

communicating for **LEARNERS**

SPRING
No.2

*The Center for Teaching, Learning, and Technology
Spring Semester 2008*

Celebrating a Year of Collaboration and Learning

The Center, through the support of the Office of the Provost and the Graduate College, offered 10 learning communities (LCs) with over 130 faculty and graduate student members. These communities have worked collaboratively to provide resources, information, ideas, feedback, reflection, and support for one another. The members of the following LCs will gather for a celebration dinner in May. Congratulations to all!

Active Learning in the Natural Sciences

The goal of this learning community is to provide a foundation and support for Natural Sciences faculty interested in transforming their science classrooms to more interactive learning environments.

Core Commitments Service-Learning

This community supports the development of high quality courses using service-learning pedagogy addressing the development of personal and social responsibility and civic learning.

Life Science Scientific Teaching and Reform

The Life Sciences LC is interested in scientific teaching to explore the process of learning. Members approach this as an experimental problem: what does the research indicate regarding learning, how does it apply to courses, and how is success measured?

New Faculty

The New Faculty LC is comprised of a diverse group of first or second year BGSU faculty and focuses on discourse and experiences central to the members' professional growth as teachers and scholars.

Publication

This learning community collectively tackles the pressure to publish and present its ongoing research. Each meeting is dedicated to helping members achieve their stated scholarly goals for the year by focusing intensively on writing and publishing, especially in the Humanities, Social Sciences, and Pedagogy.

Research in Science and Mathematics Education

Faculty, graduate students, and others with a common interest in the science of learning critique research articles and design, conduct, and present collaborative research projects related to how K-16+ students learn science and mathematics.

Scholarship of Teaching & Learning (SoTL)

The purpose of this learning community is to value, encourage, and engage in the scholarship of teaching and learning. The community and its members research and discuss professional practices leading to the development of scholarly teaching and enriched and meaningful student learning.

STAR Journal (Synergistic Teaching and Learning)

The STAR journal learning community is working to establish an open access, peer-reviewed, scholarly journal whose content focuses on synergies of scholarship.

The Transition to Digital

This community focuses on how using information and communication technologies in classrooms, both real and virtual, affects students. Additionally, members examine how decisions to use certain technological tools influence student learning.

Web 2.0 Pedagogy and Scholarship Across the Curriculum and Community

This learning community focuses on Web 2.0 and Second Life pedagogies that stress engagement with the community, exploring community connections and outreach through service learning.

Want to join a 2008-2009 Learning Community?

Applications will be available in early July on the Center's website at www.bgsu.edu/ctl/



visionary STATUS

Chris Dede is the Timothy E. Wirth Professor of Learning Technologies at Harvard's Graduate School of Education. His interest lies in expanded human capabilities for knowledge creation, sharing, and mastery of emerging technologies, which are reflected in his teaching models. His research spans emerging technologies for learning, strong technology infusion into large-scale educational improvement initiatives, policy formulation and analysis, and leadership in educational innovation. He is currently conducting studies to develop and assess learning environments based on modeling and visualization, online teacher professional development, wireless mobile devices, and multi-user virtual environments. It is Chris Dede's educational innovation and his challenges for educators to think differently and creatively about the skills needed for the future that have earned him the title of visionary.

For more information on Chris Dede and his research, visit:

http://www.virtual.gmu.edu/SS_research/cdpapers/index.htm

<http://www.virtual.gmu.edu/EDIT895/knowmob.html>

uncovering understanding

It's 9:30 on a Thursday and the regular "crowd" assembles. The lesson commences, and with five minutes to go you ask, "So, does everyone understand?" Students either nod unconvincingly or stare longingly at their cell phones. "Great, then I'll see everyone next week!"

Sound familiar? The good news is that there are better ways of discovering what students really know and do not know. One option is to integrate clickers, or student response devices, to gain real-time, archival feedback on student learning.

Clickers are handheld feedback devices or remotes students use to answer questions in order to inform the instructor and themselves of their conceptual understandings. The entire system consists of a computer, a USB receiver for the computer, a remote (usually one per student), software to create the question slides and analyze student responses, and a projector to display the created slides. Clicker response questions can be multiple choice, true/false, ranking, and sometimes—depending on the system used—short answer. Best practices suggest the instructor design the questions so that a variety of thinking processes are required, from memorization to higher-order, critical thinking.

Based on revelations from effective questioning with clickers, an instructor can determine if she needs to review a certain concept or not. For example, using a core set of questions and clickers during the first week of class, a professor discovers that 88% of her students already have a good understanding of a particular concept. Consequently, rather than spend the next three sessions on the topic as she had in the past, she decides to change one day so a guest speaker can discuss practical applications of the concept.

The real power in clickers lies not in their technological circuitry or software wizardry, but in the opportunities they provide instructors and students to uncover what is known, thought, felt, or recalled and assimilate these discoveries into meaningful learning.



The Hot Five

The Center presents its top five list of our hottest online resources.

1

Greater Expectations
greaterexpectations.org

A report from AAC&U for undergraduate education in the 21st century

2

Babelfish
babelfish.altavista.com

A free translator capable of interpreting large bodies of text in many languages

3

University System of Ohio
universitysystem.ohio.gov

The latest news, press releases, and university information for all of Ohio's public institutions

4

Life Long Learning
psyc.memphis.edu/learning

An educational resource dedicated to lifelong learning research

5

Google Sites
sites.google.com

An online application that makes it easier to create a team website by sharing information.

Benefits of Clicker Use:

- Learning is socially constructed through a communication process involving dialoging, questioning, synthesizing, and additional questioning.
- Assessing publicly, but anonymously, such as with the use of clickers, students can see where they stand among their classmates.
- The feedback received from students can be used to modify or redirect instruction, prompt a discussion, or review previous content or experiences.
- Although the initial process of integrating clicker technology can be time-consuming, faculty find that the benefits of student engagement and learning far outweigh the work involved.

Clickers @ BGSU

After a two-semester pilot study that began in Summer 2007, BGSU will begin adoption and support of the Turning Point (TP) student response system this fall. The key elements in selecting the TP system are that it is cross-platform (with more options for Windows than Mac) and that it easily integrates with PowerPoint and Excel.

Beginning this fall, approximately 200 technology-equipped classrooms will be outfitted with a receiver and TP software to incorporate the use of clickers. Since the software is free for anyone to download, faculty, staff, and students can use it at their convenience, on or off campus.

Later this month and throughout the summer semester, the Center will be offering a series of three workshops on effective use of clickers in the classroom. For more information about effective teaching with clickers, refer to the Center's Resource Page or register for one of the upcoming workshops by visiting our website (<http://www.bgsu.edu/ctl>) or calling 372-6898.

Continued on back of issue

Did you know?

March 14, 2008 marked the second annual BGSU Teaching and Learning Fair. This year's event proved to be even more exemplary than last year. The thought-provoking keynote address came from Dr. Diane Halpern, "Applying the Science of Learning in the Classroom and Beyond." If you did not attend, or were not one of the over 100 faculty members who presented at the fair, you can get a feel for the event by browsing the collection of related materials at the T&L Fair website (<http://www.bgsu.edu/ctl>). You will find images from the Fair, list of presenters, and a PDF of Diane Halpern's PowerPoint presentation. Also, look for the presentation on the BGSU digital video-streaming server. Mark your calendar for the third annual Fair on February 6, 2009!

scheduled workshops

Tools Workshops

Workshops for technology tools to use in the classroom or for research

An Introduction to Classroom Blogs and Wikis

Thursday, May 15, 1pm-1:45pm

Advanced Blogging

Wednesday, April 16, 12:00pm-1:30pm

Wednesday, May 21, 1:00pm-2:30pm

Advanced Wiki

Friday, April 18, 12:00pm-1:30pm

Wednesday, May 28, 1:00pm-2:30pm

Film to Finish

Monday, April 14, 3:00pm-4:30pm

PDFs in the Classroom

Friday, April 25, 10:00am-11:00am

Audio Files with Audacity

Friday, April 18, 3:00pm-4:00pm

Thursday, May 22, 9:00am-10:00am

Extending the Classroom Experience with Podcasting

Wednesday, April 16, 2:00pm-3:00pm

Thursday, May 15, 9:00am-10:00am

Document Security

Monday, April 21, 3:00pm-4:00pm

Wednesday, May 14, 1:00pm-2:00pm

Learn about Second Life and Visit the BGSU "Island"

Wednesday, April 16, 9:00am-10:00am

Monday, May 12, 9:30am-10:30am

Introduction to Web 2.0:

Applications That Run in Your Internet Browser

Wednesday, April 23, 9:30am-10:30am

Advanced Web 2.0:

Online Office Alternatives

Tuesday, April 22, 1:00pm-2:00pm

Please turn to back for more scheduled workshops.

scheduled workshops

Tools Workshops Continued

Advanced Web 2.0: Tools and Multimedia

Tuesday, April 15, 3:00pm-4:00pm

Introduction to Clickers

Thursday, April 17, 3:00pm-4:00pm

Monday, May 19, 2:00pm-3:00pm

Clicker Basics

Monday, April 21, 12:30pm-1:30pm

Thursday, May 29, 1:00pm-2:00pm

Advanced Clickers

Thursday, April 24, 3:00pm-4:00pm

Wednesday, June 4, 1:00pm-2:00pm

Look for our next newsletter in June for more Summer workshops.

To register for one or more of our workshops contact the Center at:
ctl@bgsu.edu
419.372.6898

Effective Use of Clickers

The sections below contrast the integration of clickers in the classroom—HOTS and NOTS:

HOTS (Higher Order Thinking Skills)

Breaking Out: Mix up questions with lecture, activities, and discussions for reinforcement and to keep the mind engaged.

Movin' On Up: Focus on a variety of questions, especially application, analysis, synthesis, and evaluation (e.g. ask for an opinion).

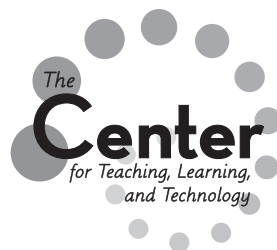
On the Fly: Create questions based on student responses or a new thought; have students work in pairs/groups to come up with questions during or out of class time and present it themselves.

NOTS (NO Thinking Skills)

Attendance Ally: "I'm only using clickers to take attendance." Informative feedback and assessment are the major benefits of using clickers (and there are much less expensive ways to take attendance).

Factoid-Folly: Questions focus only on memorization skills (Bloom's: knowledge and comprehension levels) rather than higher, critical thinking levels.

Captured Soloists: Students respond alone rather than discussing with a peer or several others. Allow them opportunities to discuss and challenge their thinking.



This newsletter is a publication of the Center for Teaching, Learning, and Technology. Visit us online at www.bgsu.edu/ctl/.