

A stack of white papers, slightly blurred, set against a light purple background.A blurred image of a clock face, showing numbers and hands, set against a pink and purple background.

Teams & Teamwork

A stack of white papers, slightly blurred, set against a light green background.A clear image of a yellow clock face with black numbers and hands, set against a yellow and orange background.

University of Twente
Workshop June 3 2016

Teamwork

*“Coming together is a beginning.
Keeping together is progress.
Working together is success.”*

- Henry Ford



Advantages/Disadvantages of Teamwork?

- Advantages?

- Disadvantages?



Why do we need teamwork in engineering?

- Because today's workplace demands teamwork!!!
 - Modern problems are increasingly complex.
 - Modern problems are often interdisciplinary.
 - Modern problems involve multiple stakeholders and engineering firms.
 - Time frames are increasingly shorter.
- Teamwork is integrated into the curriculum.



Team Formation

- Random
- Self Select
- Skill Based
- Heterogeneous vs. Homogeneous
- Ethnicity and Gender



Team Formation Activity

ECE1012 – Civil Engineering Perspectives

Fall 2011

Team Formation Questionnaire

Name: _____

Hometown: _____ H.S. GPA (& year of graduation): _____

Hobbies/Interests: _____

Where do you currently live (on campus or the city you current reside in)? _____

Preferred times for team meetings and group work (please circle as many as possible):

Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Morning	Morning	Morning	Morning	Morning	Morning	Morning
Afternoon	Afternoon	Afternoon	Afternoon	Afternoon	Afternoon	Afternoon
Evening	Evening	Evening	Evening	Evening	Evening	Evening

Why did you choose civil engineering or what component of civil engineering interests you?

Have you ever been a leader/officer in an organization? If so, in what capacity?

Would you be willing to be a team leader in this course?

Have you used any of the following software programs (please circle):

AutoCAD (or similar graphics software)? YES NO

Excel? YES NO

Word? YES NO

PowerPoint? YES NO

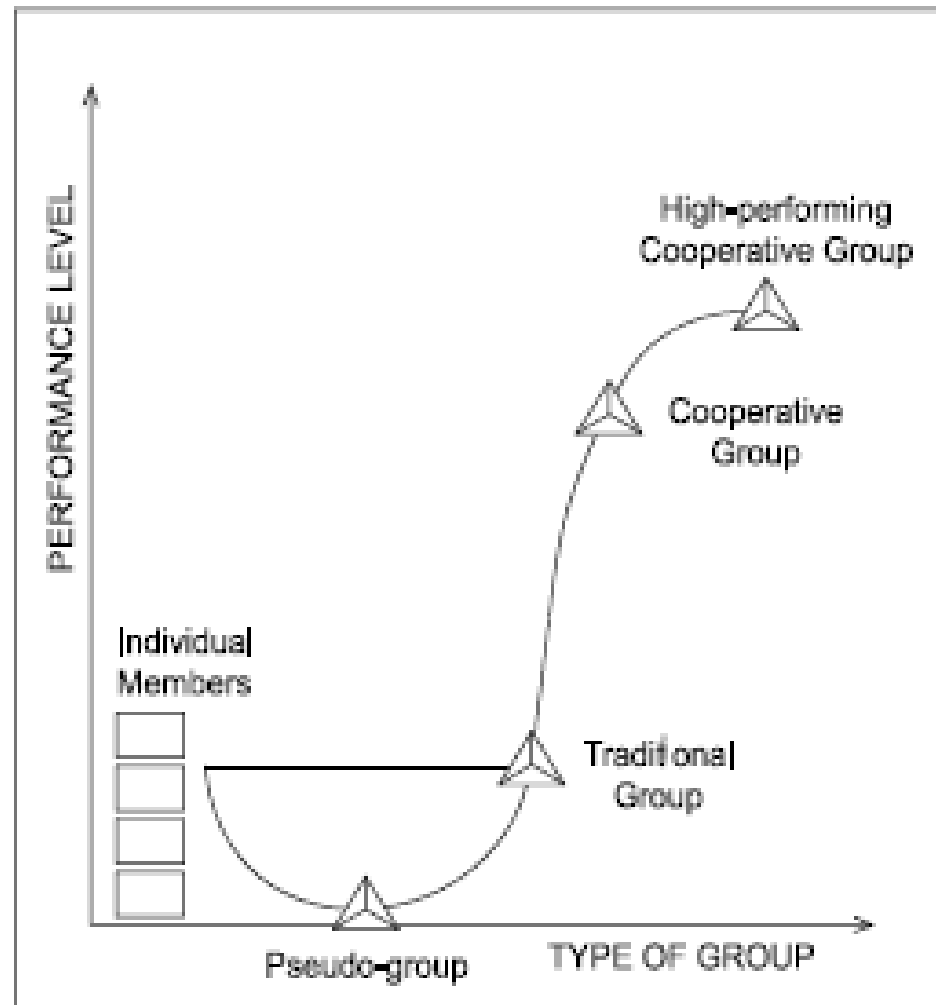
NOTE: Information provided will assist in forming good functioning teams. I would appreciate you answering every question, but you may skip any question without repercussion. Please be as generous as possible with preferred times available for group work. If there is a person you wish to have as a team member, please write their name on the back of this form. Only one name allowed.

Types of Learning Teams

- Pseudo Group
- Traditional Group
- Cooperative Group
- High Performing Group



Types of Learning Teams



What are the elements of a good team?

For teams to function properly, there are five elements (adapted from Smith, 2000):

- *Positive interdependence* – the group focus on a common goal or product and is dependent on each other to finish.
- *Group processing and conflict resolution* – the group periodically reflects on how well the group is performing; celebrating the successes and solving the breakdowns.
- *Individual and group accountability* – each person is responsible for their own work and the overall work of the team.
- *Interaction* – team meets face-to-face for dynamic exchange of information and resources
- *Teamwork skills* – each person practices effective communication, decision making, problem solving, conflict management, and adjusts to team and individual task demands



Giving Effective Feedback

- Be direct and honest.
- Focus on specific issues and behaviors, not generalizations.
- Provide specific examples and incidents.
- Cite positive information first, then negative.
- Give ideas for improvement and ask opinion from recipient.
- Ask for reciprocal feedback.
- It is well-timed.
- Refer to clear expectations that were known in advance.
- Check if feedback was clearly communicated.



Receiving Effective Feedback

- Stop Talking! It's impossible to listen if you are talking.
- Accept feedback as “reality” for the person giving it.
- Show the talker you want to listen. Look and act interested.
- Do not get distracted during a conversation.
- Ask for additional information and examples.
- Focus on how the feedback can help solve a specific problem.
- Summarize what you think has been said to assure understanding.
- Express appreciation for others' input.



Team Roles

- Leader
- Recorder
- Consultant
- Time Keeper
- Laborer (Everyone)





Leader

- Organize Technical Assignments
- Allocates Responsibilities/Timelines
- Facilitates Team Discussions
- Monitor the Performance and Understanding Team Members
- Edits/Submits Final Products
- Intervenes in Conflict

Recorder

- Takes Meeting Notes
- Records Technical Data
- Checks for Consensus
- Responsible for Outline/Draft of Overall Report





Consultant

- Plays “Devil’s Advocate” / Contrarian
- Suggests Alternatives
- Keeps Team Moving Forward
- Consults With Other Groups, Professor, Others as Needed

Time Keeper

- Keeps track of time on tasks
- Assigned time or recording time





Laborer

- Participate in Discussions
- Perform Technical and Written Work
- Contribute Ideas
- Participate in Presentations
- Monitor the Performance and Understanding of Other Team Members! **EVERYONE**



Team Player Styles

- Contributor – task oriented
 - Authoritative, reliable, proficient, and organized
- Collaborator – goal directed
 - Forward-thinking, flexible, and imaginative
- Communicator – process oriented
 - Supportive, considerate, relaxed, and enthusiastic
- Challenger – questions the goals
 - Honest, outspoken, principled, and adventurous

Which are you?



Team-Player Survey

PURPOSE: To help you identify your predominant "team player" style. The results should lead you to an assessment of your strengths and weaknesses, and give you a basis to increase your effectiveness as a "team player".

DIRECTIONS: This is a survey. There are no right or wrong answers. Your first answer is likely the best. Please answer each question according to how you honestly feel you function now as a team member, rather than how you used to be or how you would like to be.

You will be asked to complete eighteen sentences. Each sentence has four possible endings. Please rank the four endings in the order that you feel they apply to you. Place the number 4 next to the answer that is most applicable to you, and continue down to the number 1 which is the ending least applicable to you.

Please do not use a number more than once in each question. There are no ties or fractions. Each set of endings must be ranked 4,3,2, and 1.

PLEASE COMPLETE THIS SURVEY NOW, BEFORE THE PROGRAM BEGINS, SO YOU CAN USE THE DATA DURING THE PROGRAM.



Guidelines for Productive Meetings

- Set and distribute an agenda in advance
- Make sure roles are assigned
- Limit interruptions
- Take minutes (notes) and distribute them at the meeting (or via email before)
- Identify action items, person responsible, and deadline (in minutes)
- Set next meeting (date, agenda, etc.)
- Evaluate the meeting (can include in minutes)

Meeting Evaluation

■ Positives (Plus)

- Everyone was in attendance
- Agenda was complete and distributed ahead of meeting via email
- Andy was prepared to present his proposed schedule
- Julie found new resource for teamwork

■ Adjust (Delta)

- Don was 10 minutes late
- Tangents about Simpsons wasted time
- Presentations not complete





CRAPOLA (Hensey 2001)

- If team process isn't followed, the team risks defaulting to the CRAPOLA process
 - Circular
 - Repetitive
 - Argumentative
 - Personal
 - Opinionated
 - Leading Anywhere but where we need to go



First Meeting – Sept ??, 2016

- Get to know each other
 - Share your learning styles, team player styles, and interests (personal information).
- Clarify roles (leader, recorder, etc.)
- Set ground rules for this meeting and future meetings
 - Attendance, participation, schedule, agendas, etc.
- Assignment!
 - Share Information; Submit Minutes