## What kinds of things are Group Work?

- Cooperative learning: students work together in a small group so that everyone participates on a collective task that has been clearly assigned
- Collaborative learning: students and faculty work together to create knowledge.
- Reciprocal peer teaching: one student teaches others, who then reciprocate in kind

## Why use group work?

- Benefits of groups:
  - Groups have more information than a single individual.
  - Groups stimulate creativity.
  - People remember group discussions better.
- allows students gain a better understanding of themselves
- allows students to become active participants in their learning
- helps students develop skills valued by employers (such as team work, problem solving, negotiation, conflict resolution, leadership, critical thinking and time management)
- exposes students to diverse ideas and approaches
- acknowledges and uses individual students' strengths and expertise
- through discussion, helps students articulate their ideas, refine concepts and develop interpersonal and communication skills
- allows students to experience situations that resemble the workplace, e.g. authentic real world projects, and
- facilitates a deeper understanding of course content
- decisions that students help make yield greater satisfaction

# How to incorporate group work into your course

- Decide that you want to incorporate group work into the class
- Design group work into your syllabus and schedule
- Teaching students to work in a group:
  - how to work together,
  - how to structure time,
  - how to do work and delegate tasks, and
  - how to work proactively in groups.
- Monitoring groups
- Assessment of the group and their work using rubrics

This is the step we usually skip

## Key Aspects of Successful Group Work

- Explanation of purpose
  - What are we doing
  - How does it relate to what we've already done
  - How will I / we be assessed?
- Makes sure everyone participates
  - Group norms
  - Group size
  - Meaningful roles
  - Rich tasks not busy work
- Support all students
  - Introverts
  - Other individuals (FTIC, PWD, various ability levels or backgrounds)
- Assess Group Work
  - Rubrics
  - Student Reflections

#### Pre-conditions for Group Work

Students are more likely to work effectively in groups if the teacher:

- 1. selects groups to suit the task;
- 2. provides clear structures in which groups can operate;
- uses strategies that support positive behaviors and develop group-work skills;
- 4. establishes clear rules and procedures;
- introduces tasks so that outcomes are clear and linked to the behaviors required;
- 6. maintains momentum by effective intervention;
- 7. sets group goals.

#### Forming Groups

- Randomly assign students to groups
  - maximizes heterogeneity
  - effective in large classrooms.
- For smaller classes, especially if you are familiar with most of the students, you can select the group members based on known attributes of the class.
- Allow the class the self-select their group
  - can gravitate toward friends and roommates
  - can result in the students self segregating and spending more time socializing than working on the group project
- Groups which are assigned by the instructor tend to perform better than self-selected groups
  - Attribute-based assignment by faculty or Blackboard Random assignment (reviewed and modified by instructor)

## Forming Groups

Gathering the following information can help you form better groups:

- Academic major
- Work schedule if any
- Areas of interest
- Work style: Early Bird, Balanced, Last-Minute

Oakley, B., Felder, R. M., Brent, R., & Elhajj, I. (2004). Turning student groups into effective teams. *Journal of Student Centered Learning*, 2(1), 9-34.

### Syllabus Section on Group Work:

- This course will have group assignments where you will have to work as part of an assigned group to complete the assignment.
- Peer evaluations at the end of each group project will be collected to make grading more equitable.
- Students will be allowed to quit a group or fire a member from the group with the knowledge that the student must find a new group. If this situation arises, the instructor must be notified before the assignment is due; preferably, as soon as possible.
- The instructor reserves the right to make adjustments, if needed during the course, to group membership.

#### Clear Structures - Roles



#### Students often divide tasks

- You do Part 1
- I'll do Part 2
- You do Part 3
- Fred will turn it in

- Reader/Checker Facilitator, reads problem, checks that the facts that the group will use are indeed correct and will stand up to scrutiny from the teacher or other groups, ensure consensus
- Clarifier/planner do we all understand problem, do we have a plan?
- Summarizer prepares the group's presentation to the class and summarize conclusions reached to see if the rest of the group agrees
- Researcher collects background information and looks up any additional information that is needed to complete the task
- Runner who tries to find the resources needed to complete the task, such as equipment and dictionaries
- Observer/troubleshooter/timekeeper takes notes, tracks time, and records group processes
- Designer/Artist create graphs or illustrations, final product
- Writer/Recorder writes down the major output of the group, and synthesizes the work of the other group members

## Strategies - Setting group ground rules

• What would be a good set of ground rules for your group?

```
      1.
      ...

      2.
      ...

      3.
      ...

      4.
      ...

      5.
      ...

      6.
      ...

      7.
      ...

      8.
      ...
```

- Aim for a total of no more than six-ten rules.
- Have students create, sign and submit a "group contract" or "team contract"
- BUT ALSO provide more opportunities for deeper interactions that build trust and a sense of belonging

#### Elements of a Team Contract

- Agree on a form of electronic communication.
- Agree on a form of participation. Group roles are not required but they may facilitate your work. Consider designating a coordinator, web master, editor and/or proofreader.
- Consult with your instructor if a conflict arises that can't be worked through by the team.
- Dealing with non-cooperative team members: removing other members or quitting the team.

# Clear rules and procedures – Setting and communicating your expectations - 1

Module Activities



#### Module 10 - Dealing with Information Security Challenges

The activity this module is a group case. This case is based on events that recently occurred at FedEx (FDX).

Your group's case analyses is due by Sunday, April 12th by 11:59 PM. Only one team member needs to submit the case analyses to both "For Submission" links

- I use a Folder called Module Activities to display To Do lists for each Module
- Module Activities and Modules appear in my Course Menu
- This is an example To Do for Module 10 for a case analysis as group work



#### **Group Case Analysis**

Attached Files: MIS\_6204-PS1-Case\_FedEx\_F19.pdf (107.249 KB)

- · Case questions to guide your group's analysis are attached here.
- · Please submit your group case analysis using the submission links below.

#### Expectations - 2

Contents of the Assignments folder in Module 10



#### Grading Rubric for FedEx

Attached Files: Fedex Rubric MIS 6204.pdf (54.86 KB)



#### FedEx Case (Drafts)

You may submit your group's draft as many times as you would like using this link. I will not be reviewing these drafts. The Similarity Report will be available to assist you in your writing.

>> View/Complete



#### FedEx Case (for submission)

One member of your group should submit this assignment before the due date, using BOTH this link and the link below. Please be sure to submit in both places.

>> View/Complete

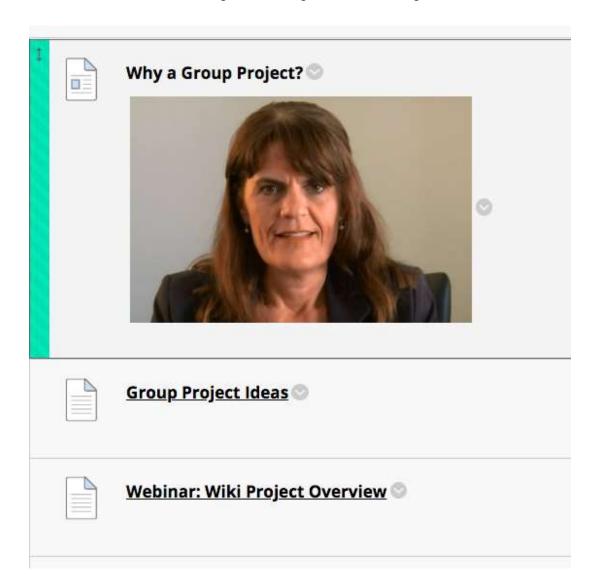


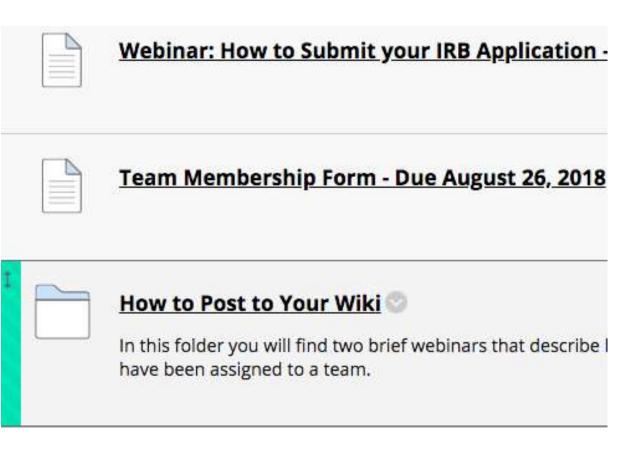
#### FedEx Case (For Submission)

Availability: Item is hidden from students. It was last available on Apr 20, 2020 12:05 AM.

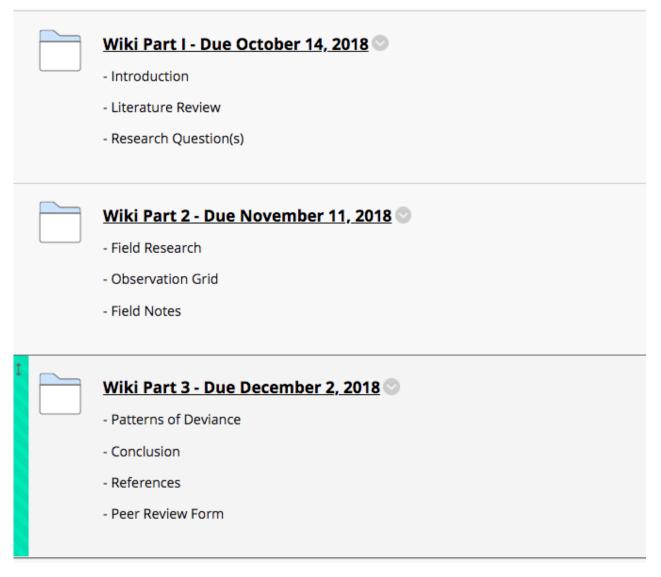
One member of your group should submit your assignment to both this link and the link above.

## A Step-by-Step Guide to Group Work





## A Step-by-Step Guide to Group Work



#### **Effective Intervention**

- Will you be connected with students when doing group work?
- How will you give your students feedback? In person, via discussion boards, chats/group meetings, journals, assignment feedback, or emails?
- Why are you giving feedback?
  - √ To help students focus
  - ✓ To ensure students are working with the time frame available
  - √ To help student get "unstuck"
  - ✓ To help groups with coordination or cooperation issues

- ✓ To ask questions to prompt them to go further
- √ To correct misunderstandings
- √ To give feedback on performance
- √ To offer encouragement / celebrate

## Set Group Goals

- Your assignment we saw examples earlier
- Your rubric
- Expectation that students will learn from group work it will form a part of your assessment
  - Small stakes assignments
  - Larger stakes assignments
  - Exams

# Expectations – 3 / Group Goals / Assessment

	Level of Achievement					
Criteria	Needs substantial improvement or not evident (0-5)	Needs improvement (5-9)	Acceptable (10-12)	Very good (13-14)	Excellent (15)	Sum
How well was FedEx prepared for this incident? Justify your answer.	<ul> <li>Fails to identify key relevant issues in the case. No justification or rationale provided.</li> </ul>	and understand key relevant issues in the	• Identifies and understands key relevant issues in the case. Some justification or rationale provided.	<ul> <li>Identifies and analyzes relevant issues in the case. Justification or rationale provided.</li> </ul>	Synthesizes (makes strong connections) and distinguishes between issues in the case. Strong justification or rationale presented.	
points (15)						
What do you believe FedEx should have done (or done better) before, during or after the cyber-attack?	<ul> <li>Fails to identify issue or relevant response based on the case.</li> </ul>	Response is not relevant, accurate, or plausible.	<ul> <li>Response is relevant, accurate, and plausible, and some supported by analysis or addresses the issues.</li> </ul>	<ul> <li>Response is relevant, accurate, and plausible.</li> <li>Justified recommendation is provided with analysis to address the issues.</li> </ul>	ERelevant, accurate, and plausible responses are clearly stated.	
points (15)						
3. What recommendations would you make to FedEx and TNT Express management regarding the integration plan and the TNT transformation plans? Should these plans adapt in the wake of the cyber-attack?	<ul> <li>Fails to answer and identify issue or recommend alternative in the case. Does not address both questions.</li> </ul>	<ul> <li>Justification recommendation or response is provided with some flaws. Does not clearly address both questions.</li> </ul>	• Justification recommendation and responses with sufficient support are addressed.	• Justified recommendation plan is provided based on the coherent and correct analysis. Addresses both questions.	<ul> <li>Insightful recommendation or response provided is not only relevant, accurate, and plausible, but it is effective and efficient. Fully answers both questions.</li> </ul>	
points (15)						

## **Grading Rubric for Semester-Long Project**

- **Introduction** Is the introduction clear and well-written? Does it describe the deviant behavior you will be researching?
- **Literature Review** Did each team member find THREE high quality journal articles related to your topic? Did you synthesize and integrate pertinent and recent research into your write up? Did you include proper in-text citations and a reference list at the bottom of the wiki?
- Research Question(s) Did you come up with a research question(s) before going out and conducting your field research?
- **Field Observation** Did each team member conduct your field work on three separate occasions for one hour?
- **Observational Grid** Did you develop a grid where you kept track of what you saw? Did you post your observational grid to the wiki?
- Field Notes Did you post detailed field notes to your wiki?
- Patterns of Deviance Did you identify and describe at least 6 patterns of deviance from your field research?
- **Conclusion** Did you write a few concluding paragraphs that either tie back to the literature review or your introduction?
- References Do your references follow APA style?
- Writing quality Is your writing clear and free of typographical errors? Do you transition well from one topic to another?

#### Peer evaluation

- In general, research shows these tend to correlate with faculty evaluations.
- Peer-evaluation comments are not useful for identifying group dysfunction (Journals may be better)
- High-performance groups gave higher ratings to their members compared with low-performance groups.
- Ratings may not provide an unbiased measure of individual effort or accountability for lower-scoring students, who were more likely to receive lower peer ratings in low-performance groups relative to lower-scoring students in high-performance groups.
  - High-scoring students in high-performance groups may recognize that their lower-scoring peers are simply contributing to the level of their ability.
  - Students in low-performance groups were holding lower-scoring students to a greater degree of accountability on peer ratings than lower scorers in highperformance groups

# Peer Evaluation Name Group # Class

Please assign scores that reflect how you really feel about the extent to which the other members of your team contributed to your learning and/or your team's performance. This will be your only opportunity to reward the members of your team who worked hard on your behalf. (Note: If you give everyone pretty much the same score you will be hurting those who did the most and helping those who did the least.)

<u>Instructions:</u> In the space below please rate each of the **other** members of your team. Each member's peer evaluation score will be the average of the points they receive from the other members of the team. To complete the evaluation you should:

- List the name of each member of your team. <u>Do not list</u> yourself.
- Assign an average of ten points to the <u>other</u> members of your team (For example, you should assign a total of 40 points in a five-member team, 50 points in a six-member team, etc.)
- You must differentiate some in your ratings; for example, you must give at least one score of 11 or higher (maximum = 15) and one score of 9 or lower.
- Please double check your scores (They should total 30 points in a four-member team, 50 points in a six-member team, etc.)

**Additional Feedback:** In the space provided briefly describe your reasons for your highest and lowest ratings. These comments -- but not information about who provided them -- will be used to provide feedback to students who would like to receive it.

Team Member:	Score:		
	-		
	5		

Reason(s) for your highest rating(s). (Use the back side, if necessary.)

Reason(s) for your lowest rating(s). (Use the back side, if necessary.)

# Example of a Peer Evaluation

## This example

- requires teamwork to complete
- adjusts the group score for each individual

#### Team Project Peer Moderation

#### Instructions

For each team member in turn, discuss and rate their *relative contribution* to the completion of each component of the team project: did they contribute above or below average within the team? You can't all have contributed above average, so make sure your individual marks average the same as the team mark.

Student name		
	그 아이지 않아 하나 있다. 이 아이라는 하는 아이들의 집에 가지 때문에 가지 그 그 그 그 그 그 그 그 그 그 그 그 그 그 그 그 그 그	

#### Extent of individual contribution to each component

С	omponent of team project	average	average	average	above average	well above average	
1	Literature review	-2	-1	0	±1	+2	
2	Design of study	-2	-1	0	+1	<u>+2</u>	
3	Collection of data	-4	-2	0	+2	<u>+4</u>	
4	Analysis of data	5	-3	0	<u>+3</u>	+5	
5	Writing of report	-2	-1	0	+1	+2	
6	Oral presentation of report	-1	0	0	0	+1	
-							

Tutor's mark for team project 62%

Sum of moderation marks +

Individual mark 69%

Signatures of team members:

# Reviewing team effectiveness / Learning from reflection & group feedback

- Teamwork logs / Journals (individual members)
- Regularly write reflective notes on how the team is operating

#### **Teamwork Report (team)**

- What steps have you taken to organize your teamwork?
- What steps have you taken to monitor team effectiveness?
- What steps have you taken to improve team effectiveness?
- What problems have you encountered in working as a team? How did you resolve them?
- What would you do differently if doing this teamwork again?

#### **Exams**

- Create one or more exam questions to test student's knowledge and understanding of the work they did in the group work
- Examples of exam questions:
  - What were the important considerations in your analyses of the XXX case? Which factors in the client situation drove your recommendations? Why?
  - Please describe your recommended solution for XXX and explain why it best fits the needs of this firm.
  - How did your efforts contribute to the recommended solution for XXX? Please describe your role and the work you did on this project.
  - What was the most important thing you learned from the XXX project?

#### Questions and Resources

- Today's presenters:
  - Bill.Hefley@utdallas.edu
  - cclanham@utdallas.edu
- <u>Faculty Resources for Teaching and Research</u> (in Blackboard)
- Center for Teaching and Learning The University of Texas at Dallas https://www.utdallas.edu/ctl/
- Faculty Mentors Fridays at 2 pm
   Contact Mary Beth Goodrich goodrich@utdallas.edu

## Appendix – What is Group Work?

### Broad Categories of Group Work

- Cooperative learning: students work together in a small group so that everyone participates on a collective task that has been clearly assigned
- Collaborative learning: students and faculty work together to create knowledge.
- Reciprocal peer teaching: one student teaches others, who then reciprocate in kind

### Group work?

- Stump Your Partner
- 'Think-pair-share' and 'Think-pair-square'
- Snowballing or the Jigsaw method
- Catch-up
- Debating
- Case study
- Project Based Learning/Problem Based Learning
- Group Presentations

- Devise the Display create an artifact (website or content)
- Gallery critique structured peer review
- Socratic talk debate and feedback
- Fishbowl debate / Talking triads explain a topic with speaker, questioner, recorder roles
- Mastery modelling good and bad examples critiqued to develop a mastery model

# Project Based Learning/ Problem Based Learning Examples

- Case analyses
- Research papers
- Design-build projects
- Service learning projects
- Action research projects

#### Group Work – Can be Done In-Class or Online or Offline

#### **Snowball**

- **Step 1:** 'On your own, write down as many ways as you can that might speed up the reaction between hydrochloric acid and marble. You have 1 minute.'
- Step 2: 'As a pair, compare your lists, agree a set of factors that you think have the best chance of speeding up the reaction and leave to one side those you think are irrelevant. You have 2 minutes.'
- Step 3: 'As a four, select from your lists those two factors that you think will cause the biggest increase and are therefore worth investigating. You have 3 minutes.'
- Step 4: 'As an eight, for each factor you have selected, use what you know about particles to give a reason for the effect you think it will have. You have 10 minutes and then I will ask for your reasons.'