of the team's process skills.**
 - observing group interactions and progress
 - providing feedback on the learning and problem solving processes
 - forming observations into constructive statements
 - providing regular (every 15 min.) updates on process strengths, improvements, insights
 - giving suggestions on improving the team's time efficiency
 - performing as an active learner and problem solver

Team Explorer

- **The Team Explorer is responsible for expanding the team's focus and providing technical assistance.**
 - providing wild and crazy ideas when appropriate
 - providing energy to motivate the team
 - checking to see if enough possibilities have been explored
 - periodically checking to see if ideas are technically feasible
 - suggesting resources that can be used
 - performing as an active learner and problem solver

*Adapted from: Duncan-Hewitt, Wendy, David Mount, and Dan Apple. 1994. *A Handbook on Cooperative Learning*. Pacific Crest Software, Corvallis, OR, pp. 15-19.

Activity: Roles for Effective Teams

Objective: Team members learn definitions of team member roles and how these roles support an effective team process.

Tasks

Organization

- (3 minutes.) Each team member chooses a different team role (Manager, Recorder, Reporter, Reflector, and Explorer) as identified in the handout. This will be your role throughout this unit. If the team size is fewer than five, then omit the Explorer as a chosen role
- Facilitator assigns each team a different role to analyze.

Your Selected Role: _____

- Each person reviews your role as defined in the handout.
- Each person tells the other members on your team the most important responsibility for your role.
- Each person tells the other team members what experience or personality trait that will help you do a good job in your chosen role.

Your Team's Assigned Role for this Activity: _____

- Team members discuss responsibilities of a person in this role and decide on the three most valuable.
- Team members will prioritize these three most valuable responsibilities.

Deliverables

Team Reporter briefly presents orally the team's prioritized list of three most valuable responsibilities to be performed in the role assigned to the team and why they were selected.

Criteria for Success

- Members understand and can describe the most important responsibilities of their chosen roles.
- Teams learn how to come to a consensus.
- Team members gain a sense of becoming a functioning "team".
- Reporters and Reflectors represent the results and functioning of their team.

Resources

- Handout on "Responsibilities of Functional Team Roles"
- Fifteen minutes of team discussion time

Student Availability Times

Name _____ Results of Hermann Four Quadrant Analysis
Phone _____ Very Strong _____
Major _____ Moderate Strength _____
Ethnicity _____ Not a Strength _____
Gender _____ Report as: (number checked/quadrant)

Fill in the blanks when you are available to work on team projects

	Mon	Tues	Wed	Thurs	Fri	Sat	Sun
7:30 a.m.							
8:30 a.m.							
9:30 a.m.							
10:30 a.m.							
11:30 a.m.							
12:30 p.m.							
1:30 p.m.							
2:30 p.m.							
3:30 p.m.							
4:30 p.m.							
5:30 p.m.							
6:30 p.m.							
7:30 p.m.							
8:30 p.m.							
9:30 p.m.							
10:30 p.m.							

Activity: Creating a Team Symbol and Name

Objective: Team members create a team symbol and name while developing a supportive environment to effectively work together.

Tasks

- Review team roles and make sure each person on team understands their responsibility.
- Briefly review the individual qualities of team members.
- Summarize the important similarities of engineers and engineering design.
- Use your symbol on your card to begin the process.
- Brainstorm and generate at least five different possible ways that your figure on the card could be modified to represent your team. Be creative! Wild ideas are great!
- Choose one of the ideas and develop it further into your symbol and name.
- Draw the symbol and name on an overhead transparency.
- Team members will help the reflector prepare their team's reflector's report, which completes the following statements:
 - Our primary strength as a team was . . .
 - An area in which our team could improve is . . .
 - An insight I personally gained from this activity is . . .

Deliverables

- Team reporter uses transparency and explains team symbol to class.
- Team reflector prepared to give reflector report during the final activity.

Criteria for Success

- Team logos are creative.
- Logos represent all members of the team.
- All team members were active in the process.

Resources

- Symbol on card.
- Team's newly developed synergy
- Eighteen minutes of group activity
- SWE's 'Engineering'