THE MANTLE

Center for Excellence in Teaching and Learning

Comments on Active and Cooperative Learning

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During our recent Winter Intersession, the CETL, working with the Provost's Office and the Center for Math and Science Education (CMSE), hosted a workshop on active and cooperative learning. Drs. Richard Felder and Rebecca Brent from North Carolina State University led this workshop, which was attended by approximately 70 UM faculty members.

The terms "active learning" and "cooperative learning" may seem like trendy buzz words in higher education circles. And many faculty members, no doubt, will think that this is just another trend that will pass and will not supplant the tried and true "sage on the stage," instructor-centered lecture method, where student learning is assessed individually and where there is an implicit competition between students for grades. Yet, if the goal of our institution and our goal as instructors is to enhance student learning, we should carefully consider the merits of active and cooperative learning modalities. Research shows that the more students are involved in their own learning, rather than passively listening and taking notes (and a growing number of students seem not to be taking notes these days!), the more they will comprehend and retain material. And even the proponents of active learning tell us that there is always a place for lecturing, with a good mixture of modalities being most effective. Active learning refers to any teaching/learning activity where students learn by doing. Active learning includes a broad range of teaching activities, including: in class discussion, which can be informal ("What was the muddiest point?") or the more structured "think-pair-share" format; the use of clickers for in-class concept checking; one-minute paper assignments; team projects/assignments, etc.

Cooperative learning is a subset of active learning techniques where students work together in teams during part or all of a semester. Cooperative learning capitalizes on students explaining, giving feedback, assessing, and holding one another responsible for completing assignments and learning. Key features of cooperative learning are that the team members must depend on each other, to a certain degree, to achieve learning goals, that each member of a team must still be individually accountable for his or her own learning and contributions, that the team activities must

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require some interactivity and group processing, and that the activities should help develop communication, leadership, and teamwork skills.

At the above workshop, Drs. Felder and Brent described their experiences with cooperative learning and gave numerous tips. These included recommendations for web applications for creating teams and for students to assess the contributions of their peers. Useful summaries of the theory, evidence, and techniques for cooperative learning can be found at

http://www4.ncsu.edu/unity/lockers/users/f/felder/public/Papers/CLChapter.pdf and

http://www.niagara.edu/assets/assets/cctl/documents/JET.pdf.

The nature of cooperative learning is that it holds students responsible both for their individual learning (which must always be assessed in traditional ways) and for the work of the team. One particular active, cooperative learning strategy is referred to as the *Jigsaw* structure, in which student teams are formed to work on a group assignment, with the roles of individual students being clearly defined. For example, in a team of four, one student might be responsible for the experimental set up, one for data and statistical analysis, one for interpretation of results in light of theory, and one for the write up or oral report. In a class having a number of such teams, the instructor would provide separate guidance to the role A, B, C, etc. members from each team and each team member would, in turn, be responsible for explaining the details of his or her assigned role to other team members.

Drs. Felder and Brent cautioned that implementing cooperative learning strategies is not without difficulties, both in setting up and managing, and they suggested that faculty who wish to incorporate these techniques should begin with incremental steps. However, they provided evidence, including personal

experiences, showing the success of cooperative learning, including an improvement in the retention of students in majors, particularly for minority or at-risk students. By setting up teams and establishing expectations for each member, the weaker students are less likely to hide or give up and the stronger students develop leadership and teamwork skills and solidify their own understanding by explaining to others.

The CETL, CMSE, and Provost's Office hopes to continue to present workshops of this type and invites faculty participation and suggestions for future workshop topics.

FacChats are informal discussion groups on topics related to teaching and/or learning open to all UM faculty.

Why participate in UM FacChats?

- to meet with other interested colleagues for an informal discussion of teaching and learning
- to learn and share ideas around a common theme or question in teaching and learning
- to continue to develop professionally as a college teacher and faculty member

Topics are added throughout the semester and are advertised at cetl.olemiss.edu/facchats and through UMToday and email.

You can suggest topics for future FacChats by emailing us at cetl@olemiss.edu.

Study USA: Experiential Learning from a Pedagogical Point of View

February 8 & 16, 2016 - Faculty Development Luncheon

Study USA is a short-term domestic travel program that offers students direct access to professionals, organizations, and issues related to their field of study. Off-campus experiences enhance learning by allowing students to apply information learned in traditional classrooms to real-world situations. Study USA implements field-based experiential learning practices proven to increase student engagement and critical thinking. It also gives students and faculty an opportunity to network and generate support for the University of Mississippi.

Laura Antonow and Kristina Phillips from the Office of College Programs in the Division of Outreach and Continuing Education will address how to cultivate the pedagogy of experiential learning at our institution and Study USA policies and procedures.

Online registration is requested by 5:00 PM, February 12, 2016 at cetl.olemiss.edu.

Event Details: Monday, February 8th and Tuesday, February 16th, in the Union Ballroom, beginning at 11:45am. A complimentary lunch will be provided.

Writing Skills Transfer via Sustained, Interdisciplinary, Writing Center sponsored Writing Groups

March 23, 2016 - Faculty Development Luncheon

This presentation explores the value of writing groups sponsored by writing centers (WC-WGs) and is based on the experiences and research at The Ohio State University (OSU). WC-WGs involve 4-8 advanced academic writers of dissertations, theses, personal statements, proposals, grants, journal articles, etc. Advanced writers (graduate students, post-docs, and junior faculty) join in weekly, interdisciplinary 1.5 or 2-hour writing-project discussions and reviews of participant submissions. Quite often, time is taken to allow members to "just write" during the session. WC-WGs are facilitated by one graduate writing consultant and continue through the semester. OSU may eventually combine WC-WGs with cost-based graduate student and faculty writing boot camps. To see OSU's current offerings, go to https://cstw.osu.edu/cstw-writing-groups.

Our understanding of the importance of WC-WGs follows the scholarship of Nicol and Macfarlane-Dick (2006), Klein, et al. (2008), and Nowacek (2011) among others. Following a brief description of the logistics and procedures of the groups, Dr. Selfe will describe what their writing consultants have learned about these writing-support experiences and provide tentative results from their WC-WG research efforts.

Event Details: 3/23/15, 11:45am in the Union Ballroom. Lunch will be provided.

Speaker's Bio: After 20 years of work in digital literacy and literacy acquisition, Dr. Richard (Dickie) Selfe was hired as Director of the Center for the Study and Teaching of Writing (CSTW) in the College of Arts and Sciences at The Ohio State University. He now directs the OSU Writing Center and has made significant changes in the support services offered, including expanding the number and scope of writing groups. Selfe's scholarly interests cluster around the intersection of communication pedagogies, programmatic curricula, and the social/institutional influences of digital systems. His most recent book-length project is entitled *Sustainable Communication Practices: Creating a Culture of Support for Technology-rich Education.* He is a co-editor and author in an online collection called *Technological Ecologies and Sustainability,* published in Computers and Composition Digital Press. In production is a collaboration with Aaron Knochel called "Digital Community Storytelling: A case study of community / academic interaction," which is part of a special issue on Spacial Praxis in *Kairos: A Journal of Rhetoric, Technology, and Pedagogy.*

Active Learning Classrooms
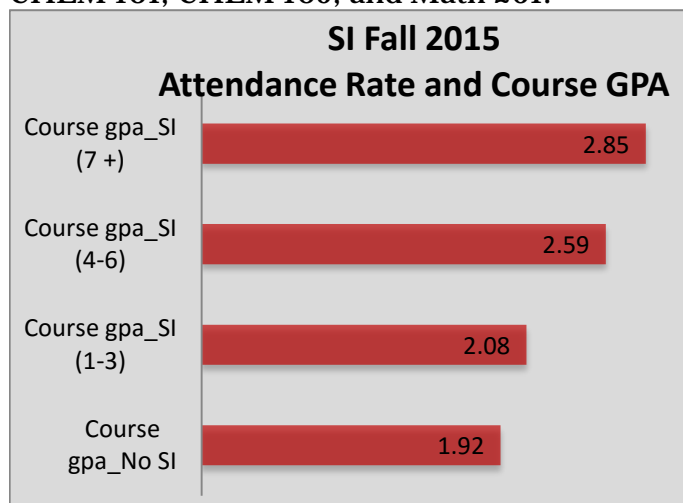*April 12, 2016 - Faculty Development Luncheon*

A Panel of UM Faculty will present what they learned from attending the National Forum on Active Learning Classrooms at the University of Minnesota in August of 2015. The Panel consist of faculty members, Tiffany Bensen from Biology, Cecille Labuda, fromPhysics & Astronomy, Keri Scott from Chemistry, and Adam Smith from Chemical Engineering.

The forum was focused on advancing practice and research of active learning classroom spaces. New sessions were featured at this forum that were designed to provide opportunities for participants to demonstrate innovative practices and research that leverage the advantages of technology-enhanced learning spaces and active learning pedagogies.

This informative Faculty Development Luncheon will be held on April 12, 2016 in the Union Ballroom beginning at 11:45 am. Lunch will be provided. Registration for this Faculty Development Luncheon will open on March 28, 2016.

Verification of Student Identity in Online Classes
April 27, 2016 - Faculty Development Luncheon

Director of Online Design and E-Learning, Anne Klingen, will moderate a UM Faculty Panel on Verification of Student Identity in Online Classes on April 27, 2016.

All credit-bearing courses and programs offered through online learning methods **must** verify that the student who registers for an online education course or program is the same student who participates in and completes the course or program and receives academic credit. UM policy states that instructors are required to select one of three ways to verify student identity (VSI). Join us on April 27, 2016 for a panel discussion with current UM online faculty to find out how to verify student identity and learn more about online education.

This informative Faculty Development Luncheon will be held on April 27, 2016, in the Union Ballroom beginning at 11:45 am. Lunch will be provided. Registration for this Faculty Development Luncheon will open on April 13, 2016.

Supplemental Instruction (SI)

Supplemental Instruction (SI) courses supported this past fall included:
ACCY 201, BISC 102, BISC 160, BISC 206, CHEM 101, CHEM 105, and Math 261.

SI Fall 2015 Attendance Rate and Course GPA

- Course gpa_SI (7 +): 2.85
- Course gpa_SI (4-6): 2.59
- Course gpa_SI (1-3): 2.08
- Course gpa_No SI: 1.92

The semester report indicates that students who attended SI regularly earned higher course GPA's.

SI will support the next sequences of these courses, i.e. ACCY 202, BISC 162, BISC 207, and MATH 262 during Spring 2016 in addition to more sections of BISC 102, CHEM 101 and 105.

SI schedules are published on our website, as available, at:
cetl.olemiss.edu/supplementalinstruction

For questions regarding the SI Program please contact Nancy Wiggers at 662-915-1079 or by email at nwiggers@olemiss.edu.