

TIDEE

Transferable Integrated Design Engineering Education



UNIT 2: Creating Teams and Learning Problem Definition Skills

Session 1: Developing Teams through Positive Communication

Responsibilities of Functional Team Roles

Effective Statements for Team Members

Killer & Igniter Phrases

Killer Phrases

Igniter Phrases

Refining Sounds of Effective Teams

Student Availability Times

Unit 2: Creating Competent Teams and Improving Problem Definition Skills

Session 1: Developing Teams through Positive Communication

Announcements and Objectives for the Day (10 minutes)

- Create new teams.
- Develop positive techniques for communication.
- Gain new understanding about individual learning preferences.
- Develop a team identity.

Establishing Times Available to Meet Outside Class (5 minutes)

- Fill out the form to show when you are available to meet outside class.

Forming New Teams (8 minutes)

- Form teams with at least five team members on each team. No team may have more than six people on their team. If you choose you may pair up with a person from your previous team. No team may have three members from a previous team. Make sure that your team can meet outside of class for at least two hours per week.

Killer & Igniter Phrases (12 minutes)

Refining Sounds of Effective Teams (20 minutes)

Learning Style Profile (12 minutes)

Creating a Team Image (15 minutes)

- Each person on the team will describe their learning style profile, and how their strengths helped their previous team become successful. The new team will use this information to create a “dynamic” team name for their new team. Team name will be reported to class.

Reflectors Report

- Team reflector orally presents brief statements that describe:
 - Their impressions on how teams become organized.
 - The effect that the activities have had on making their team more effective.
 - What is needed to make their team perform at a fantastic level.

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

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.

Effective Statements for Team Members

Each of the roles has performance criteria that act like a job description. Listed are some helpful sayings that can assist you to help make the team a positive and rewarding experience.

- A **leader** or **team manager** should reduce stress. A leader might say:
 - What do you think about.....?
 - Good job!
 - How can we apply or use this concept?
 - Would this be a good approach to.....?
 - As I understand it, our conclusion is.....
 - Let's listen to one idea at a time.
 - We need to refocus and deal with.....
 - What is your idea?
 - Should we do.....?
 - Could this be summarized by saying.....?
 - Have we reached this conclusion.....?

- A **reporter** is responsible for representing the team's consensus. A reporter might say:
 - How could we present that?
 - How can I relay that effectively?
 - Can I say that our team decided...
 - Does our list consists of...
 - Is it correct to say that our graph shows...
 - How can I put that simply?
 - Through a process of elimination did we...?

- An **explorer** creates new ideas and takes risks. An explorer might say:
 - Let's consider this another way.
 - What about this idea?
 - Let's find new methods for presenting this material.
 - What would happen if we combined these ideas?
 - What is this analogous to?
 - How should we present this?

- A **reflector** looks at things as a big picture. A reflector might say:
 - This is what it sounds like, but it could also.....
 - So what you are saying is.....
 - But let's focus on.....
 - How can we improve on.....?
 - Do we have all of the data?
 - Is that going to achieve our goal?

- A **recorder** should be able to summarize items without editorializing. A recorder might say:
 - Can we say this is.....?
 - Up to this point we gathered.....
 - Where are we going with.....?
 - What data do we have to.....?
 - Can we say that more succinctly?
 - Do we agree on this?
 - Should it be recorded in our team journal?

KILLER & IGNITER PHRASES HANDOUT

Killer Phrases, the Enemy of Ideas

Killer Phrases are part of culture and upbringing. One study showed that negative no-can-do statements are all around us, outweighing positive can-do statements by substantial margins. At home, on the average, parents say 18 negative statements for every positive statement. The average is 432 negative statements per day. The same study showed that teachers display a 12-to-1 ratio of negative-to-positive statements.

The rules of brainstorming are:

READY Define your problem.

FIRE Come up with as many ideas as fast as you can without criticizing them.

QUANTITY COUNTS. WILD IDEAS ARE ENCOURAGED!

AIM Sift. Synthesize. Choose.

- Examples of Killer Phrases:
 - "Give me a break."
 - "Because I said so."
 - "You have to be kidding."
 - ...laughter...
 - ...dirty looks...
 - "Yes, but..."
 - "That's so dumb"

Igniter Phrases, Phrases that Make Things Work

In one study it was reported that a good teacher makes eight positive comments for every negative comment to the students.

- Examples of Phrases That Make Things Work:
 - "Nice Job."
 - "Wow!"
 - "Cool"

Activity: Killer Phrases

Objective: Participants learn to identify and avoid using “killer phrases”

Tasks

- Team brainstorms for “Killer Phrases.”

Deliverables

- Team reporter presents orally:
 - Number of “Killer Phrases” identified
 - Team’s most unusual phrase.

Criteria for Success

- Teams brainstorm effectively and each team identifies at least 20 “killer phrases.”

Resources

- Handout: “Killer & Igniter Phrases”
- Three minutes of brainstorming time

Activity: Igniter Phrases

Objective: Participants learn to use phrases that will create a positive environment to support the team's activities.

Tasks

- Team brainstorms for “igniter phrases.”

Deliverables

- Team reporter presents orally:
 - Number of “igniter phrases” identified
 - Team’s most effective phrase to help create a positive team environment.

Criteria for Success

- Teams brainstorm effectively and each team identifies at least 20 “igniter phrases.”
- Team members are more aware of the impact on team communications by using reinforcing phrases.

Resources

- Handout: “Killer & Igniter Phrases”
- Three minutes of brainstorming time

Activity: Refining Sounds of Effective Teams

Objective: Team members learn how to use positive statements to make the team become more effective

Tasks

Your team's assigned role for this activity is _____

- Select roles and place the appropriate nameplate in front of each team member.
- Instructor assigns each team a team role to analyze.
- Review the handout: "Effective Statements for Team Members." Discuss if these statements would be statements that would be attributed primarily to each role or could be said by any person on the team.
- For your assigned role, think of two situations where the person in this role would need to communicate ideas or information to the team.
- For each situation, generate positive statements that could be used to communicate this information.
- Brainstorm for negative statements that should not be used in this role for this situation.
- Identify how the person in this role can improve team performance through effective use of statements.

Deliverables

- Team reporter presents on an overhead transparency:
 - Two situations with positive and negative statements identified for the assigned role.
 - The most effective statement that a person in this role could say that would support the team's goals.

Criteria for Success

- Statements are constructive and effective in enhancing team performance.
- Team members have new phrases they could use to make their job more effective.
- Team members have a broader understanding of the job responsibilities within the team.
- Team members have a better understanding of how teaming skills contribute to the success of the project.

Resources

- Handout that lists effective statements for team members.
- Team member's experience in teamwork.
- Fifteen minutes of team discussion time.

Student Availability Times

Name _____

Phone _____

Major _____

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.							
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10:30 p.m.							