Learning-Centered Teaching with Google Apps:

Successful Strategies for Collaborative Learning in Online, Hybrid, and Traditional Courses

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Today’s objectives

- Link learning-centered practices to group learning.

- Identify strategies to focus successfully on collaboration.

- Consider strategies to support a group project.

- Vent (just a little)
What’s rough about group projects?

What do students say?

http://tinyurl.com/ms t-groups-students
What’s rough about group projects?

- What’s the faculty experience?

http://tinyurl.com/mst-groups-faculty
Students’ complaints:

- Bad past experiences
- Lack of trust in team members
- Easier to do individually
- Grades affected by others’ poor contributions
- Worry about slackers in the group
Faculty experiences

- Time lost that’s needed to cover content
- Lack of familiarity with alternate assessment techniques
- Handling student conflicts
- How to grade the individual vs. grade the group
- Unsure how to help students develop team skills
What does research tell us?

research

[plural] 1 serious study of a subject, that discovers new facts, new ideas. A research student, a research team.
Learning-centered teaching focuses on:

- what students are learning
- how they are learning

and
Why learning-centered? Why collaborative learning?

- Learner-Centered Teaching (Weimer, 2002)
- Principles for Good Practice in Undergraduate Education (Chickering & Gamson, 1987)
- Implementing the Seven Principles: Technology as a lever (Chickering & Ehrmann, 1996)
- How College Affects Students (Pascarella & Terenzini, 1991;2005)
- National Survey of Student Engagement (Kuh, 1998 - present)
Principles for Good Practice in Undergraduate Education (Chickering & Gamson, 1987; Chickering & Ehrmann, 1996)

- Encourage student & faculty contact
- Develop reciprocity and cooperation among students
- Use active learning techniques
- Give prompt feedback
- Emphasize time on task
- Communicate high expectations
- Respect diverse talents and ways of learning
Learner-Centered Teaching (Weimer, 2002)

“Being learner-centered focuses attention...on the learning:

- *what* the student is learning,
- *how* the student is learning,
- the conditions under which the student is learning,
- whether the student is retaining, applying the learning,
- *how current learning positions the student for future learning*....

When instruction is learner-centered, the action focuses on what students (not teachers) are doing” (p. xvi).
Benefits of Group Work
Marketplace seeks graduates who are:

- Team players
- Capable communicators
- Project managers
- Conflict resolvers
- Trust builders
So – what do we tell the students?

I've got your back!
Explain the rationale

Many approaches and solutions tackle big problems together.
Capitalizes on the strength of a diverse set of skills.
Prepare for professional situations.
Managing Conflict

**Instructor’s Role**

1. Set clear goals
2. Make expectations for team members explicit
3. Assign roles (e.g. devil’s advocate, visionary, leader)
4. Manage group size and makeup
5. Stay close, check-in often

**Students’ Role**

1. Establish meeting times
2. Encourage frequent interaction
3. Rotate roles @ each mtg
4. Decide by consensus how to resolve conflicts:
   - Lack of participation
   - Poor contributions
   - Take turns talking
   - Be open to persuasion
Choose one course - make a plan

☐ Identify the course
☐ Plan a developmental sequence for learning collaborative skills
☐ Adopt the strategy incrementally
  ■ Explain why to your students
☐ Align with objectives for a group assignment, project, the profession
☐ Assess the group and the project
Integrate a focus on how

- Make a plan.
- Be systematic.
- Plan small increments.
  - Increase time on task
  - Add interpersonal skills
  - Teach project management skills
- Be prepared to assess and fine-tune.
- Expect to be successful.
- Keep trying.

cf. Weimer’s (2002) chapter 9: Making learner-centered teaching work
A F2F Example: Criminology

- Vice Crimes Case: Prosecution, Defense, and Jury teams
- How would you set this up in a traditional course?
An Online Example: Criminology

First iteration:

**Group Activity #1: Societal concerns regarding vice crimes**

Availability: Item is no longer available. It was last available on Mar 11, 2012 3:41 PM.

Instructions: [http://voicethread.com/share/2753456/](http://voicethread.com/share/2753456/)

For further guidance on the project discussion, you can view this VT link.

**Group Activity #1**

Availability: Item is not available.

JURY DELIBERATIONS [http://voicethread.com/share/2699208/](http://voicethread.com/share/2699208/)
An Online Example: Criminology

Results:
Meltdowns - assignment, faculty, students
☐ Interim deadlines - missing
☐ Strategies to connect students: missing
☐ Details about how to complete the assignment - missing
☐ Rubric for assigning grades - missing
An Online Example:  
Criminology

Redesigned Assignment:  Example

Overview of Steps for Team 1: Prosecution

**Deadline** for Completion of Steps 1-2:  **Sunday evening, March 4 at 11:00 PM**

**STEP 1.**  Everyone: Participate in the Voicethread discussion for the prosecution below.

**STEP 2.**  Each group member should contribute to the final summary for your team's argument. The spokesperson will refer to this document when making the closing argument to the jury (in a new Voicethread).

**Deadline** for Completion of Steps 3-4:  **Tuesday evening, March 6 at 11:00 PM**

**STEP 3.**  Your team's spokesperson will create a new Voicethread presenting the prosecution's closing argument to the jury.

**STEP 4.**  The spokesperson will share the new Voicethread link on the discussion board below. The jury will then view the prosecution and defense's closing arguments and render the verdict.
What supports are available to you?
Collaborative Groups: Roles and Skills

Task/goals __________________________ Meeting time/date ________

<table>
<thead>
<tr>
<th>Role</th>
<th>Team member’s name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project manager</td>
<td></td>
</tr>
<tr>
<td>Recorder/note taker</td>
<td></td>
</tr>
<tr>
<td>Conflict manager</td>
<td></td>
</tr>
<tr>
<td>Skeptic and timekeeper</td>
<td></td>
</tr>
<tr>
<td>Assessor</td>
<td></td>
</tr>
</tbody>
</table>

**Team members’ names/ Team Process Skills**

| Prompt and present                    | | | |
|---------------------------------------| | | |
| Participated/presented ideas          | | | |
| Eye contact and listening skills      | | | |
| Used nonjudgmental language           | | | |
| Checked for common understanding      | | | |
| Worked to consensus                   | | | |
| Used role responsibilities            | | | |

Comments on process at this meeting:

Members’ signatures acknowledge meeting goals and outcomes.
How groups take responsibility

☐ Develop own ground rules - Example
  - Everyone prepares, participates, attends
  - One person talks at a time (no side conversations)
  - Everyone takes a turn at each role
    - Leader, time keeper, note taker, energizer, evaluator
  - Agree upon when/why a member is asked to leave group

☐ Assess use of roles and skills at each meeting

☐ Request project/group updates at mid-point

☐ Assess self and each group member when project submitted
**Form for a Self-Evaluation**

Your Name: ___________________________________________________________

*Instructions*: Evaluate your work in the group using the criteria below. Rate each criterion from 1 to 3, with 3 being the highest. The highest possible score is 15. Be fair and honest.

<table>
<thead>
<tr>
<th>Criterion</th>
<th>Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attended group meetings regularly and promptly.</td>
<td></td>
</tr>
<tr>
<td>Contributed to the overall group project.</td>
<td></td>
</tr>
<tr>
<td>Accepted a fair share of responsibility for the project.</td>
<td></td>
</tr>
<tr>
<td>Completed assigned tasks on time.</td>
<td></td>
</tr>
<tr>
<td>Accepted responsibility for and observed ground rules.</td>
<td></td>
</tr>
</tbody>
</table>

What percentage of the work did you complete? ______%                      Total

Describe your most significant contribution to the project.

Other comments to justify your ratings:
Form for Evaluating Members’ Group Participation

*Instructions*: Evaluate each person in the group using the criteria below. Insert each person’s name and rate him/her from 1 to 3 on each criterion. 1 is low. 3 is high. The highest possible score is 15. Be fair and honest.

<table>
<thead>
<tr>
<th>Criterion</th>
<th>Name 1</th>
<th>Name 2</th>
<th>Name 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attended group meetings regularly and promptly.</td>
<td></td>
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</tr>
<tr>
<td>Accepted responsibility for and observed ground rules.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Total** your rating for each person:

<table>
<thead>
<tr>
<th>What percentage of the work did this person complete?</th>
<th>%</th>
<th>%</th>
<th>%</th>
</tr>
</thead>
</table>

Describe each person's most significant contribution to the project.
Name 1:  
Name 2:  
Name 3:  

Other Comments:
Assess process with content

☐ Each group member submits self-evaluation and evaluation of those in group
☐ Assess comprehension of content and process in class discussions, minute papers, homework
☐ Seek mid-semester feedback on both content and process
☐ Customize end-of-semester evaluation for your courses to capture how students learned both content and process
## Alternate Assessment Options:
### Instructor Assessment

<table>
<thead>
<tr>
<th>Assessment Option</th>
<th>Advantages</th>
<th>Disadvantages</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Shared Group Grade</strong></td>
<td>• encourages group work - groups sink or swim together</td>
<td>• individual contributions are not necessarily reflected in the marks</td>
</tr>
<tr>
<td></td>
<td>• decreases likelihood of plagiarism (more likely with individual products from group work)</td>
<td>• stronger students may be unfairly disadvantaged by weaker ones and vice versa</td>
</tr>
<tr>
<td></td>
<td>• relatively straightforward method</td>
<td></td>
</tr>
<tr>
<td><strong>Group Average Grade</strong></td>
<td>• may provide motivation for students to focus on both individual and group work and thereby develop in both areas</td>
<td>• may be perceived as unfair by students</td>
</tr>
<tr>
<td>Individual submissions (allocated tasks or individual reports) are scored individually. The group members each receive the average of these individual scores.</td>
<td></td>
<td>• stronger students may be unfairly disadvantaged by weaker ones and vice versa</td>
</tr>
<tr>
<td><strong>Individual Grade - Allocated task</strong></td>
<td>• a relatively objective way of ensuring individual participation</td>
<td>• difficult to find tasks that are exactly equal in size/complexity</td>
</tr>
<tr>
<td>Each student completes an allocated task that contributes to the final group product and gets the marks for that task</td>
<td>• may provide additional motivation to students</td>
<td>• does not encourage the group process/collaboration</td>
</tr>
<tr>
<td></td>
<td>• potential to reward outstanding performance</td>
<td>• dependencies between tasks may slow progress of some</td>
</tr>
<tr>
<td><strong>Individual Grade - Individual report</strong></td>
<td>• ensures individual effort</td>
<td>• precise manner in which individual reports should differ</td>
</tr>
<tr>
<td>Each student writes and submits an individual report based on the group's work on the task/project</td>
<td>• perceived as fair by students</td>
<td>• often very unclear to students</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• likelihood of unintentional plagiarism increased</td>
</tr>
</tbody>
</table>
## Alternate Assessment Options: Student Assessment

<table>
<thead>
<tr>
<th>Assessment Option</th>
<th>Advantages</th>
<th>Disadvantages</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Student distribution of pool of marks</strong></td>
<td>• easy to implement&lt;br&gt;• may motivate students to contribute more&lt;br&gt;• negotiation skills become part of the learning process&lt;br&gt;• potential to reward outstanding performance&lt;br&gt;• may be perceived as fairer than shared or average group mark alone</td>
<td>• open to subjective evaluation by friends&lt;br&gt;• may lead to conflict&lt;br&gt;• may foster competition and therefore be counterproductive to team work&lt;br&gt;• students may not have the skills necessary for the required negotiation</td>
</tr>
<tr>
<td>Instructor awards a set number of scores and let the group decide how to distribute them.</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Example: 4 member group</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Product grade: 80/100.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4 * 80 = 320 pts to be distributed.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>If members decide that they all contributed equally then each get 80</td>
<td></td>
<td></td>
</tr>
<tr>
<td>If they decided that person A deserved much more, then A might get 95, and the remaining if equal would get 75.</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Students allocate individual weightings</strong></td>
<td>• As above</td>
<td>• As above</td>
</tr>
<tr>
<td>Instructor gives shared group grade &amp; individual grade adjusted according to a peer assessment factor.</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Example</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Group Grade = 80/100</td>
<td></td>
<td></td>
</tr>
<tr>
<td>The individual student's peer grade ranges from .5 – 1.5, with 1 for full</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Grade = Group grade * peer</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Below=80 *.75 =60</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Above=80 * 1.2 = 96</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
In summary

- “If you think you understand something...apply it ...teach it to a peer”
- Learn group skills as learn course content
- Include as course & project objectives
- Emphasize learning for learning (not credits)
- Explain relevance of learning collaborative behaviors for profession
- Role of teamwork in program and profession
- Alert colleagues, chair to innovation pilots
References


National Survey of Student Engagement: http://nsse.iub.edu/index.cfm


QUESTIONS
Sample evaluation forms

I’m happy to send these copies electronically.

View:  http://www.umsl.edu/~fletchert/classes/peerRating.htm

Send request to  peggy_cohen@umsl.edu
Developing a Plan

Step 1 (consider week of 3/19)

**Content:**
1. Ask a question...wait
4. Call on pairs to reply....wait
5. Discuss responses
8. Consider homework in pairs, study partners

**Process:**
2. Meet one person near you
3. Together, prepare a response in *two* minutes
6. Discuss working in pairs
7. Value of eye contact: Did you look each other in the eye? Why important?

*Expand think-pair-share to include attention to process.*
Step 2 (week of 4/2)

**Content:**

1. Discuss an issue, problem, question

4. Call on triads to reply

5. Discuss responses

**Process:**

2. Work in groups of 3

3. Take *five* minutes to prepare a response

6. Discuss working in threes:
   - Eye contact?
   - Introductions?
   - Each person contribute?

*We weren’t born with group skills -- we learn them with experience.*
Step 3: in-class groups of 3→5

- Content-focused discussion
  - Clarify outcome or product
  - Allot 10 minutes

- Use interpersonal skills, prep for group projects
  - Practice eye contact
  - Everyone participates
  - Take turns being leader
  - Take turns keeping group on-task and on-time

- Return to whole class
  - Discuss responses, solutions, understanding
  - Discuss processing skills and assigned roles

Adopt a pace that works for you, your students, the course.