

# ACTIVE LEARNING

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## Resources on Participation, Class Discussion and Group Work Prepared by Maryellen Weimer

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## PARTICIPATION

### Research Documented Problems with Participation

Most teachers devote a small amount of time to participation

In an observational study of 20 social science and humanities classrooms, teachers devoted only 5.85% of total class time to student participation. That's approximately one minute per 40 minutes of class time.

Reference: [Nunn, C. E. "Discussion in the College Classroom: Triangulating Observational and Survey Results." \*Journal of Higher Education\*, 1996, 67 \(3\), 243-66.](#)

Based on 155 visits to 40 college classrooms at different institutions, across a range of disciplines and at course levels from introductory to advanced: Professors talked almost 80% of the time, four times more frequently than students in these classes with an average size of 47. The amount of teacher talk was consistent across institutional type, discipline and perhaps most surprisingly, course level.

Reference: Fischer, C. G. and Grant, G. E. "Intellectual Levels in College Classrooms." In C. L. Ellner and C. P. Barnes, *Studies of College Teaching*. Lexington, Mass.: D. C. Heath, 1983.

A large percentage of students never talk

Half the students surveyed in this study said they participated infrequently or never in the classes.

Reference: [Nunn, C. E. "Discussion in the College Classroom: Triangulating Observational and Survey Results." \*Journal of Higher Education\*, 1996, 67 \(3\), 243-66.](#)

Over half the students in this study did not participate in any of the 10 sessions of each class observed.

Reference: [Howard, J. R. and Henney, A. C. "Student Participation and Instructor Gender in Mixed Age Classrooms." \*Journal of Higher Education\*, 1998, 69 \(4\), 384-405.](#)

Thirty two class sessions observed with 20 students in attendance on average. Twelve students per session did not participate.

Reference: [Howard, J. R., James, G. H., and Taylor, D. R. "The Consolidation of Responsibility in the Mixed Age Classroom." \*Teaching Sociology\*, 2002, 30, 214-234.](#)

A small number of students do most of the talking

In this observational study, only 44% of the students participated and 28% of those who did participate accounted for 89% of all the comments made by students.

Reference: **Howard, J. R., Short, L. B., and Clark, S. M.** "Students' Participation in the Mixed Age Classroom." *Teaching Sociology*, 1996, 24 (1), 8-24.

Observers in this study noted 31 interactions per session, 29 (92%) made by 5 students.

Reference: [Howard, J. R. and Henney, A. C.](#) "Student Participation and Instructor Gender in Mixed Age Classrooms." *Journal of Higher Education*, 1998, 69 (4), 384-405.

Teachers ask factual questions that test recall, not questions that challenge higher order thinking

From a chapter summarizing a number of different studies of classroom participation: "Over four-fifths of the time, instructors asked students to recall facts or ideas. This was true whether the course was at an introductory or advanced level. It should disturb us to note that approximately one-third of the questions asked by professors were never answered. This suggests that professors often use questioning merely as a rhetorical tool for furthering their own lectures rather than as a strategy for evoking class participation."

(p. 185)

Reference: Ellner, C. L. "Piercing the College Veil." In C. L. Ellner and C. P. Barnes, *Studies of College Teaching*. Lexington, Mass.: D. C. Heath, 1983.

In a study that compared classes with the most and least participation, there was significantly more participation when faculty asked analytical questions.

Reference: **Auster, C. J., and MacRone, M.** "The Classroom as a Negotiated Social Setting: An Empirical Study of the Effects of Faculty Members' Behavior on Students' Participation." *Teaching Sociology*, October 1994, 22, 289-300.

## What the research says about why students don't participate

They participate less if they perceive that the teacher has all the answers

"The more students perceive the professor as an authority of knowledge, the less likely it is they will participate in class." (p. 586)

Reference: [Weaver, R. R. and Qi, Jiang.](#) "Classroom Organization and Participation." *Journal of Higher Education*, 2005, 76 (5), 570-600.

They lack confidence

This study found the main reason is a lack of confidence. Students feared looking unintelligent in front of the professor **and** in front of their peers.

Reference: [Fassinger, P. A.](#) "Understanding Classroom Interaction: Students' and Professors' Contributions to Students' Silence." *Journal of Higher Education*, 1995, 66 (1), 82-96.

## Are calling on students and grading participation viable solutions to these problems?

According to students, no

This student view was expressed repeatedly during interviews conducted as part of this study: “Students, as consumers, have purchased the right to choose a passive role if they wish. To make them uncomfortable by requiring they participate in discussion was deemed an unreasonable expectation by many of the students interviewed.” (p. 516)

In the same study, only 43% of students thought it was fair for an instructor to made verbal participation a part of their grade.

Reference: [Howard, J. R. and Baird, R. “The Consolidation of Responsibility and Students’ Definitions of Situation in the Mixed Age College Classroom.” \*Journal of Higher Education\*, 2000, 71 \(6\), 700-721.](#)

According to some research, yes

“Our results present a strong argument against the common belief that cold calling decreases student comfort in the discussion classroom.” (p. 241)

Reference: **Souza, T. J., Dallimore, E. J., Aoki, E., and Pilling, B. C. “Communication Climate, Comfort and Cold Calling.” *To Improve the Academy*, 2010, 28, 227-249.**

## Innovative approaches to handling participation

Let students have some control over how they participate

Reference: **Litz, R. A. “Red Light, Green Light and Other Ideas for Class Participation-Intensive Courses: Method and Implications for Business Ethics Education. *Teaching Business Ethics*, 2003, 7 (4), 365-378.**

“Pay” for good and appropriate contributions

Reference: **Chylinski, M. “Cash for Comment: Participation Money as a Mechanism for Measurement, Reward, and Formative Feedback in Active Class Participation. *Journal of Marketing Education*, 2010, 32 (1), 25-38.**

## Assessing classroom participation

Let students establish the grading criteria

Reference: **Woods, D. R. “Participation is More than Attendance.” *Journal of Engineering Education*, 1996, 85 (3), 177-181.**

Involve students in the assessment process

Reference: Weimer, M. *Learner-Centered Teaching*. San Francisco: Jossey-Bass, 2002.

## DISCUSSION

## Getting Students Prepared to Discuss

**Howard, J. R. Just in Time Teaching in Sociology or How I Convinced my Students to Actually Read the Assignment.** *Teaching Sociology*, 2004, 32, 385-90.

--after a telling assessment revealing just how few students were actually doing the reading, devised an interesting assignment which did as the title claims

**Roberts, J. C., and Roberts, K. A. “Deep Reading, Cost/Benefit, and the Construction of Meaning: Enhancing Reading Comprehension and Deep Learning in Sociology Courses.** *Teaching Sociology*, 2008, 36, 125-140.

--insightful analysis of student reading skills and how they can be developed. Objects to quizzes and proposes an assignment that helps develop college level reading skills.

**Tomasek, T. “Critical Reading: Using Reading Prompts to Promote Active Engagement with Text.”** *International Journal of Teaching and Learning in Higher Education*, 2009, 21 (1), 127-132.

--great example of an assignment design that gets students doing the reading at the same time it develops college-level reading skills

**Yamane, D. “Course Preparation Assignments: A Strategy for Creating Discussion-Based Courses.** *Teaching Sociology*, 2006, 34 (July), 236-248.

--describes an assignment that gets students doing the reading before they come to class and participating in discussion during class

## Good General Sources on Discussion

Brookfield, S. D. and Preskill, S. *Discussion as a Way of Teaching: Tools and Techniques for a Democratic Classroom*. 2<sup>nd</sup> ed. San Francisco: Jossey-Bass, 2005.

--thorough analysis of discussion and many ideas for more student participation and less teacher control

Christensen, C. R. “Every Student Teaches and Every Teacher Learns: The Reciprocal Gift of Discussion Teaching.” In C. R. Christensen, D. A. Garvin, and A. Sweet (eds.), *Educating for Judgment: The Artistry of Discussion Leadership*. Boston: Harvard Business School Press, 1991.

--compelling confirmation of the power of discussion to promote learning from one of the all time best discussion teachers

**Frederick, P. “The Dreaded Discussion: Ten Ways to Start.”** *Improving College and University Teaching*, 1981, 29 (3), 109-114.

--super collection of discussion starter ideas, not dated despite the publication date

**Welty, W. M. “Discussion Method Teaching: How to Make it Work.”** *Change*, , July-August 1989, pp. 40-49.

--lots of practical suggestions like “cool” calling which gives students a bit of time to prepare an answer

## GROUP WORK

### Group Formation

Should teachers form the groups or let students form their own groups? If teachers form the groups, what criteria should they use?

What’s the best size for PBL groups?

Should group membership stay the same or should new groups be formed for each case?

Brickell, J. L., Porter, D. B., Reynolds, M. F., and Cosgrove, R. D. (1994). Assigning students to groups for engineering design projects: A comparison of five methods. *Journal of Engineering Education*, 83 (3), 259-262.

Thompson, M. E. (1993). Building groups on students' knowledge and experience. *Teaching Sociology*, 21 (1), 95-99.

## Designing Tasks that Promote Learning and Develop Skills Needed to Work Together Productively (for PBL and beyond)

How do you design tasks that students don't find boring?

How do you prevent students from dividing the task and working independently? What about group to group collaboration?

What about group testing?

Whetten, D. A. (2007). Principles of effective course design: What I wish I had known about learner-centered teaching 30 years ago. *Journal of Management Education*, 31 (3), 339-357.

Wiggins, G. and McTighe, J. *Understanding by Design*. Expanded 2<sup>nd</sup> Ed.. Upper Saddle River, NJ: Pearson Merrill Prentice Hall, 2005.

## Handling Small Group Dynamics

What about students who are not doing their fair share of the work?

What about students who are doing more than their fair share of the work?

What about groups who are managing their time poorly; socializing, procrastinating?

What about groups with role problems; too many leaders, no leaders, no one disagrees? What problems should the group solve and what problems should the teacher solve? What should teachers do when they intervene in a group's problems?

Aggarwal, P. and O'Brien, C. L. (2008). Social loafing on group projects: Structural antecedents and effect on student satisfaction. *Journal of Marketing Education*, 30 (3), 255-264.

Chapman, K. J., Meuter, M. L., Toy, D., and Wright, L. K. (2010). Are student groups dysfunctional. *Journal of Marketing Education*, 32 (1), 39-49.

Group Member's Bill of Rights and Responsibilities adapted from D. G. Longman.  
[www.facultyfocus.com](http://www.facultyfocus.com) Appears in the February 7, 2012 post.

## Making Use of Group Products

What's the best way to share group products with the whole class? Presentations? Online?

## Assessing Learning that Occurs in Collective Context

What's best? Group grades? Individual grades? Some combination of both?

What about peer assessment within the groups? Should it count? How much?

What about groups assessing other groups?

Baker, D. F. (2008). Peer assessment in small groups: A comparison of methods." *Journal of Management Education*, 32 (2), 183-209.

Sadler, D. R (2010). [Beyond feedback: Developing student capability in complex appraisal](#). *Assessment & Evaluation in Higher Education*, 35 (5), 535-550.