Second Annual Teaching Scholars Institute

Good Practice Develops Reciprocity and Cooperation Among Students

A collection of teaching strategies introduced by Teaching Scholars from:

Murray State University
University of Tennessee–Martin
Western Kentucky University

Held at:
Western Kentucky University
Bowling Green, Kentucky
March 4, 2005
About the Teaching Scholars Institute

The Teaching Scholars Institute (TSI) was initiated from the Provost’s office at Murray State University in 2004. Faculty from Western Kentucky University, University of Tennessee at Martin, and Murray State University nominated by their Deans participated in this conference. The TSI recognizes the contributions of the following participants:

**Murray State University**
Ken Bowman, Agriculture  
Joe DeBella, Adolescent, Career and Special Education  
Terry Derting, Biological Science  
Jack Dressler, Music  
Larry Guin, Economics and Finance  
Peggy Pittman-Munke, Social Work/ Criminal Justice/ Gerontology

**University of Tennessee – Martin**
Nancy Buschhaus, Biological Sciences  
Tim Hacker, English  
Elaine Harriss, Music  
Arnold Redman, Accounting, Finance, Economics, and International Business  
Gwen Scarborough, Nursing

**Western Kentucky University**
Cathy Abell, Nursing  
Michelle Jackson, Academic Support, Mathematics  
Les Pesterfield, Chemistry  
Paula Potter, Management  
Donald Speer, Music  
Steve Wininger, Psychology

**Directors:**
Sally Kuhlenschmidt, Director, Faculty Center for Excellence in Teaching, WKU  
Linda Miller, Director, Center for Teaching, Learning & Technology, MSU  
Joan West, Director, Office of Research, Grants, and Contract, UT Martin

**Recognitions:**
Patty Flowers, UT Martin  
Nancy Givens and Kenneth Kuehn, WKU  
Hal Rice, MSU
Teaching Scholars: Encouraging Cooperation among Students

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Notes of Appreciation
Now in its second year, the Teaching Scholars Institute (TSI) consists of faculty members selected by academic Deans at Murray State University (MSU), Western Kentucky University (WKU), and University of Tennessee—Martin (UTM) for their innovative teaching approaches. The mission of the Institute is to foster communication among the universities and develop a record of effective teaching strategies.

The Teaching Scholars Institute held its first meeting at Murray State University on February 27, 2004, to discuss Chickering’s first principle of effective teaching: “Good practice encourages contact between students and faculty.” This year’s meeting was held at Western Kentucky University on March 4, 2005, to discuss Chickering’s second principle of effective teaching: “Good practice develops reciprocity and cooperation among students.”

The faculty met in small groups to discuss how they develop reciprocity and cooperation with their students, first by discipline and then by special interest topics.

Discipline Groups included:
- Business
- Health
- Humanities
- Science/Agriculture
- Social Sciences/Education

Topic Groups included:
- Civic Engagement
- General Education/Large Classes
- Special Issues (e.g., Legal Issues, Disability, etc.)
- Technology
- Upper Division Classes

The findings presented in this report highlight the experiences that the instructors shared during the day. The faculty members offered innovative approaches to developing reciprocity and cooperation among students and involving students more significantly in their chosen discipline and in the broader area of lifelong learning.

The report is divided into four main sections:
I. Instructor-specific Approaches
II. Special Issues
III. Key Principles
IV. Concerns and Cautions
I. Instructor-Specific Approaches

Instructors in the Teaching Scholars Institute (TSI) discussed techniques for building reciprocity and cooperation among their students. In addition to icebreaker activities to get the class interacting early, many of the teaching scholars incorporate new technology into their courses to improve ease and speed of communication. The following examples demonstrate best practice activities that involve students interacting with other students and encourage reciprocity and cooperation.

Icebreaker Activities

Steve Wininger (WKU) uses an activity to get students talking to each other. He has the students fill out information on a note card, and then has them swap the cards and introduce each other to the class. As an icebreaker, he has them include the answer to the question “What is your passion?” on the cards.

Peggy Pittman-Munke (MSU) uses a similar activity, where she asks her students to tell something memorable about themselves.

Larry Guin (MSU) offers another icebreaker activity that he has found to be helpful. “I like to learn the names of my students very early in the semester. To facilitate this, I take digital photos of the students during the first week of class and insert thumbnail photos into expanded cells of an Excel spreadsheet to make a seating chart (with names underneath the photos). With the help of the photos, I typically know all the students' names (up to 40) during the second week. I have the students type a short paragraph or two about themselves (their hometown, major, interests, etc.) into a discussion forum located on the class web site. Coupled with the seating chart that I give them, this encourages introductions among the class members because of the common bonds that they recognize (similar major, rival high schools, etc.) from the website.”

Joe DeBella (MSU) emphasized giving students lots of opportunities to speak in front of each other.

Paula Potter (WKU) stated that it is important for students to have respect for each other. On the first day of class, she makes sure it's understood that full attention is to be given to the speaker. This must be reinforced and ground rules set, so that students know the speaker will have the floor. A speaker is defined as any student in the class, the professor, or a guest speaker. This is a way to get students to speak in class more easily.

Using New Technology to Enhance Student Interactions

Terry Derting (MSU) feels that new technologies coming out can greatly enhance student interactions, but they are expensive. She described how she has used HP tablets, acquired from an HP grant program, in classes. The instructor can write on the tablet, and these notes are transmitted to all students, where they can be saved and printed at a later time. The students also can ask questions of and get immediate responses from other students. The feedback has been great—“better than PDA’s, better than laptops” said one student.

Les Pesterfield (WKU) indicated that he wouldn’t like to transfer his notes to students, saying it’s too passive and that the act of writing notes helps students to learn.
Pesterfield uses lack of knowledge of technology as a way to help students warm up to collaborating with each other. “A problem I see is that students are shy at first – and don’t want to look stupid. One way I’ve found to “force” interaction with other students is the graphing calculator. I refuse to show them how to use one, and say to the students, ‘If you don’t know how to use the calculator, ask the person next to you.’ They are hesitant at first, but by the second semester, it stimulates a lot of interaction.”

**Working with Partners**

Michelle Jackson (WKU) recommends having students work with a partner. “I teach lower division classes. Students don’t want to speak out. At first, let them work with a partner or quiz with a partner, give them partner assignments.”

Nancy Buschhaus (UTM) gets students interacting by letting her students do an open book quiz where they are allowed to talk to each other.

Elaine Harriss (UTM) has students work together. “If one is having problems, assign another student to work with him or her. Students know one another and they naturally discuss among themselves.”

Pittman-Munke (MSU) has students to pair up into “buddies.” If one buddy is gone, the other takes notes and passes the information on to the one who is missing from class.

**Encouraging Group Work**

Pittman-Munke (MSU) reminds her students that collaboration is an essential part of the discipline to be successful – you can’t do it alone. Social work requires many different agencies to cooperate and it is important for students to learn to talk and cooperate.

Cathy Abell (WKU) and Gwen Scarborough (UTM) reported that group work was widely used in their discipline and is considered very critical for student success in the field. Peer to peer evaluations are also used in the undergraduate classes.

Such group work and participation is considered important as it models real world applications in the field. Students must understand that the medical field actually operates in healthcare delivery teams to administer care to patients. Practicing the skills that will be needed by graduates can be accomplished in a safe environment in the classroom, which protects both students and patients. Students also learn the value of networking within the profession by participating in group activities such as the use of online discussion boards. All students go through the program as a cadre and they find the networking and team building done in the early classes invaluable as they move to the upper class levels and into the field.

“As students progress through the program it is noted that respect for peers grows and they learn to depend on one another, which is critical as they move to the professional work place.”

— Cathy Abell (WKU) and Gwen Scarborough (UTM)
Tim Hacker (UTM) noted that when the higher education community asked business "How are we doing?" and they said "These people do not work well together," the importance of teaching reciprocity and cooperation is made clear. Teamwork and collaboration is essential in business today.

Harriss (UTM) observed, “If you are doing chamber music, each must do their part well but if they do not cooperate it becomes a disaster. The individual must excel but the pair or group must also work well together.”

“Reciprocity can be found in the ability to say ‘I don’t know, but let’s find out together.’”
— Steve Wininger (WKU)

Potter (WKU) said that it’s amazing how a few students in a class can either bring out or shut down the class.

Redman (UTM) noted that the “personality” of classes varies by class.

Managing Group Work
Group work is not without problems. According to Abell (WKU) and Scarborough (UTM), one area that presents problems is assessing group projects and involvement.

Derting (MSU) often gets complaints about working in groups from students. They don’t like it when not all of the students put in effort but all get the same grade. She uses Blackboard to assess student contributions on the discussion board. “It helps to keep students honest,” she says. She is able to see who’s being creative in their input and also able to differentiate grades within the group.

Abell (WKU) and Scarborough (UTM) also grade participation in online discussions and carefully monitor it as a safeguard.

Derting allows students to change groups if they request it, and often one or a couple of students do. “We work it out,” she says. For long-term modules she feels that switching groups around doesn’t work. Students had already learned how to work together and then must relearn this with other students.

Pittman-Munke (MSU) also allows students to change groups if they just don’t get along, but points are deducted from their grade. She finds that groups tend to get too “inbred” if they remain the same throughout the semester.

Buschhaus (UTM) believes that students work in groups better if they are permitted to form their own groups. She gives a little “lag time” at the start of the semester, for a couple of weeks, so students can interact before they are asked to form groups.

Ken Bowman (MSU) likes to have students work in groups but doesn’t grade them that way. He’s observed that students seem to sincerely dislike being graded as part of a group.
Pesterfield (WKU) observed that “When I give a problem to a group, I often find one person dominates and takes over. This becomes less of a problem with upper level classes.”

Redman (UTM) finds that reciprocity and cooperation work better in small classes, where students are more prone to interact.

Derting (MSU) shared an idea to help with accountability in groups by using a pyramid test. The students take the test individually, which counts as 75% of the grade, then they take it again as a group, and they can get a bonus 25%.

Pesterfield (WKU) uses essentially the same idea, but he reverses the percentages. In his Chemistry upper division labs, students do a research project poster presentation, where each person in the group has to do part of the presentation. Here, he counts 25% as individual and 75% as group. This emphasizes the importance of group work while also recognizing individual contributions.

Les also establishes students’ personal accountability by having students collect lab data together, but requiring each student to submit his or her own lab report.

Wininger (WKU) raised the question of how to deal with groups when they refuse to cooperate.

DeBella (MSU) assigns roles within the group when this happens.

Pittman-Munke (MSU) has a formal checklist for evaluating student groups. She feels that students learn respect for how others act when they work in groups and use this checklist.

**Active Learning Approaches**

DeBella (MSU) has students make out the exams. He also uses web page development as a collaboration activity since some are good at it and know how, but others do not. “This provides an opportunity for students who have been weak in other areas to exert some leadership in this area.” It also builds confidence.

Hacker (UTM) suggests having [music] students write for composition class about music. “Rather than students seeing English Composition as totally unnecessary, let them write about those things that matter to them.”

> “A lot of interaction happens outside classrooms. An example of best practice in music is to require participation in ensembles.”
> — Donald Speer (WKU)

The Humanities Discipline Cluster [Jack Dressler (MSU), Donald Speer (WKU), Elaine Harriss and Tim Hacker (UT-M)] asserted that instructors should make opportunities for students to make connections outside themselves. Students learn better when they can see applications. It is up to the instructor to find the right kinds of tasks for students to have opportunities to work together.
Bowman (MSU) makes in-class participation mandatory. If students don’t participate it affects their grade. He also noted that classroom seating affects participation in discussion. He pays attention to where the active students sit, then tries to move them around.

Arnold Redman (UTM) also requires his students to participate. If they don’t participate, they will receive lower grades. He finds this helps some students open up in class, and once they get past their shyness about speaking, they may actually become assertive.

Guin (MSU) encourages students to challenge him. As students become comfortable with each other and with the idea of disagreeing, it leads to a richer discussion. The amount of disagreement means a diversity of ideas.

Potter (WKU) notes that as students become confident in asserting themselves, they become more effective in expressing their thoughts.

**Student Empowerment/Peer Approaches**

Abell (WKU) and Scarborough (UTM) use peer-to-peer evaluations in their undergraduate classes.

Redman (UTM) and Guin (MSU) also use peer review of groups and believe it works in preventing team members from trying to “get a free ride.” It tends to keep students happier with their group work and grades. Guin also observed that students feel their peers are harder on them than the instructor.

DeBella (MSU) uses a variety of approaches to encourage peer teaching and modeling. He teaches social dance and breaks groups up to let the better students teach others. He uses students to demonstrate and then models working with students. It was noted that some students resist peer teaching.

The Social Sciences/Education Discipline Cluster [DeBella and Pittman-Munke (MSU), and Wininger (WKU)] suggested recognizing others’ strengths, verbally or in writing, and asking for student feedback are ways to model and encourage reciprocity and cooperation.

Hacker (UTM) noted that, “Peer teachers can model reciprocity for students.”

Pittman-Munke (MSU) links struggling students with mentors. For in-class work, she demonstrates that students can help her by appointing a student to keep her on track. She has noticed this attitude spill over outside of class, where students might ask to help in other ways.

**Learning Communities**

Pesterfield (WKU) asked if others have used learning communities where students are clustered together. The Chemistry department at Western tried it for two years. All chemistry majors were put in the same Freshman-Experience class, same general chemistry class, same lab and same math class. The Chemistry learning community worked out really well the first year, but in the second year we had a lot of difficulties with scheduling and haven’t done it again. In the first year, the LC became the “strongest force of students that ever moved through our department, and the most active Chemistry Club we’ve ever had.”
He added that they try to get as many students to participate in the Chemistry Club as possible. It’s a way for freshman and sophomore students to get to know juniors and seniors in the department. But, he said, it’s becoming more prevalent for students not to “hook in” because many have to have a job, some working even 40 hours per week.

Jackson (WKU) said that they had tried doing a “living and learning together” community, but it turned out to be too much togetherness. “A lot of husbands and wives couldn’t survive that,” she explained.

Speer (WKU) believes that reciprocity might be something geared not only to certain disciplines, but also to certain students. “Weaker students benefit more from learning communities; strong students, perhaps, do not benefit as much.”

**Assessment**

Pittman-Munke (MSU) lets students know there are an infinite number of A’s, to limit competition. A possible barrier that was noted is that administrative regulations may restrict faculty from being too free in allocating good grades. Some departments keep a close eye on faculty distribution of grades.

In the Social Sciences/Education Discipline Cluster [DeBella and Pittman-Munke (MSU) and Wininger (WKU)] it was recommended to assess over a longer range, looking at how students do in the next group. They suggest using student peer evaluations as a part of assessing group work.

Another suggestion that was made was to use a contract grading system, where students have an opportunity to have input into how they will be assessed and what items will be given greater weight during the semester.

The question was raised whether universities are assessing their ability to teach reciprocity and cooperation. If we value these things and say we are teaching them, how do we know that we are and how well we do it?

The Humanities Discipline Cluster [Dressler (MSU), Speer (WKU), Harriss and Hacker (UTM)] noted the importance of eliminating fear (of grading practices, participating in class, etc.) to build a classroom climate conducive to reciprocity and cooperation.
II. Special Issues

General Education/Large Classes

A very large problem identified for general education/large classes was trying to cover too much required material in too short a time. Often instructors are deterred from reciprocity activities because they have to cover so much material - there's no time! Prioritizing material and what you want students to “take away” from your class is essential. This involves front-end planning, but makes the class more enjoyable for both students and faculty, and learning is often improved.

Derting (MSU) said, “When I came to Murray State, I had 32 chapters to cover and we covered all of them - and the students went away with nothing. These are non-majors and science isn’t viewed in the same way. I went through a philosophy shift, to deciding what are the primary concepts I want the students to leave with – and limited my material accordingly - and how best to teach these topics. It is always through interaction.”

“I have a ‘mini-lab’ in a large classroom,” Derting added. “At the beginning of class we just talk about the news. I try to find out what their interests are, let them be the guide for discussion – as a springboard to the day. I’ve found less is more – we cover less but they go away with more.”

“You implement the majors and integrate the non-majors.”
— Nancy Buschhaus (UTM)

Another frequently encountered problem with general education/large classes is how to engage students, many of whom don't have an interest in being engaged.

Dressler (MSU) engages students in his class in a variety of ways: “I teach an interdisciplinary Western Civilization class. Just reading and coming to the test doesn’t work. I teach the first two-thirds of the period, and then put students into groups of 4 or 5 to make a presentation. Each group makes about two presentations per semester. I try to bring in connections to other disciplines and involve older students' personal experiences.

Dressler also believes that students respond better to teamwork if it takes place in class. He finds outside-of-class group assignments to be problematic.

Wininger (WKU) believes maturity may be an issue that relates to reciprocity and group work in General Ed classes. “There are a lot more disinterested students who are not plugging in,” he says. One solution he offers is based on the “hot cognition” model, that people encode, i.e. learn, information more easily if they connect emotion with the information. Music, for example, is very useful for this. “In my classes, I try to promote emotive responses, even negative emotion, such as cognitive dissonance.”

For large classes, some universities are beginning to adopt Personal Response Systems (PRS). Instructors post a multiple-choice question pertaining to course material, students can select a "best answer", and the distribution is displayed immediately in class.
Derting (MSU) has used a PRS and believes they have a lot of applications, “if you can come up with the hard question.” Questions need to be challenging, and test banks provided with the software are often inadequate. The PRS is packaged with the Introductory Biology text used at MSU. She believes the system can be used to help keep students engaged, review key concepts or show the instructor when concepts are not being grasped.

Student engagement in general education/large classes is facilitated by group work, just as it is in other types of classes. Buschhaus (UTM) has observed that working in groups is initially intimidating to students – especially freshmen – and you have to get past that.

Wininger (WKU) observed that it’s especially difficult to assess participation in large classes, and that in small groups students are often more willing to ask questions. This would support including group activities even in very large classes.

Derting (MSU) shared a technique used to encourage better interaction in groups. “In lab, we sometimes flip a coin to determine whether to have a quiz or not. Then, we flip a coin to see which student will take the quiz for the group. This gets students to work with each other. When we do a group quiz, only one is graded – but the students don’t know in advance who’ll be graded.”

Buschhaus (UTM) agreed that it is sometimes an issue to get students over intimidation that inhibits their discussions. She uses open quizzes, to get students to talk with one another. With the open quizzes, she has noticed that students, at first, do not share. Then they may share with their neighbor. Then toward the end of the semester they will get up and move around, and argue amongst themselves. As the semester progresses, those students who do not prepare are naturally excluded. In the lab, desks are arranged into “pods” to facilitate discussions.

Whatever the difficulties of working with general education/large classes, Derting (MSU) cautioned not to set the bar low - this reinforces boredom. “Students will come up to the standards you set,” she asserted.

“You don’t want to teach students where they are. You want to teach at a level slightly above that to encourage growth,” added Wininger (WKU).

Technology
Note: None of the participants in the subgroup used technology a lot in their teaching but some discussion did take place.

This group discussed the importance of matching the suitability of technology to what you’re doing and also emphasized that technology should be used to enhance class, not be the class.

Speer (WKU) sees teaching music as a one-on-one endeavor and doesn’t always find interactive technology to be as useful in his discipline. He uses technology, however, for individual students in his classes, so they can practice without disturbing others by using headphones and various other devices that depend on advanced technologies.

The idea of technology isolating students was discussed. Peer/group work was one method presented as a way to help prevent the isolation that can result from technology use.
The greatest value these instructors reported for using technology in building reciprocity and cooperation was in peer-to-peer technical assistance. Younger students often can assist older students in use of technology, and this can be an esteem-builder for younger students.

**Civic Engagement**

The American Democracy Project has fostered a new focus on civic engagement for students on campuses across the nation. The project grew out of “a concern about decreasing rates of participation in the civic life of America in voting, advocacy, local grassroots associations, and in other forms of civic engagement that are necessary for the vitality of our democracy.”

Several participants shared the belief that it is important to involve students in reflection activities to help them frame what they have learned. Skills gained through community projects that were identified include: 1) planning and organizing, 2) critical thinking, 3) how to treat others, 4) social skills, 5) delegating and 6) dedication.

Abell (WKU) believes an advantage of civic engagement is that students get to see and interact with more people and learn about the difference they can make. They get to work with other people in the community, and not just students. She adds that students appear eager for these types of projects. They get an opportunity to apply learning in a real-life environment.

Pittman-Munke (MSU) believes that students learn to connect with the broad community through civic engagement activities and they make connections. They also become more confident with what they want to do in their lives and caring for others. “I need to take care of my community, so that my community can take care of me.”

Pittman-Munke (MSU) believes other advantages from civic engagement activities are that they help students “grow up” to learning; they learn from everyone in the community, and can fail without dire consequences. Students learn about each other, hearing each other out, and different learning styles, and they learn to work together. Community projects also teach ethical decision-making, how to be a “servant-leader”, and they help students identify their own values. Disadvantages include the time and effort required to set up and implement projects and being aware and proactive in potentially harmful situations for students, e.g., working in a jail.

Harriss (UTM) noted some additional benefits of civic engagement projects. They offer an opportunity for students to discover their strengths and hone their skills. They are, in essence, preparation for real life. Students also develop social skills through their involvement. She notes that, at times, the students who have done well academically are the first ones to “bomb out” in the real world, and students who don’t shine in the classroom may shine in a service project. In this way, success in student engagement projects can be an esteem-builder for less academically talented students, who learn they have other valuable strengths.

Another comment was that it is essential for faculty to model the behaviors they seek, i.e., if you ask students to be involved, you must be too. Engagement projects also model the importance of balancing lives. Some precautions to observe are to always ensure the safety of students and don’t take on more than you (or the student) can handle. Finally, reflection must be built into civic engagement projects, so that students can integrate the experiences and maximize their learning from them.
Upper Division Classes
Upper division classes present certain advantages, as well as challenges. Students have an increased level of skills, more commitment and motivation, and sometimes a bit more respect for professionalism, but being close to graduation also may distract them.

Some recommendations for building reciprocity and cooperation among students in upper division classes include designing classes for greater interpersonal interactions among students; involving students in activities that model the real world, such as internships and work study; and offering capstone classes, where students can draw upon and feature and highlight all of their learning to-date.

Other Concerns
Interactive Television (ITV) Classes – The participants in this subgroup questioned whether ITV is really interactive. All preferred the use of an online Class Management System (CMS) (e.g., Blackboard) to the use of ITV for teaching. Online discussion tools were used by group members to try to re-create face-to-face discussions in the classroom.

Students with Disabilities – The group discussed using more group work without grades attached, making it low stakes, to encourage working with a partner. Wait to ask them to pair off until at least 2-3 weeks into the semester.

Cultural differences – It is important to overcome stereotypes and more work is needed on the part of instructors to overcome stereotypes. Cultural differences between faculty and students make interactions more tricky. It was suggested as helpful for faculty to use a mentor to help “bridge the gap” to understanding what is going on in the classroom. Faculty need to learn more about the cultural “cues” of the countries their students come from and move in small steps to get to the point where faculty can “read” what is happening in the classroom.
III. Key Principles

Following the morning and afternoon breakout sessions, the full working group came together to distill what had been discussed and identify important precepts for developing reciprocity and cooperation among students.

Difficulties in generating reciprocity and cooperation

- **Resistance among students to group work** – this generally falls into two types:
  1) discussion, where there is no grade and no product, and
  2) graded group work, where there may be different levels of contribution to the group but all students get a single grade

- **Diversity of background** – while diversity in a class is generally regarded as a positive thing, in classes where there was less diversity, reciprocity and cooperation seemed to be easier to achieve.

- **Developing trust** – an initial shyness makes it difficult to initiate group work, especially in the freshman and sophomore years. Different types of icebreakers or trust-building exercises may be used to get past this barrier.

- **Assessment of reciprocity and cooperation** – if reciprocity and cooperation are not incorporated in the grade, students may not feel motivated to participate; if they are incorporated, do you assess effort or outcome or both? And how do you assess fairly and equitably among students who may have different learning styles, different personalities?

- **Individual participation and accountability** – students have concerns about individual participation and accountability, as well as the assignment of grades for group work, especially when one or several students do most of the work and one or several do little or nothing. One solution offered is to use peer evaluation in determining each student’s grade.

- **Cultural barriers** – differences in language, cultural or educational background can impede effective group work.

- **Class Size** – group size should be small enough for all students to be able to participate meaningfully and to secure accountability of all members.

- **Not conducive to all classes** – some classes are not conducive to reciprocity and cooperation, depending on the subject area, amount of material to be covered, and maturity level of students.

- **Interpersonal Conflicts** – personality differences can surface in groups, and, if not contained, can disrupt the ability of groups to function effectively as a “learning unit”.

Best Practices for Reciprocity and Cooperation:

- **Ice breakers to get students to know one another** – these are useful early in the class or preceding group work to get students interacting and break down barriers to trust.

- **Accountability & structure for group work; assign roles** – group work should be structured to ensure contributions by all students and accountability for failure to participate.
• **Set a classroom environment of respect for others’ thoughts and ideas** – many classes establish ground rules early, to ensure the welcoming of and respect for expression of differing viewpoints.

• **Clarify expectations for group work** – communicate to students clearly your expectations for cooperative or group work and how participation in class and assignments will be recognized and rewarded.

• **Classroom design/arrangement** – the arrangement of desks can facilitate or interfere with student interactions. Classes that emphasize cooperative group assignments and student interactions may adopt a “pod” arrangement, where students can interact more freely.

• **Rotate leadership of the group** – by rotating roles, students develop leadership skills and learn respect and cooperation.

• **Establish the value of group work for students** – demonstrate that you, the instructor, value group work by making it integral to the content as well as grading for a class. “You get what you reward” is an old saying that applies.

• **Model reciprocity and cooperation** – instructors must “practice what they preach” in their interactions with students, other faculty, outside guests and administration.

• **Peers are one of the greatest resources** – use peer tutors, peer instructors, peer evaluations to bring home the message of reciprocity and cooperation.

• **Shared experiences among students provide a basis for students’ discussions** – field trips, volunteer activities and other opportunities can create bonds and open up avenues for interaction between students.

• **Encourage students to see life as a cooperative endeavor rather than competitive** – facilitate this through group assignments, grading practices, etc.

• **Use a “stick” approach** – make group work a major part of the grade, and participation in class and online discussions mandatory.

**Other Practices to Encourage Reciprocity and Cooperation:**

• **Ask students to share their thoughts with one other student** before sharing with the group, it encourages greater student contact as well as clarification of ideas before presenting.

• **“Alternate Reality Day”** – move students who typically sit in the back to the front of the classroom, to encourage more participation among those who may “hide” at the back.

• **Open-note quizzes** – encourage students to ask questions and discuss with other students, to increase interaction, cooperation and learning.

• **Use technology to facilitate real-time sharing** – use of networked or wireless laptops and PDA’s in the classroom permits students to interact during class without disrupting class.
• **Let students initially pick who they want to work with in groups**, to overcome initial resistance to group work. These groups can later be rearranged, if so desired.

• **Develop parameters** for students to grade each other among the group, to assist with assessment, such as a rubric or other tool.

• **Use peer teaching** – give students the opportunity to comment on and critique each other’s work.

• **Peer grading** – as a component of group work assessment.

• **Use Blackboard**, with required online participation.

• **Force interaction with other students**, e.g., refuse to show students how to use graphing calculators, so they must go to other students for help.

• **Grade by “mastery”** not by competition.

**D. Considerations in Assessment**

How does one assess reciprocity and cooperation? Some considerations suggested by participants include:

• Should participation and cooperation be required, i.e., should you grade reciprocity or is it a means to an end?

• Effective work in groups becomes a course objective for some disciplines.

• Use peer grading and peer review to encourage greater cooperation among students.

• Use contract grading which gives students clear benchmarks of what they have to achieve.

• Where participation is a part of the grade, unique contributions and participation should be counted, not “I agree” types of responses; this empowers students and moves them away from passive agreement.

• Use “pyramid” exams, where an individual exam is followed by the same exam done by the group, and the student receives a grade for both.

• Create a “friendly” classroom environment; when students are comfortable, they are better able to discuss and disagree.
IV. Concerns and Cautions

Student-Centered vs. Teacher-Centered Instruction
The question of whether teaching should be student-centered or teacher-centered was discussed in the General Education/Large Classes group. One member of the group commented, “My job is not to make learning fun. It wasn’t always fun for me.” [Unattributed]

Flowers (MSU) emphasized that she wants teaching to be fun for her. “It is fun for me when students learn the materials and do well in class.”

Wininger (WKU) proposed that student-centered vs. teacher-centered teaching can be a continuum rather than a dichotomy. Then there is a subject-centered approach.

While good teaching, he adds, varies for different instructors, some elements in the “tool box” for good teaching include: 1) expertise in the subject area, 2) a clear vision of what you want to accomplish, i.e., a mission statement and clear objectives for the class, 3) enthusiasm!, and 4) subject-driven, content-rich material. “Arouse a passion in students. It helps them learn!”

Getting High Schools More Involved in Collaborative Learning
Some college students have trouble moving to a more student-centered model of learning because of patterns of teaching and learning they experienced in high school. To encourage a more student-centered approach in college, the subgroup recommended encouraging this model at the high school level.

When high school age and college age students are in the same class, establishing good interaction creates certain pedagogical issues. Using group presentations was one method suggested to help. Also, using plays can be a way around the problems created. By adopting a “persona” students can move past themselves.

Collaboration among faculty is always very important to model.

Derting (MSU) reminded us that if we don’t like the habits that freshmen students come to the University with, we have ourselves to blame. “We are responsible for what happens or does not happen at the K-12 level because we teach the teachers!” she said. “To effect change, we need to redefine the outcomes we seek in training K-12 teachers.”

Overcoming Student “Culture”
Redman (UTM) noted that the “culture” at UT-Martin appears to be part of the problem of getting students involved. Students don’t like other students answering questions or taking the lead because of social pressures. “Students want to be receivers,” he says.

Potter (WKU) has also noticed that it’s a “culture thing.” One thing she does to counteract this, is to assign students to work in small groups only for a class period. They then move to other groups during other class periods. “The students get to work on several projects with different groups over the course of the semester. This allows students to interact with a large number of class members.”
Students have an increased opportunity to get to know each other better. Students then feel more comfortable speaking in front of each other and this enhances class discussions.”

Dressler (MSU) observed that the International students’ culture makes reciprocation and cooperation more difficult. They have learned through culture to look to the teacher as the purveyor of information. Would moving learning to a residential area have an impact? “We live together, why not study together?”

**Sometimes Reciprocity Doesn't Fit**

Speer (WKU) said he’s not sure reciprocity and cooperation have to occur in every class. He teaches 100 - 200 piano students, who work virtually on their own. For some classes, students need to work alone and this is appropriate.

Dressler (MSU) observed that the diversity of students in his Western Civilization classes makes reciprocity and cooperation difficult. Of the forty to fifty students, some are athletes, some music majors, some forty-year-olds, business majors, and secretaries, none of whom have much in common.

Harriss (UTM) asked why does reciprocity have to occur in every class? She feels reciprocity is not a natural fit for every situation. Reciprocity and cooperation occur outside class and naturally fit in some classes but not necessarily in every class.

Hacker (UTM) said, “Sometimes the reciprocity feels contrived. Students recognize this.”
Resources


11. TLT (Teaching and Learning Technology)/Seven Principles Library, Encouraging Cooperation Among Students @ http://www.tltgroup.org/Seven/2_Stu-Stu_Cooperation.htm
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