







CONFERENCE THEME:

EVIDENCE-BASED LEARNING & TEACHING



CONFERENCE PROCEEDINGS

June z - 5, zoll Bethesda, Maryland



Preface to the Conference Proceedings

Teaching and Learning Colleagues,

This year the Lilly Conference on College and University Teaching in Bethesda drew registrations from 350 individuals, coming from 115 different institutions, 35 states, and 6 countries. During the conference participants noted many opportunities to have meaningful conversations about issues related to teaching and learning. Particularly noteworthy about this particular conference is the focus on future faculty, with many graduate students presenting and participating right along with faculty.

The proposal submission process was very competitive this year. Based on a blind peer review process, 69% of the proposals were accepted overall. Of the total proposals submitted, 59% recived their top choice for presentation format.

The conference proceedings consist of three sections. The first section is comprised of papers written by presenters who agreed to capture material presented in their sessions. These papers were peer reviewed following the conference prior to acceptance into this document. For all of these authors, their conference presentations were accepted following a blind, peer review process. The second section are concurrent session abstracts. All concurrent conference sessions proposals were routed thorugh a blind peer review process and abstracts included in this document are the same as those that were included in the conference program. The final section are poster session abstracts. As with the other sections of the proceedings, these abstracts are the same as those that were included in the conference program. The poster sessions were also selected following a blind peer review process.

I am grateful to all of the individuals who presented their work at the Lilly Conference on College and University Teaching, Bethesda this past June, 2011. Conference evaluations, supported by anecdotal comments, clearly noted the quality of the session presentations, both in content and delivery. Of the many things that are needed to make a conference a success, conference presentations are by far the most important. This really is a group effort and I appreciate your willingness to help make this important event possible.

Todd Zakrajsek

Conference Director

1 oslel

June 2 - 5, 2011

2011 Lilly -DC Plenary Presenters



Dr. Robert Boice

Bob, Emeritus Professor of Psychology at Stony Brook University, is one of the most frequently cited authors in

the field of faculty development. He is particularly noted for his work in the area of assisting new faculty to get off to a quick and productive start in the academy and also for helping faculty to writing productively. Some of his early research focused on civilities in the classroom. Bob has received numerous teaching awards, and published several books and hundreds of peer-reviewed articles. His books include: Professors as Writers: A Self-Help Guide to Productive Writing, Procrastination and Blocking, and Advice for New Faculty Members. He is currently completing a a book about imagination and creativity as seen from the vantage of struggling new faculty. This recent work is drawn from his research on productivity and effectiveness enhanced by developing a the learned skills of imagination.

Pleneary Session Title: Improving Teaching and Writing by Mastering Basic Imagination Skills



Dr. Claire Howell Major

Claire is a Professor of Higher Education at The University of Alabama, where she teaches courses on collegiate-level

instruction and curricula. Her research focuses on teaching and research methods in higher education as well as on higher education in popular culture. Her first two books focus on instructional approaches: Foundations of Problem-Based Learning (with Maggi Savin-Baden) and Collaborative Learning Techniques (with Elizabeth Barkley and K. Patricia Cross). Her most recent books are An Introduction to Qualitative Research Synthesis (with Maggi Savin-Baden) and New Approaches in Qualitative Research: Wisdom and Uncertainty (co-edited with Maggi Savin-Baden). She has published more than 30 journal issues, articles, or book chapters, the most recent of which appear in The Journal of Higher Education, Teachers College Record, Higher Education, and Research in Higher Education. Claire received her Ph.D. in higher education from the University of Georgia.

Plenary Session Title: What We Know about Active Learning Methods...and Why We Should Care



2011 Lilly -DC Plenary Presenters



Dr. Norm Vaughan

An educator and researcher with interests in blended learning, faculty development, and K through 12 schooling.

Norm is an Assistant Professor in the Department of Education, and Faculty of Teaching and Learning at Mount Royal University in Calgary, Alberta. He recently co-authored the book *Blended Learning in* Higher Education (Jossey-Bass, 2008) and has published a series of articles on blended learning and faculty development. Norm is the Co-founder of the Blended Online Design Network (BOLD), a member of the Community of Inquiry Research Group, the Associate Editor of the International Journal of Mobile and Blended Learning and he is on the Editorial Boards of the International Journal of Excellence in e-Learning, Canadian Journal of Learning and Technology, the Journal on Centres for Teaching & Learning, and the Learning Communities Journal.

Plenary Session Title: Blended Learning in Higher Education: Promises and Pitfalls



Dr. Todd Zakrajsek

Todd serves as the Executive Director of the Center for Faculty Excellence at the University of North Carolina

at Chapel Hill. Previously, Todd was the founding director of The Faculty Center for Innovative Teaching (FaCIT) at Central Michigan University. Prior to that, he started the Center for Teaching and Learning at Southern Oregon University, where he also taught in the psychology department as a tenured associate professor. Todd has written two introductory psychology instructor's manuals for McGraw-Hill and a student study guide for Addison-Wesley. He received his Ph.D. in Industrial/ Organizational Psychology from Ohio University. He has provided workshop sessions and keynote conference presentations in 36 states and 4 countries in the past several years. He is also the recipient of a 2004 national innovation in faculty development award for the development of the concept of "The 5-minute Workshop."

Plenary Session Title: How Students Learn: Strategies for Teaching from Cognitive, Social, and Physiological Psychology



TEACHING AND LEARNING



THE LILLY CONFERENCE

CONFERENCE **PAPERS**



The Integration of Team Based Learning Strategies in Equine Science

Sheri S.W. Birmingham
Assistant Professor of Equine Science,
Otterbein University

Abstract

Team-based learning (TBL) is a form of collaborative learning that consists of four essential elements: 1) strategically formed, permanent teams, 2) readiness assurance, 3) application activities, and 4) peer evaluations. This instructional strategy has been implemented in a wide variety of disciplines, including human medical courses. However, at this time, there is a paucity of literature in the area of TBL and its application to equine science and veterinary medicine. This pilot attempt to introduce TBL into an equine science setting provides insight into the challenges and benefits of incorporating this type of teaching modality into equine pre-veterinary courses.

Issue being addressed

Due to many of the equine science courses being very content heavy, traditional lectures leave little time for active learning and application of knowledge. The author's goal of this study is to incorporate TBL into a traditional, lecture-based course in order reduce the amount of time spent on information transfer and encourage student preparedness. Through the application of knowledge, group discussion, complex problem solving, and peer review, students will develop a mastery of the course content and be better prepared for assessments in professional school. The challenges and successes experienced by the students and professor during this pilot attempt will be reviewed.

Literature review and background

The use of team-based learning strategies in professional schools is growing, as they are shifting from primarily knowledge-based exit competencies to ones of complex problem solving and the "integration of knowledge, skills, judgment and attitudes" (Goaverts, 2008). In order to help prepare pre-veterinary students for this type of assessment it is important to shift from the traditional lecture-based model to one that focuses on the active learner. Not only will this transformation allow for better understanding of the content, but it will create "students who can communicate, value teamwork, solve problems, acquire knowledge that is broad and deep, and do so for their entire career" (Sibley & Parmelee, 2008; Michaelsen & Sweet, 2008).

Learning objectives

- •Students will learn how to better prepare for classroom discussions by thoroughly reading and investigating course material prior to class.
- •Students will assess their level of understanding of the assigned readings by completing readiness assessment quizzes.
- •Students will engage in educational discussions with their peers in order to collectively complete group quizzes, which will better their understanding of the course material as they explain concepts to others and hear others' opinions in return.
- •Students will identify areas of information that they feel need more assistance in understanding and will provide the professor with these questions, in order to help guide the clarifying lectures.
 •Students will have the chance to apply their knowledge to a carefully designed question or prob-

lem that does not necessarily have one "correct" answer. These application activities require the student teams to: address significant problems that demonstrate the course materials usefulness; make a specific choice; and work on the same problem as other teams so that they are invested in others' rationales and conclusions.

Outcome

The student responses gathered from the surveys were overwhelmingly positive. Twelve of the sixteen students in the course completed the survey. The survey questions allowed the students to share their input regarding how they felt the TBL strategies affected their preparedness, understanding, and engagement in the course. All of the students reported that the group work and readiness assessment guizzes encouraged them to come prepared to class. Many stated that they focused more on the readings ahead of time because they "did not want to let their group down". The students all agreed that the readiness assessment quizzes helped them to assess what they needed to study more and what to ask specific questions about during the clarifying lectures. The majority (10/12) really liked the group quizzes and discussions. They pointed out the fact that through the exchange of ideas with others, they learned more about the material and tended to remember it better. Only two students did not emphatically approve of the group work. These students noted that it was only helpful if all group members did their part by preparing ahead, and that not enough time was spent on particular topics if one group member was struggling with a concept. All of the students stated that they felt that they were more engaged in this type of classroom setting, versus a traditional lecture setting. However, one student did mention that while they felt more engaged, they would like to see a bit more lecture in the course.

Overall, the learning objectives were met through the TBL strategies that were integrated over the course of the quarter. The student feedback allowed the instructor to identify areas of strength, as well as areas that needed more attention. The following quarter, more emphasis was placed on encouraging students to use the outcomes of the readiness assessment quizzes in order to come prepared with written questions to be addressed during the clarification lecture. This seemed to help those that felt they had not been able to spend enough discussion time on difficult topics. The survey results from the following quarter were again, unanimously positive. This pilot study has allowed for the author to develop TBL strate gies that may be used successfully in equine science courses and aid in future pedagogical research.

References

Goaverts, M.J.B. "Educational Competencies or Education for Professional Competence?" Medical Education, 2008, 42, 234 – 236.

Michaelsen, L.K. & Sweet, M. "The Essential Elements of Team-Based Learning. New Directions for Teaching and Learning, 2008, 16, 7 – 27.

Sibley, J. & Parmelee, D.X. "Knowledge Is No Longer Enough: Enhancing Professional Education with Team-Based Learning. New Directions for Teaching and Learning, 2008, 16, 41 – 53.



Using Real-Time Data Display and Analysis in Introductory Biology Labs

Michael A. Buckholt, Allison Hunter, Jessica M. Caron, and Jill Rulfs Dept. of Biology and the Academic Technology Center, Worcester Polytechnic Institute

Abstract

We employ classroom performance systems and Google Docs for real-time data collection and display in our biology laboratories allowing students to visualize class data as it is collected and perform statistical analysis. Students report that real-time data collection aids statistical analysis and understanding of the need for larger data sets. Benefits include the ability to recognize and address problems as they occur and provide students with a relative measure of their progress during the lab.

Introduction

It is the responsibility of faculty to rethink and redesign laboratory experiences to engage our current student populations in ways consistent with their experience, knowledge and preferences (Hofstein and Lunetta 2003). Students entering college in the 21st century are termed "digital natives" (Prensky,2008.) They have been exposed to the use of technology throughout their entire lives, and they gather information using formats and technologies not yet viewed as mainstream educational formats. They are used to constantly working in an environment where they control the speed, availability and access to information. Students today are younger than the PC and place value on being constantly connected (Frank 2000). Frank characterized these students with the "information age mindset" as preferring typing to writing, accustomed to multitasking and having zero tolerance with delays. As teachers, we should utilize available technology to engage students with the methods and means with which they are most familiar.

Methodology

In order to take advantage of students' use of media and to put laboratory data use and collection in a context students are familiar with we have developed a system using various electronic media for real-time display and subsequent statistical analysis of lab class data. We have developed two methods for accomplishing this. Initially we developed the method for real time display and collection of data using the Classroom Performance System (CPS) from elnstruction. This method utilizes the CPS's ability to collect numeric data. Students answer specific questions in their lab manual using the CPS "clicker" in student managed assessment (SMA) mode to input their data. Real time display is achieved by projecting the spreadsheet that is generated from the instructor's computer. The data can be downloaded as an Excel compatible file and posted for student use (Hunter 2010). A second method has also been developed employing Google Docs to collect the class data. This method is implemented by creating an account in Google Docs that all student in a lab section log into, then creating an appropriate spreadsheet. Student teams are each assigned a row number to use to input their data. Real time display is accomplished both by projecting from a computer logged into the account and viewing the spreadsheet on individual student computers logged in to upload data (Habib 2011). Surveys assessing student's attitudes toward the usefulness and ease of use were conducted to gauge student attitudes to the new systems, both CPS and Google Docs. Pre and post course tests were administered using questions based on the statistics that were introduced using the class data to assess student understanding of appropriate use of statistical tests.

Results

Overall student attitudes about the usefulness of real time data display were positive. Similar results were obtained for both the CPS based system and the Google Docs based system. Data obtained from surveys of 114 students using the CPS system showed the students regarded a number of aspects of the system favorably. For example, 73% of respondents felt it was important to see how their data compared with those of others and 71% felt data sharing gave them confidence in their results. Additionally, 97% reported that it allowed them to make connections between their data and that of the group with 86% reported that data sharing and analysis helped them understand the need for large data sets. A survey of 83 students who used the Google Docs system showed 89% felt that live data collection and display in lab was useful. 84% of students agreed it was easy to use and of 43 students that had experience with both methods 75% found the Google Docs method easier to use than the CPS method (Habib 2011).

Students in the initial courses using the CPS system were tested prior to the beginning of the lab and during the final quiz using questions to determine if they had made significant learning gains in statistical knowledge over the course of the class. Chi square analysis of the results from 114 students showed students had no significant gains on questions involving mean and standard deviation but did on questions involving linear regression (χ 2=9.57, p=0.0019) and analysis of variance (ANOVA) (χ 2=15.1, p=0.0002)

Discussion

Our results show that students feel that having real time data collected and displayed in the laboratory is useful to them in understanding their data as well as putting it in a larger context. They indicate that both of the methods we have employed are easy to use with the Google Docs spreadsheets being the easiest. Presumably this is a result of their familiarity with the technology and engaging them in ways that relates to their prior experiences. We documented statistically significant student learning gains in two kinds of statistics, ANOVA and linear regression, that we introduced during the course. However, we didn't realize gains in student understanding of mean and standard deviation. This is likely the result of the students' prior familiarity with mean and standard deviation as opposed to ANOVA and linear regression so there was less possibility for learning gains

These methods also have additional benefits in addition to student engagement and learning gains. Seeing all of the class data allows the instructor to see both overall and individual problems and intervene in a timely fashion. Students also self-reported that seeing the class data provided them with a relative measure of their progress during the lab so that they could see if they were running behind and the ability to self-identify issues with their experiment. Finally, both of these methods are not limited to use in a laboratory setting. They can as easily be employed in a lecture setting by having students collect or report data about themselves.

Citations:

- 1. Hunter, A., Rulfs, J., Caron, J.M., Buckholt, M. A. (2010) Using a Classroom Response System for Real-Time Data Display and Analysis in Introductory Biology Labs. Journal of College Science Teaching vol. 40, no.2, 19-25
- 2. Prensky, M. (2008). Turning on the lights. Educational Leadership 65: 40-45
- 3. Strommen, E.F., and Lincoln, B. (1992). Constructivism, Technology, and the Future of Classroom Learning. Education and Urban Society 24, 466-476



4. Hofstein, A., and Lunetta, V. (2003). The laboratory in science education: Foundations for the twenty-first century. Science Education 88, 28.

5. Habib, C. W., Use of Google Docs as Learning Aid in Biological Laboratory Application, Worcester Polytechnic Institute Interactive Qualifying Project. http://www.wpi.edu/Pubs/E-project/Available/E-project-042910-113323/unrestricted/Habib_Cameron_IQP_Final.pdf, 1/14/2011

Clicker Lending Program: Implementing an Innovative Classroom Technology

Autumn Caines, Elene Kent Ph. D., and Sharon Peck Ph. D.

Department of Information Technology and Business and Economics Department,

Capital University

Abstract

Engagement of traditional aged (18-22) college students has long challenged faculty members. This challenge seems to have intensified as the "millennial" generation has matriculated. One engagement strategy is the use of "electronic audience response systems" commonly known as "clickers" in the classroom. We explore the implementation of clickers in the classroom at a moderately sized (approximately 4,000 students) private university.

Teaching with Clickers

How to best engage our students? That is the question that college and university faculty all face. While there is considerable debate about whether or not today's students are less engaged than students from previous generations (Weimer, M., 2009), there is no question that they are more technologically involved (Zickuhr, K., 2010). As faculty members we believe that it is better to harness this technological involvement than to try to fight it. One way we do this is through the use of "electronic audience response systems" or clickers in the classroom.

What is a clicker? A clicker is a small electronic device that allows students to "vote" for the answer that they (or their group) thinks is correct. As the students "vote" their response is captured and visually displayed.

Why do we use clickers? Clickers provide a variety of benefits in the classroom. The following list of benefits is based upon our experience and the experience of others.

- •Anonymity: Clickers allow students to respond anonymously to the instructor's question. This is helpful for both the shy student who hesitates to participate and the eager student who experiences peer approbation for "excessive" participation.
- •Active Participation: Clickers encourage students to actively participate in the discussion. Everyone can see how many people have voted and can exhort the majority of the class to participate. While some students may simply select an answer, others may actually consider the question before voting. This active consideration can be enhanced by designing questions that require small group conferring prior to voting.
- •Fun/game aspect: Clickers are still relatively novel in the classroom and many students respond to the "fun" aspect, comparable to participating in a game show.
- •Visual review: The clicker "vote" remains visible to the entire class while the wisdom of each answer is discussed. Unlike the "show of hands" response that is the low tech version of voting, the

class can see the distribution of responses while the class reviews the various responses.

Supporting Clickers

Capital University supports the use of clickers with their Clicker Pilot and Lending Program sponsored by the Department of Information Technology. The program allows instructors to pilot the use of clickers in their classes for an entire term and then allows them to continue to borrow clickers on a daily or weekly check out after the pilot period.

What is meant by support? There are several different approaches to support and many have different definitions of what support means. The following is a list of support services provided by and brought about by the program.

- •Training and User Support: It is critical that faculty feel comfortable creating clicker slides and running polling presentations, at the very least. Once these basics are covered further training in saving and reporting on data that is collected during clicker sessions is then often desired and helpful. Furthermore, outside of training there should be additional support in place for those moments of emergency that require a more one-on-one approach to support. The program provides for both of these kinds of support as well as encouraging and facilitating faculty user meetings.
- •Software Support: As specific software is required for presenting the polling slides, the program worked to make sure that all classroom computers on the main campus are "clicker ready" with the software installed and ready to use. Because of this standardization and software support departments that have chosen to purchase their own clicker sets from the same company can benefit from being able to use this software across campus. The same software is used to create the polling slides and it is a free download from the clicker manufacturer's web site; allowing faculty to download the software to their office computers or laptops.
- •Hardware Lending and Support: The program maintains 150 clickers that are divided up into cases that provide a complete hardware solution for each instructor. A case is stocked with the number of clickers that an instructor requests, a base station device that plugs into the classroom computer and acts as a receiver, and some supplemental support materials such as quick start guides and cheat sheets on keyboard shortcuts. The program lends cases for an entire term (a classroom pilot) or for just a day or week.

References

Beckert, T., Fauth, E., and Olsen, K. (2009). Clicker Satisfaction for Students in Human Development: Differences for Class Type, Prior Exposure, and Student Talkativity. North American Journal of Psychology, 11.3, 559-611.

Martin, M. (2007). Clickers in the Classroom: An Active Learning Approach. Educause Quarterly, 30.2, 71-74.

Julius, J., Murphy-Boyer, L., Smith M.K., and Twetten J. (2007). Successful Clicker Standardization. Educause Quarterly, 30.4, 63-67.

Perkins, K. & Turpen, C. (2009). Student Perspectives on Using Clickers in Upper-division Physics Courses. AIP Conference Proceedings, 1179, 225-228.

Weimer, M. (2009). Student Attention Spans. Faculty Focus Special Report. Building Student Engagement: 15 Strategies for the College Classroom, 4.

Wood, W. (2004). Clickers: A Teaching Gimmick that Works. Developmental Cell, 7, 796-798. Zickuhr, K. (2010). Generations 2010. Pew Internet and American Life Project. Retrieved from http://pewinternet.org/~/media//Files/Reports/2010/PIP_Generations_and_Tech10.pdf



Rethinking Lab Manuals: Video Podcasts and Learning Preferences

Jessica Caron, Michael Buckholt, Allison Hunter, and Jill Rulfs Worcester Polytechnic Institute

Abstract

Educational technologies (e.g., computers, social software, personal response systems, and multimedia) have become commonplace in the higher education classroom; however, the full potential of this trend has yet to be realized in the laboratory setting. Using the Technology Acceptance Model (TAM), this study investigated the student acceptance and usage of podcasting in the undergraduate biology laboratory setting. The results indicate that students perceived benefits to podcasting for procedural aspects of the laboratory but not for the conceptual aspects that might be assessed on lab quizzes.

Technology Integration in the Science Laboratory

The science laboratory is a unique educational setting with technology needs and affordances that are separate and distinct from those of the traditional classroom setting. While a great deal has changed in the science laboratory in the past 20 years, much still remains the same and frequently students are presented with a paper-based laboratory manual containing cookbook-like recipes (Coopers & Kerns, 2006; M. Lee, Chan, & McLoughlin, 2006). As a result, students are not empowered to engage with the materials or collaborate with their peers. However, engagement and collaboration are both imperative if students are to gain an understanding of what it means to be part of a greater scientific community (Zivkovic, Bradley, Stemwedel, Edwards, & Vaughan, 2007).

Hofstein and Lunetta (2004) suggest that it is the responsibility of faculty to rethink and redesign laboratory experiences to engage our current student populations in ways consistent with their experience, knowledge, and preferences. For our current student population, the digital natives, this in many cases means integrating technology in to the curriculum (Prensky, 2008). The integration of technology, and in particular multimedia such as video podcasts and social software, into the laboratory setting may help us to achieve the charge of rethinking our curriculum (Dani & Koenig, 2008; Hofstein & Lunetta, 2004).

The Integration of Video Podcasts into the Laboratory

The laboratory manual is at the heart of any laboratory course. While it is often provided electronically, the document itself is most often static. The document often focuses a student's attention on the procedural aspect of the laboratory rather than engaging them in higher order thinking. The laboratory manual is one area in which technology, social software, and multimedia are having impacts in the laboratory (H. P. Lee, 2002). The incorporation of multimedia learning-on-demand materials into the laboratory manual has the potential to make the manual more accessible for students of all learning types (Pearson, 2006). In astudy by Crampton et al.(2008) students found supplemental video podcasts to be a useful tool in the laboratory and particularly in preparing for lab practical experiences (Crampton, Vanniasinkam, & Ragusa, 2008). This suggests that video podcasts may be useful as a supplement to the often static laboratory manual (Crampton et al., 2008). However, this potential can only be realized if students are accepting of the technology and willing to engage with it. Therefore, the ability to predict user acceptance and use is important.

Technology Acceptance Model

The Technology Acceptance Model (TAM) is a survey instrument used to gauge a population's acceptance of a given technology. Developed in 1989, the TAM is based on earlier work with the Theory of Reasoned Action (TRA) (Fishbein & Ajzen, 1975; Davis, 1989). TRA measures behavioral intent as judged by user beliefs and attitudes towards a specific action (Fishbein & Ajzen, 1975). The TAM specifically investigates user perceptions in four areas: Perceived Ease of Use, Perceived Usefulness, Intention to Use, and Attitude Towards Using. Taken together these have been shown to be a strong predictor of user acceptance and subsequent usage of a given technology (Abt & Barry, 2007; Davis, 1989; Gao, 2005).

Results and Discussion

The laboratory curriculum at this study site has been redesigned in an attempt to meet the charge of rethinking our curriculum as set forth by Hofstein and Lunetta (2004). In particular, video podcasts were developed to be used both as preparation tools and as Just-in-Time Teaching (JiTT) and learning tools to help students address procedural issues quickly and easily, allowing them more time to consider the conceptual learning tasks.

In the case of video podcasts, students perceived benefits in two of the four task areas investigated, preparing for the laboratory and resolving questions during the laboratory, but not in preparing for quizzes or writing lab reports. As these videos were developed specifically to demonstrate procedural aspects of the laboratory, it was predicted, and the data supported, that students would find the videos useful for those task areas directly relating to the laboratory. Students who used the video podcasts reported using them most frequently to review the laboratory procedure. Of note, 47% of students indicated that the video podcasts were of particular use in preparing for laboratory because they presented the procedural material in a visual format that allowed them to understand the lab progression and visualize the procedure. These comments were part of an interesting trend relating to student learning styles that was observed across open-ended student responses. Throughout the surveys, several open-ended responses were given that appeared to relate to learning styles. These comments came both from students who used the videos as well as from students who did not use the videos. These comments identified the videos as an alternative learning mode to that of text and often indicated the degree to which video was part of their preferred learning mode.

Students also reported using the videos during the laboratory. While several students (14%) did indicate that asking the instructor or TA was faster and easier, 25% indicated that they used the videos to preview or clarify a technique in the laboratory. Students did not find the laboratory video podcasts useful when preparing for quizzes or writing lab reports. The Technology Acceptance Model predicts that perceived usefulness impacts usage and the findings in this study do conform to this model. Students reported that they did not use the provided laboratory video podcasts for tasks where there was no perceived usefulness.

References

Abt, G., & Barry, T. (2007). The quantitative effect of students using podcasts in a first year undergraduate exercise physiology module. Bioscience Education E-Journal, 10(8) doi:10.3108/beej.10.8 Coopers, M., & Kerns, T. (2006). Changing the laboratory: Effects of a laboratory course on students' attitudes and perceptions. Journal of Chemical Education, 83(9), 1356.

Crampton, A., Vanniasinkam, T., & Ragusa, A. T. (2008). Microbial vodcasting – supplementing labo-



ratory time with vodcasts of key microbial skills. UniServe Science Proceedings Visualisation, The University of Sydney. 171-175.

Dani, D., & Koenig, K. (2008). Technology and reform-based science education. Theory into Practice, 47(3), 204.

Davis, F. D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of Information Technology. MIS Quarterly, 13(3), 319-340.

Fishbein, M., & Ajzen, I. (1975). Belief, Attitude, Intention, and Behavior: An Introduction to Theory and Research. Reading, MA: Addison-Wesley. Retrieved from http://www.people.umass.edu/aizen/f&a1975.html

Gao, Y. (2005). Applying the Technology Acceptance Model to educational hypermedia: a field study. Journal of Educational Multimedia and Hypermedia, 14(3), 237-247.

Hofstein, A., & Lunetta, V. N. (2004). The laboratory in science education: Foundations for the twenty-first century. Science Education, 88(1), 28-54. doi:10.1002/sce.10106

Lee, M., Chan, A., & McLoughlin, C. (2006). Students as producers: second year students' experiences as podcasters of content for first year undergraduates. Information Technology Based Higher Education and Training, 2006. ITHET '06. 7th International Conference on, , 832-841. doi:10.1109/ITHET.2006.339707

Lee, H. P. (2002). Comparison between traditional and web-based interactive manuals for laboratory-based subjects. International Journal of Mechanical Engineering Education, 30(4), 307.

Pearson, H. (2006). Online methods share insider tricks. Nature, 441(7094), 678.

Prensky, M. (2008). Turning on the lights. Educational Leadership, 65(6), 40-45.

Zivkovic, B., Bradley, J., Stemwedel, J., Edwards, P., & Vaughan, K. T. L. (2007). Opening science to all: Implications of blogs and wikis for social and scholarly scientific communication. Proceedings of the American Society for Information Science and Technology, 44(1), 1-3.

Yawns to Yoda: Using the Force of Success-Teams to Promote Student Community, Responsibility, and Success

Dr. Gladys Childs and Dr. Carol Johnson-Gerendas Philosophy and Religion, Communications Departments Texas Wesleyan University

Abstract

In this session, attendees will learn how to use the success team concept to facilitate student responsibility for team learning outcomes and experiences. We will explore how success teams encourage students to look beyond themselves to support fellow classmates. Real-life classroom examples and student success-team survey results will be shared. Attendees will leave with knowledge and tools to help them transform their classrooms into successful communities of learners.

With the impact of student collaboration, peer study groups (Gardner & Barefoot, 2010; Gardner, Jewler, & Barefoot, 2011), and success teams (Downing, 2010) on student success being well documented, the authors of this paper wondered how this concept would work with the particular student population found at Texas Wesleyan University. A great number of students are first-generation college students, commuters and come from difficult backgrounds. Many are minority

students who are struggling to pay for a college education. Could the theory and application of success teams as a tool for student success in the classroom and in college work with the authors' students?

The university had already begun learning communities among certain freshman and transfer classes. The idea being that the learning communities would help promote student community and success for improved retention. With the learning communities, two cross-discipline classes would be paired together to work on a common learning theme. The classes which are represented in this particular study were a freshman New Testament and a freshman English class.

At the second to third class meetings, students joined self-formed groups of 4-5 people to make the success teams. Their first task was to individually come up with a list of outcomes and experiences they wanted to achieve by being a part of the class. Outcomes deal with goals related to the course work/material being studied such as: getting an "A" in the class to having a better grasp of grammar to a better understanding of the characters in the New Testament. Experiences relate to feelings and relationship goals such as: having fun, making new friends, having creative classroom experiences and so forth. Then, the students shared their personal outcomes and experiences with the members of their success team. The group then jointly decided what they wanted as their success team outcomes and experiences for the class. Once the goals were decided upon, the students signed a success team contract which listed the outcomes and experiences and how they would support one another to reach these goals. Students were encouraged to exchange phone numbers and email addresses and contact one another if they noticed someone in their group was having a problem or missed a class and needed the notes or for any reason they thought was important. Some of the outcomes the students came up with were: meet class deadlines, stop procrastination, develop better discussion skills, gain knowledge and understanding and good grades. For experiences some of the groups said: safe learning environment, make friends, be healthy physically and mentally, laugh and learn, open discussions and healthy conversations.

As the semester progressed, the students were put into their success teams many times for discussions or group work in both classes. Also, a few times during the semester, the success teams met in both classes to discuss the progress they were making on their team contract and to make adjustments if necessary to their goals. At the end of the semester, the students were surveyed to determine the helpfulness of the success teams.

The voluntary success team survey was a likert scale consisting of twenty questions. The responses ranged from 1, strongly disagree to 5, strongly agree. Space was also provided for students to make additional comments. When asked, "Did your team members support your learning or success in the class?," a little over three-fourths of the individuals stated their team members contributed to their class success. The majority of students also reported they had a stronger sense of support and a stronger sense of fellowship in the class as compared to their other classes not containing success teams. Also, the majority of students wished they had success teams for their other classes. The most notable response came from the question, "Did your success team help make for a better class experience?" Eighty-one percent of students agreed or strongly agreed.

In terms of responsibility, the impact of success teams was felt by the students. When asked, "Did being part of a success team create a sense of responsibility to help your fellow team mates?," almost three-fourths of the students agreed or strongly agreed with this question. And, when asked did setting outcomes and experiences motivate you to take responsibility for their achieve-



ment, the majority of students stated that they did feel accountable to make them a reality.

Overall, the use of success teams in these two classes was positively received and aided in promoting student community, responsibility and success. However, it needs to be noted that using success teams in the classroom does place responsibility on the professor as well due to the fact that the instructor is made aware (through the contracts) what the students are wanting in terms of outcomes and experiences. While, the professor cannot mandate every outcome or experience come true, he or she does have enough control to significantly aid in these endeavors. It is also important for the instructor to regularly bring to the students' attention various outcomes or goals which might need special attention or more work to achieve.

In summary, the authors found the force of success teams to create student community, responsibility and success could not be denied. One student summed up her experience as such, "Our success team was one happy family. We were there for each other and concerned about teammates that were struggling. I wish I had this type of support in my other classes. All of us will keep in touch." May the force of success teams be with you and your students as well.

References

Downing, Skip. (2010). On Course. (6th ed.). Boston: Wadsworth.

Downing, Skip. (2010). On Course: Study Skills Plus. (1st ed.). Florence, KY: Cengage.

Downing, Skip. (2010). On Course I Workshop: Innovative Strategies for Empowering Your Students to Become Active, Responsible Learners. Monkton, MD: On Course.

Gardner, J. N. & Barefoot, B. O. (2010). Step by Step: To College & Career Success. (3rd ed.). Boston: Bedford/St. Martins.

Gardner, J. N., Jewler, A. J., & Barefoot, B. O. (2011). Your College Experience: Strategies for Success. (9th ed.). Boston: Bedford/St. Martin.

Inspiration in Action: Motivating Your Students to Achieve Challenging Goals

Steven D. Cohen
Department of Communication
University of Maryland, College Park

Abstract

As an instructor, you often have to motivate your students to achieve something great—something that seems out of reach. Your job is to eliminate the words "can't," "don't," and "won't" from their vocabulary and push them to go further than they ever thought was possible. In this session, we will explore how inspirational speakers lift peoples' sights and spirits and enable them to achieve challenging or irrational goals. We will examine the techniques that these speakers use to fire up their audience members and apply these techniques to classroom teaching scenarios.

Objectives

In this session, participants will

- •Explore the art of inspiration—specifically, how it works and why it works
- •Examine the verbal and nonverbal techniques that professional speakers use to motivate their

June 2 - 5, 2011

audience members

•Apply inspirational speaking techniques to classroom teaching scenarios

Workshop Outline

- •Define inspiration and compare inspiration to persuasion and charisma
- •Discuss the challenge of dissecting and delivering inspirational messages
- •Explore the impact of inspirational language
- •Examine the three main inspiration techniques: (1) holding out hope; (2) making the impossible appear possible; (3) believing in your message
- •View and analyze video examples
- •Discuss classroom teaching applications
- Conduct classroom role play exercise
- •Review key points

Activities

Clapping exercise

Participants will try to clap at exactly the same time as everyone else in the room

•Revisiting inspirational moments

Participants will discuss and dissect moments when they felt inspired

Using inspirational language

Participants will practice delivering particular speech excerpts to understand how professional speakers craft inspirational language

•Inspiring your audience in real time

Participants will use the techniques that they learned to craft and deliver an inspirational message on the spot

References

- Cohen, S. D. (2011). Public speaking: The path to success. San Diego: Cognella.
- Cohen, S. D. (2010, January). Becoming a powerful public speaker: Using imagery to captivate your listeners. Rostrum, 84(5), 15-16.
- Cohen, S. D. (2009, December). Leading through speech: How leaders champion their cause. Rostrum, 84(4), 11-12.
- Cohen, S. D., & Wei, T. E. (2010). Transmitting musical images: Using classical music to teach public speaking. Communication Teacher, 24(3), 115-121.
- Cohen, S. D., Wei, T. E., DeFraia, D. C., & Drury, C. J. (2011). The music of speech: Layering musical elements to deliver powerful messages. Relevant Rhetoric: A New Journal of Rhetorical
- Studies. Retrieved from http://relevantrhetoric.com/wp-content/uploads/The-Music-of-Speech.pdf
- Gallo, C. (2008, March 3). How to inspire people like Obama does. Bloomberg Businessweek. Retrieved from http://www.businessweek.com/smallbiz/content/mar2008/sb2008033_156351.htm
- Kouzes, J. M., & Posner, B. Z. (2007). The leadership challenge. (4th ed.). San Francisco, CA: Jossey-Bass.
- Stuckey, M. E. (1992). Anecdotes and conversations: The narrational and dialogic styles of modern presidential communication. Communication Quarterly, 40(1), 45-55.



Teaching Partnerships: Collaborating with Librarians to Teach Critical Thinking Skills

Lydia N. Collins & Michael Gutiérrez University of Delaware Library

Abstract

In today's highly advanced Information Age, it is essential that students utilize critical thinking skills to locate, evaluate and apply information to real-life situations. Working collaboratively, faculty and subject specialist librarians can design course curricula to provide meaningful problembased learning scenarios to engage students in developing research skills. This team based approach, involving faculty, librarians and students, is particularly transferable to real-world situations.

Issue Being Addressed

The challenge for librarians is to provide meaningful library instruction sessions that align with the curriculum as well as allow students to be fully engaged in developing research skills conducive to creating knowledge applicable to real-work settings or discipline specific inquiry. The ultimate focus of the library based instruction session is to design an active learning collaborative approach for successfully solving research inquiries. In this approach instance, students are presented with real life scenarios where they are required to propose a research question and identify appropriate information resources in the peer reviewed literature or other necessary resources. In order for this innovative approach, which utilizes problem based learning to prove effective, it is necessary for teaching faculty and subject specialist librarians to work cooperatively in designing course material and library instruction session content (Black, Crest, & Volland, 2001).

Literature Review

Design, delivery, and evaluation processes embody the characteristics of constructivist education. Learners construct their own meaning; learning builds on prior knowledge, making connections between old knowledge and new information; learning is enhanced by social interaction; and meaningful learning develops through authentic tasks (Cooperstein & Kocevar-Weidinger, 2004). These are the basic foundations which drive the collaborative process between librarian and faculty members. These proven best practices for collaboratively designing, delivering, and refining instructional experiences 'with and for' students advance librarians' 'learning about learning' through intentional interactions with students and sustainable relationships with faculty.

The significance lies in the importance future, new and existing faculty place on collaborating with academic librarians that will ensure success in the classroom and in conducting research (England & Pasco, 2005). The primary objective is to describe how librarians can be viewed as consultants rather than the traditional image of librarians. There are a variety of skills that librarians obtain and are underutilizing. These include, reviewing assignments for courses to identify possible research problems; such as lack of pertinent, alternative and current resources. There are also instances in which librarians serve on curriculum committees within university environments to ensure that research needs are met, based on regular curricular changes (Layton & Hahn, 1995).

Librarians have incorporated online technologies to enhance their instruction sessions to show

both faculty and students how technology can be used to build upon their information literacy and information technology skills. In addition, librarians have taken the initiative to take an active role in developing active partnerships, collaborating, advising, and conferring with scholars to find solutions to their unique research problems. These initiatives can be utilized within information literacy sessions or during individual research consultations or integration in course managements systems. Within information literacy sessions, librarians interact with students from multidisciplinary backgrounds as well as diverse learning styles. Some librarians are incorporating principles of best for library instruction by including: creating course-related sessions; assignment specificity, active learning tasks, and catering to a variety of learning styles.

Additionally, collaborative partnerships between faculty and subject specialist librarians can lead to the successful development of creative thinking, acquisition of information literacy skills, and the enhancement of life-long learning among students (Grafstein, 2002). Librarians and faculty members can co-create subject and course specific problem-based learning scenarios for use within information literacy sessions as well as throughout courses for research topic development. The use of scenarios can provide students an outlet to practice the necessary communication skills, leading to further student engagement with faculty and librarians throughout their research process. Problem based learning research scenarios allow students to develop their ability to pose research questions and adequately identify appropriate research resources with the combined expertise of teaching faculty and subject librarians (Miller, 2001). Overall, the potential for establishing faculty-librarian collaborative partnerships, with the librarian being seen as a consultant for research and curriculum design has tremendous benefits for all parties involved.

Learning Objectives

- •To increase awareness regarding the value of faculty-librarian collaborative partnerships.
- •To identify where librarians might align themselves as co-designers of curricula to achieve course goals.
- •To promote the expertise of twenty-first century librarians, dispelling traditionally established stereotypes

Outcome or Anticipated Outcome

Teaching faculty are asked to review their preconceived notions of the traditional role of librarians. It is necessary for faculty to evaluate their perceptions versus the current role of librarians as consultants in curriculum design and as collaborators in teaching information literacy in academia. It also becomes necessary for librarians to reassess their interactions with faculty members, and ensure that those with whom they work recognize their skill set and market themselves as more than mere bibliophiles. The collaborative partnership between teaching faculty and librarians, who are well versed with information literacy competencies as well as expertise with emerging technologies, will be a sustainable approach for incorporating active learning tasks and problem based learning scenarios into the curriculum to engage students with real life situations

References

Black, C., Crest, S., & Volland, M. (2001). Building a successful information literacy infrastructure on the foundation of librarian-faculty collaboration. Research Strategies, 18(3), 215-225. Cooperstein, S. E., & Kocevar-Weidinger, E. (2004). Beyond active learning: A constructivist approach to learning. Reference Services Review, 32(2), 141-148.



England, L. E., & Pasco, R. J. (2005). Information Literacy—Making it real! Community & Junior College Libraries, 12(3), 67-72.

Grafstein, A. (2002). A discipline-based approach to information literacy. The Journal of Academic Librarianship, 28(4), 197-204.

Layton, B., & Hahn, K. (1995). The librarian as a partner in nursing education. Bulletin of the Medical Library Association, 83(4), 499.

Miller, J. M. (2001). A framework for the multiple roles of librarians in problem-based learning. Medical Reference Services Quarterly, 20(3), 23-30.

If You Digitize It Will They Read? Digital Textbooks in the Classroom, The Advent of Digital Textbook Utilization: A Faculty Perspective

Peter Eberle, Business Instructor, Anthony J. Hoos, Adjunct Mass Media Instructor, and Jeanne Belin, Program Manager The Pennsylvania State University, The Eberly Campus, Fayette Business Program

Abstract

Complaints about costs of textbooks are commonplace, as are complaints about students unwilling to read for class. Can digital texts improve these problems? Will they be easily incorporated into the classroom? This proceeding discusses a recent digital textbook pilot project that was designed to address these questions.

Issue Being Addressed

E-book readers and e-reader applications for smart phones and PDAs have become quite popular. Not only is it increasingly difficult to keep up with the release of new devices and improvements on existing platforms, but digital books are on pace to outsell traditional books. At a somewhat slower pace than in commercial markets, digital technology is gaining a foothold in academia (Gielen, 2010). Certainly, one reason for this growth may be the desire to capitalize on the popularity of electronic devices with the student population; maybe this is the way to finally inspire students to read for class.

Circumventing the escalating cost of textbooks, documented widely in the popular press, however, is another reason for the exploration of digital textbooks. What remains to be seen is whether digital texts can either increase student participation or reduce costs. Moreover, what other practical and theoretical issues may arise as a result of digitizing classroom texts?

Background Experience

As a faculty member in Business who is deeply invested in strengthening pedagogy, I've spent much of the past eight years participating in a broad range of education conferences and technology-related pilot projects, experimenting with online course development, and attempting to leverage pre-existing student literacies to develop greater business competencies. Thus, the most current educational and real-world technologies (such as podcasting, Wiki-writing, online

forum discussions, social networking, and video conferencing) have routinely been deployed in my courses to enhance the curriculum and achieve learning outcomes.

Learning Objectives

The two-semester pilot replaced print textbooks with digital textbooks in order to explore the impact of digitization on pedagogy and student learning. With the exception of becoming experienced with digital reading, searching, and note taking, student learning objectives in the courses remained the same as with traditional delivery techniques: assessing the efficacy of business strategies; learning about marketing demographics; enhancing literacy skills through rigorous reading and writing activities.

Outcome and Anticipated Long-term Outcomes

Student participation in the digital texts was voluntary and had a rate of 61 percent participation. Less than 5% left the pilot and returned to hard copy textbook. While 70 percent of students reported that digital texts were likely to expand in higher education, and 80% suggested that the digital format enhanced class discussion, there was little evidence to believe that students read the assigned materials with any greater regularity than they did in classes with traditional texts. Over the next several years, the shift to digitizing will likely lead to more easily customizable texts that are compiled and delivered more quickly; greater expansion of open courseware; and federal funding pressures for e-learning and faculty

flexibility in content delivery. Additionally, simple cost shifting from students (paying full price for hardcopy text) to the universities (as students simply print the digital text at campus computer/printer labs) may occur, eliminating any true savings.

References

The Student Monitor LLC, 2011
Thoughts on the Impacts of Digital Textbooks on Students,
www.thefacultycafé.com, 2010
Digital Textbook Sales in U.S. Higher Education – A Five-Year
Projection, Rob Reynolds & Yevgeny Ioffe, 2010
Textbooks Digital Future, www.education.newsweek.com, 2010
Post Textbook World, Tom Vanderark, www.edreformer.com, 2010
E-textbooks: The New Best Sellers, Knowledge at Wharton, 2010
Can Technology Transcend the Textbook, www.campustechnology.com, 2011
Digital Directions, www.edweek.org, 2011



Study Smarter, Not Harder: Using Empirical Evidence To Teach Students How To Learn

Amanda C. Gingerich, Ph.D. & Tara T. Lineweaver, Ph.D.

Department of Psychology

Butler University

Abstract

Based on empirical research in cognitive psychology, we have developed several classroom mini-experiments that directly validate effective study strategies. We not only provide research evidence to support common claims about effective study techniques, but we also immerse participants in the activities we have developed to directly demonstrate the effectiveness of several specific study tips. Each mini-experiment engages students in data gathering and empirically demonstrates the efficacy of the recommended approaches to studying.

Issue Being Addressed

Cognitive psychology informs the accuracy of study tips that students can use to improve their learning. Although professors often offer useful tips to students, they may not know the basis for the recommendations they make, and students may not believe that the suggestions will significantly improve their classroom performance. We will demonstrate how to engage students in brief classroom activities that directly validate effective study strategies developed on the basis of empirical research in cognitive psychology.

Background

In this session, we will present empirical research in cognitive psychology that informs the accuracy of study tips that students are often given. For example, we will provide experimental support for the claim that studying should occur in a distributed (rather than massed) fashion (e.g., Pashler, Rohrer, Cepeda, & Carpenter, 2007). We will demonstrate how to engage students in brief classroom activities that directly validate effective study strategies developed on the basis of empirical research in cognitive psychology. For instance, we will model how instructors can structure learning to foster successful encoding of content by organizing the information and encouraging students to elaborate on the material, which has been shown to improve recall of information (e.g., Goodwin, 2007). During the session, we will not only provide research evidence from the cognitive psychology literature to support common claims about effective study techniques, but we will also engage session participants in activities we have developed and utilized with students to directly demonstrate the effectiveness of several specific study tips. In this way, we will share ways in which instructors can use the findings of research in cognitive psychology to enhance student learning. Each activity explained below involves a mini-experiment that engages students in data gathering and empirically demonstrates the efficacy of the recommended approaches to studying.

1) Massed vs. Distributed Practice: We will randomly assign conference attendees to one of two groups. One group will study the same list of words at three different points throughout the session (distributed practice); the other group will study the word list three times consecutively near

the end of the session (massed practice). Both groups will then complete a memory recall test, and we will compare their scores to demonstrate the benefits of distributed practice (e.g., Pashler, Rohrer, Cepeda, & Carpenter, 2007).

- 2) Divided Attention: One group of participants will raise their hand when they hear a certain sound; the other group will perform this same task while also searching through a list for city names. The difference in reaction times between the two groups will demonstrate how difficult it is to perform two cognitive tasks simultaneously and the benefits of instead focusing attention on one task at a time. Group differences will be compared to empirical research showing that task-switching results in lost time, especially when switching from familiar to unfamiliar tasks (Rubinstein, Meyer, & Evans, 2001).
- 3) Elaborative Encoding: All participants will read a list of word pairs (e.g., shark-turtle), but they will receive different instructions about how to think about the word pairs while they read them. A subsequent cued-recall test will reveal that those who processed the meaning of each word will show better recall than those who did not. Results will be compared to empirical research showing that correct recall of list words is higher when the words have been rehearsed elaboratively than when they have been rotely rehearsed (e.g., Goodwin, 2007).

Learning Objectives

- 1) To present eight study tips supported by research in cognitive psychology that can be shared with students and can be used to improve classroom effectiveness.
- 2) To model several classroom activities for use with students that illustrate relevant cognitive phenomena and that support the recommended study tips.
- 3) To share examples of methods that engage students as active participants in data gathering in the classroom and that model the effectiveness of utilizing empirical evidence to support the study tips.

Anticipated Outcomes

At the conclusion of our session, participants will:

- 1) be familiar with evidence from cognitive psychology that supports effective study techniques.
- 2) understand eight study tips and be prepared to share them with students who can use them to improve their own approach to studying.
- 3) recognize how to structure classroom activities in a way that engages students in the process of empirically demonstrating the effectiveness of several study strategies.

References

Goodwin, K. A. (2007). Dissociative effects of true and false recall as a function of different encoding strategies. Memory, 15, 93-103.

Pashler, H., Rohrer, D., Cepada, N. J., & Carpenter, S. K. (2007). Enhancing learning and retarding forgetting: Choice and consequences. Psychonomic Bulletin and Review, 14, 187-193.

Rubinstein, J. S., Meyer, D. E., & Evans, J. E. (2001). Executive control of cognitive processes in task switching. Journal of Experimental Psychology: Human Perception and Performance, 27, 763-797.



Related Resources

Bower, G. H., & Winzenz, D. (1970). Comparison of associative learning strategies. Psychonomic Science, 20, 119-120.

Carney, R. N., & Levin, J. R. (2001). Remembering the names of unfamiliar animals: Keywords as keys to their kingdom. Applied Cognitive Psychology, 15, 133-143.

deWinstanley, P. A., & Bjork, R. A. (2002). Successful lecturing: Presenting information in ways that engage effective processing. In D. F. Halpern & M. D. Hakel (Eds.), Applying the Science of Learning to University Teaching and Beyond (pp. 19-31). San Francisco: Jossey-Bass.

Roediger, H. L., III, & Karpicke, J. D. (2006). Test-enhanced learning: Taking memory tests improves long-term retention, Psychological Science, 17, 249-255.

The Girls are Alright: A Note on the Impact of Gender on Performance in a Computer Simulation

Elene P. Kent, Ph.D. & Sharon R. Peck, Ph.D. School of Management and Leadership Capital University

Abstract

Computer simulations are often used to provide business students with an opportunity to apply content knowledge. Research shows male and female students play video games with different degrees of frequency and intensity. Do computer simulations disadvantage female students due to their relative inexperience in gaming? A possible countervailing force is that women do better in academics. Our data shows no statistically significant difference in gender performance.

Statement of the Problem: Business programs increasingly utilize computerized simulations as a means of actively engaging students in the learning experience, as well as a means of assessing student progress in achieving learning outcomes. "One of the biggest advantages of simulations is that they offer the advantage of approximating the characteristics and dynamics of complex and realistic contexts, without the effect that manifest themselves in real-life contexts (Moratis, Hoeff & Reul, 2006)."

Computer simulations are one way faculty can meet the millennial students' prefer ence for both experiential learning and the use of technology (Jonas-Dwyer & Pospisil, 2004; Moratis, et al., 2006). Although the overall usefulness of simulations in the college classroom has been explored (Stephen, Parente & Brown, 2002), little is known about how individual students perform, as most of the research focuses on teams. There is still a great deal that we do not know about

computer simulations, particularly in terms of gender differences at the individual level of learning and performance. Male students play more video games than female students (Cohen, 2009). Does this experience transfer to performance in computer simulations? Female students tend to study more, and do better in college (Whitmire, 2010). Does this behavior translate to performance in computer simulations? That is, do male and female college students perform differently in computerized business simulations?

Methodology

All undergraduate business students at our university compete in a computer simulation as part of their required integrative or "capstone" business course. The game requires students to make strategic decisions. Decisions are inter-related and outcomes depend not only upon the students' own choices but the choices of others and/or "the computer."

We collected business simulation performance data from a convenience sample of students who graduated with a business degree between 2008 and 2009. The data were collected over two years (four semesters, one class each semester, from Spring 2008 through Fall 2009.) The data set included students' gender, graduating GPA (4.0 point scale), and entering ACT score (1 to 36).

Findings

The raw data indicated that females perform slightly better than their male counterparts. In our sample females were also found to have higher GPAs and ACT scores at entrance than males. We conducted an ANCOVA and then a linear regression to adjust for male/female differences in GPA and ACT scores. The linear regression analysis showed GPA to be a powerful and statistically significant predictor of the score (beta = 35.8, p = 0.007, α = 0.05 throughout). For each 1-point increase in GPA, Balanced Score Card score was expected to increase by 35.8 points. ACT score was not a statistically significant predictor (beta = 1.647, p < 0.452). After accounting for confounding by these two factors, it was found that there was no difference between females and males on the Balanced Score Card (difference: -2.2, F(1, 112) = 0.72, p = 0.397). For the Board Score, GPA was found to be an even stronger and statistically significant predictor (beta = 67.9, p < 0.001). In this model, ACT score was found to be a weak but statistically significant predictor (beta = 6.261, p = 0.002). We computed adjusted average Balanced Score Card and Board Score marks for females and males by holding GPA and ACT constant at the averages for the entire cohort and plugging in to the appropriate regression model.

Discussion/Conclusion

The females had better average raw scores on every measure: GPA, board score, Balanced Score Card score, and ACT score. These differences were statistically significant for ACT and GPA. Additionally, GPA is a powerful and statistically significant predictor of both Balanced Score Card and Board Score while ACT score at entrance was weak and not always statistically significant. The data suggests that studiousness and overall ability to perform in school is the best predictor of the performance on these simulations, not previous experience on computer simulations—of which we argue maleness might be a surrogate. Finally after controlling for the influence of both GPA and ACT scores, we concluded that females and males did not have meaningfully different Balanced Score Card or board scores.

The finding that males did not have an advantage over females was somewhat reassuring to the researchers. We were relieved that women students' performance on computer simulations

CONFERENCE PROCEEDINGS

Conference Proceedings



was not significantly below male students and therefore they were not disadvantaged in the computer simulations that are widely used in the business classrooms. The finding that women business students had significantly higher grade point averages than their male counterparts was not tremendously surprising. Emerging research indicates that women are entering and graduating from college at dramatically higher rates than male students (U.S. Department of Education, 2010). Women are earning better grades and are spending more time on schoolwork (Ogletree and Drake, 2007).

Which brings us to this conclusion: neither gender has an advantage by our use of computer simulations in the classroom. Furthermore rather than worrying about female performance in the business classroom perhaps we should be doing more, as educators, to provide male students with advantages in the classroom! This conclusion may not be surprising to our colleagues in education, however as business faculty focused on business students and our knowledge of the business world, this conclusion caught us off-guard.

References

Adobor, H. & Daneshfar, A. (2006). Management simulations: determining their effectiveness. Journal of Management Development 25 (151-168).

Cohen, A.M. (2009). Closing the gender gap in online gaming. The Futurist 43(6), 10-11. Jonas-Dwyer, D. & Pospisil, R. (2004). The Millennial effect: Implications for academic academic development. Paper presented at 2004 HERDSA Conference, Retrieved from: http://www.herdsa.org.au/newsite/wp/wp-content/uploads/conference/2004/PDF/P050-jt.pdf. Moratis, L., Hoeff, J., & Reul, B. (2006). A duel challenge facing management education: Simulation-based learning and learning about CSR. Journal of Management Development 25:213-231. Ogletree, S.M. & Drake, R. (2007). College students' video game participation and perceptions: Gender differences and implications. Sex roles 56:537-542.

Stephen, J., Parente, D., & Brown, R. (2002). Seeing the forest and the tress: Balancing functional and integrative knowledge using large-scale simulations in capstone business strategy classes. Journal of management education 26:164-193.

U.S. Department of Education (2010). The Condition of Education. Retrieved from http://nces.ed.gov/pubs2010/2010028_6.pdf

Whitmire, R. (2010). Why boys fail: saving our sons from an educational system that's leaving them behind. New York: American Management Association.

Preparing Future Faculty by Creating a Culture of Mentoring

Lisa Lucas, & Karen Johnson
College of Education, West Chester University

Abstract

One means to prepare future faculty is through mentoring. This presentation explores the process for creating a formal mentoring program in a University setting. How to foster mentoring relationships among faculty in order to enhance professional development in teaching, scholarship, and service will be shared, as well as how a formal mentoring program helps prepare faculty to be effective and responsive to the increasingly diverse student population and rigorous demands of a tenure track position.

Issue being addressed

How to create and sustain a formal mentoring program is the issued being addressed in this presentation. The session will be an interactive session that promotes discussion regarding the formation, challenges and success of the West Chester University mentoring program. The chair of the Mentoring Committee will share logistical, process information and feedback from the past two years of participants in the program. A current mentee will share the benefits of participating in the program, how the program enabled her to navigate through the tenure and promotion process and the plans she now has to transition from mentee to mentor.

The session will focus on how new faculty, who have the support of a mentor fare better as scholars and experience higher confidence and morale. Mentoring is one way in which new faculty can acquire the skills needed for a successful academic career.

How do junior faculty members acclimatize to an academic environment? How does one acquire the skills needed for a successful academic career? Mentoring has been identified as one way in which new faculty can acquire these skills, which have been described as: (1) understanding the underlying values, traditions, and unwritten behavior codes of academia; (2) effectively managing a productive career in academia; and (3) establishing and maintaining a network of professional colleagues.

Literature Review

Newcomers experiencing adjustment within organizations find that the most dramatic changes occur within the first year (Ostroff & Kozlowski, 1993). One response to this widespread problem is to formalize, plan and structure professional mentoring relationships (Allen & Eby, 2007). In order to help new professors feel a sense of community in their workplaces and to learn how to maneuver the ambiguities of the tenure system, mentoring and collegiality can help support tenure-earning faculty in understanding their complex environments and in adjusting and experiencing success more quickly.

Cullingford (2006) described the diverse needs of mentoring in an academic environment; there will be marked differences between the mentoring needs of new staff in different disciplines. Different faculties exhibit diverse subcultures, which will affect the nature of the mentoring relationship, especially in terms of its formality.

The mentoring relationship is also a private, reciprocal one that is oriented toward supporting growth. The process of dialogue, articulating perspectives and uncovering assumptions hold the potential to facilitate the growth of both individuals. Mentoring is a practice that can support both



the mentee and the mentor as growing individuals (Ragins & Kram, 2007).

Discover how institutions are now planning and actively encouraging mentoring relationships which would have not occurred naturally (Cohen 1995), by the introduction of formal mentoring programs. Formalized academic mentoring relationships involve an experienced professor (mentor) supporting a neophyte professional (Mullen, 2008). Effective mentors guide using their institutional knowledge of the norms, values and procedures of the institution and from professional experience. The ideal is for beginning faculty to become more quickly socialized to academia with the help of seasoned colleagues who serve as role-models and advisors.

Establishment of a mentoring culture in higher education could generate widespread cultural change. The goal of this session is to position more organizations so they can become learning organizations in which mentoring itself is widely practiced. Participants will network, learn and broaden their knowledge about the remarkable benefits of creating a mentoring culture at a university.

Learning Objectives

- 1. Share with participants a model for creating a formal mentoring program that can be replicated.
- 2. Highlight successful mentoring events that received positive feedback from participants.
- 3. Discuss the professional development needed for mentors serving in the program.
- 4. Contrast: Mentoring vs. New Faculty Orientation- how to merge both programs.
- 5. Share plans for expanding the current mentoring program to create a university culture of mentoring.

Anticipated Outcomes

This session will provide clear processes and procedures in order for participants to do the following:

- Form a mentoring steering committee
- Design professional development sessions geared towards the needs of Junior Faculty
- Create forums to enhance mentoring relationships
- Discuss the need for a balanced perspective regarding the challenges of being a new professor.

 References

Allen, T. D. & Eby, L. T. (Eds) (2007). The Blackwell handbook of mentoring: A multiple perspectives approach (Malden, MA, Blackwell Publishing).

Cohen, N. H. (1995). Mentoring adult learners: A guide for educators and trainers. Malabar, Fla.: Krieger.

Cullingford, C. (2006). Mentoring in education: An international perspective. Ashgate *Publishing Limited*.

Mullen, C. A. & Kennedy, C. S. (2007). It takes a village to raise faculty: Implementing triangular mentoring relationships, Florida Educational Leadership, 7(2), 24-27.

Ostroff, C. & Kozlowski, W. W. J. (1993). The role of mentoring in the information gathering processes of newcomers during early organizational socialization. Journal of Vocational Behavior, 42, 170-183.

Ragins, B. R., & Kram, K. E. (2007). The roots and meaning of mentoring. Mentoring handbook of mentoring at work: Theory, research and practice (pp.3-15). Thousand Oaks. CA: Sage. Zacchary, L.J. (2005). Creating a mentoring culture: The organization's guide. San Francisco: Jossey-Bass.

Active Learning in a Child Psychology Course: Understanding Play by Visiting a Children's Museum

Julie Newman Kingery, Ph.D. & Melissa L. Gray, B.A.
Psychology Department
Hobart and William Smith Colleges

Abstract

Fink (2003) urges faculty to shift from a content-centered to a learning-centered approach that asks, "What kinds of learning will be significant for students?" Significant learning experiences enable students to apply information, leading to greater retention of material. The goals of this paper are to: (a) describe an active learning experience that involved a class trip to a children's museum, (b) demonstrate the impact of this experience on students' learning, and (c) discuss other strategies for engaging students in similar courses.

Introduction

Facilitating students' understanding of developmental theories and milestones is a primary objective of undergraduate child psychology courses. Another goal is for students to understand development by observing children in naturalistic settings (e.g., preschool, playground). This type of applied experience parallels recent paradigms of college teaching, which portray students as "active constructors, discoverers, and transformers of knowledge" (Smith & Waller, 1997, p. 275). Also consistent with this approach, Fink (2003) urges college faculty to shift from a content-centered to a learning-centered approach that asks, "What kinds of learning will be significant for students?" In contrast to traditional lecture-based strategies, significant learning experiences enable students to evaluate, analyze, and apply information, leading to greater retention of course material (see Fallahi, 2008).

Guided by Fink's (2003) theory, the present study evaluated the effectiveness of a class trip to a children's museum aimed at helping students understand the developmental benefits of play (e.g., language, numerical and spatial concepts, problem-solving). The goals of this paper are to: (a) describe the museum trip and related assignments, (b) demonstrate the impact of this experience on students' learning, and (c) discuss additional active learning strategies.

Methodology

Participants: Participants included 61 undergraduate students enrolled in two separate sections of a Child Psychology course at a small liberal arts institution. One section (30 students, 27 female) participated in the museum trip (i.e., Trip group), whereas the other section (31 students, 29 female) did not visit the museum (i.e., Comparison group). All students learned about the developmental benefits of play through assigned readings (i.e., Hirsh-Pasek et al., 2009; Wenner, 2009) and class discussion. Before reading, students completed a pre knowledge assessment that included true-false, multiple choice, and short-answer questions. Approximately 1 week later, a post knowledge assessment was administered (i.e., after the readings and museum visit for the Trip group, after only the readings for the Comparison group).

Trip Preparations

The course instructor visited the museum and consulted with staff about specific exhibits and



the museum's policies for college visits. Other preparations included reserving a school bus, creating a knowledge assessment, and preparing the assignment and behavioral observation sheets. The class meeting prior to the trip was devoted to discussing the developmental benefits of play, preparing students for the tasks that they would accomplish at the museum, and reviewing the requirements for a post trip response paper.

Museum Visit

The class was divided into three groups, with each group observing a different function of children's play (i.e., language and literacy; numerical and spatial concepts; attention and problem solving). Within each group, students were further divided into teams of two to complete their observations. All students in the class visited the same two museum exhibits (i.e., Super Kids Market, The Berenstain Bears) and each team selected a third exhibit of their choice.1 Students were given approximately 2 hours to complete their observations. During the class meeting after the trip, students completed the post trip knowledge assessment and turned in a response paper requiring them to connect their observations with assigned readings.

Data Analysis and Results

A 2 X 2 (Group by Time) repeated measures MANOVA was conducted to examine mean changes on the knowledge assessment from pre to post for students in the Trip group relative to those in the Comparison group. Results revealed significant effects for time, F (3, 57) = 43.02, p < .001, η 2 = .69, and the group by time interaction, F (3, 57) = 8.26, p < .001, η 2 = .30. Follow-up univariate analyses for the interaction effect indicated that the Trip group experienced greater improvement than the Comparison group on certain aspects of the knowledge assessment. Specifically, students' scores on the short-answer question (i.e., mean number of developmental benefits of play listed) increased significantly from the pre to post assessment, F(1, 59) = 23.21, p < .001, η 2 = .28 (pre M = 2.23 for Trip and 2.77 for Comparison; post M = 6.10 for Trip and 4.13 for Comparison). Improvement on the true-false questions was marginally significant, F(1, 59) = 3.13, p = .08, η 2 = .05. At the post assessment, the Trip group also responded to an open-ended question about how the museum experience influenced their learning. Review of these responses revealed several common themes (i.e., understanding the benefits of active learning, greater knowledge of the benefits of play, understanding how play changes with age).

Discussion

Students who visited the museum demonstrated greater improvement on particular aspects of the knowledge assessment relative to students in the Comparison group. The museum trip may have impacted students' learning because it allowed them to apply what they learned in class while observing children's behavior in a "real world" setting. Many students commented that this trip allowed them to see course concepts in action and learn in a way not possible through lecture and reading alone. For faculty who do not have access to a children's museum, other activities include inviting children to class, having students host a "kids carnival" event, or incorporating service-learning with youth in the local community. According to Fink (2003), these types of experiences often lead to changes in students' knowledge and thinking that continue long after a course has ended. Future research should assess other active learning strategies to determine which are most effective and meaningful for students in child psychology courses.

References

Fallahi, C. R. (2008). Redesign of a life span development course using Fink's taxonomy. Teaching of Psychology, 35, 169-175.

Fink, L. D. (2003). Creating significant learning experiences: An integrated approach to designing college courses. San Francisco, CA: Jossey-Bass.

Hirsh-Pasek, K., Golinkoff, R.M., Berk, L.E., & Singer, D.G. (2009). A mandate for playful learning in preschool: Presenting the evidence. New York, NY: Oxford University Press.

Smith, K. A., & Waller, A. A. (1997). Afterword: New paradigms for college teaching. In W. E. Campbell & K. A. Smith (Eds.), New paradigms for college teaching (pp. 269-281). Edina, MN: Interaction Book Company.

Wenner, M. (2009, February/March). The serious need for play. Scientific American Mind, 20, 22-29.

Footnotes

1Additional information about the museum exhibits, including virtual tours, can be found at: http://www.museumofplay.org/.

The Co-teaching Experience in Higher Education--a Case Study

Rui Ma, Bedrettin Yazan College of Education University of Maryland, College Park

Abstract

Graduate student co-teaching is a well-established practice among higher education institutes. This paper will explore both the conceptual and the operational aspects of co-teaching, based on the co-presenters' experiences of co-teaching an undergraduate teacher preparation course. Using co-teachers' on-going reflective writings and work correspondence as original qualitative data for a case study investigation, the paper will focus on perspectives of the co-teaching experience as well as principles and collaborative skills that can help make co-teaching a successful endeavor. Moreover, the paper will reveal how the co-teachers grow professionally from this experience as future faculty.

Introduction

Cook and Friend (1995, cited in Hepner and Newman, 2010) proposed five basic models of coteaching: one teach, one assist; parallel teaching; alternate teaching; station teaching; and team teaching. Recent studies of collaborative teaching have suggested that it is beneficial to both teachers and students (Zhou, Kim, and Kerekes, 2011). Studies have also shown that collaborative teaching is effective in the face-to-face instruction mode in higher education settings (Williams, Evans, and Metcalf, 2010). Research studies based on the higher education setting reveal the following types of co-teaching: faculty members can co-teach with doctoral students; profes-



sors from different disciplines can co-teach an inter-discipline course; faculty can co-teach to demonstrate it to student interns in education departments (Williams, Evans, and Metcalf, 2010). Co-teaching as a teaching method can promote professional and personal growth of co-teachers. As a method for preparing future faculty members, co-teaching has many advantages due to the benefits of peer collaboration and support. There are few studies focusing on the co-teaching experience shared by two doctoral students in the higher education setting.

Methodology

Insights, descriptions, and reflections from real classroom co-teachers provide valuable information for those who consider implementing this practice. This paper will use a case study methodology using qualitative data collected from the two teachers who are also doctoral students in a school of education program.

Data analysis and results

The co-teachers' joint reflections on shared experiences provide a vivid picture of their collaboration, interactions and individual professional development. The data also honestly present the nuances of successes, failures, challenges, and all the up-and-down of a co-teaching process. The focus will be on how goals have been set, and how they have been met and what lessons have been learnt. The co-teachers' experiences also provide a model for reflective teaching, especially for future faculty members.

Discussion/conclusion

The paper will reveal the benefits of co-teachers making decisions about adopting a combination of different models flexibly based on the teaching needs, and specific teaching and learning situations. More importantly, they adopt those models based on each individual's expert area and teaching strengths. The paper also will summarize factors that influence co-teaching in this particular teaching experience.

References

Crow, J. and Smith, L. (2005). Co-teaching in higher education: reflective conversation on shared experience as continued professional development for lecturers and health and social care students. Reflective Practice, 6 (4), 491-506.

Grason, D., and McGowan, E. (2010). Collaboration as a Model: Co-Teaching a Graduate Course. Information Outlook, 14(1). 16-21.

Hepner, S., and Newman, S. (2010). Teaching is teamwork: preparing for, planning, and implementing effective co-teaching practices. International Schools Journal . 29(2), 67-81. Williams, J., Evans, C., & Metcalf, D. (2010). Team Teaching: A Collaborative Approach to Effective Online Instruction. National Teacher Education Journal, 3(3), 33-38. Retrieved from EBSCOhost. Zhou, G., Jinyoung, K., & Kerekes, J. (2011). Collaborative teaching of an integrated methods course. International Electronic Journal of Elementary Education, 3(2), 123-138. Retrieved from EBSCOhost.

Unexpected Relationships, Great Results! An Innovative Research Project

Marion Mason, Heather Feldhaus, Molly Marnella, and Frank D'Angelo Departments of Psychology, Sociology and Early Childhood & Adolescent Education Bloomsburg University

Abstract

The project combines quantitative and qualitative data on pre student teachers experiences in an urban practicum experience designed to meet the diverse needs of Elementary students and provides a model for research collaboration across university departments. For this project three seemingly unrelated departments, Early Childhood & Elementary Education, Psychology, and Sociology, joined forces to develop an assessment plan to enhance the Bethlehem Diversity Urban Practicum. This two week intensive practicum for Elementary Education juniors, seniors, and graduate students has taken place for five years in Bethlehem, PA. During those five years, pre and post surveys (qualitative and quantitative) have been given to over 180 students to evaluate their perceptions of and experiences with diverse learners. The data collected has been evaluated and refined by faculty researchers in order to enhance the learning experience.

Literature Review

Exposure to urban settings motivates teacher candidates to create relationships with students that transcend the prototypical teacher-student bond. The development of such relations breaks down potentially divisive barriers, which provides for an understanding of urban cultures as well as skills and teaching practices that assist in integrating important and vital curricular components for this set of diverse learners. (Duarte & Reed, 2004). Research suggests that the practical field experiences that most impact pre-service teachers in an urban environment dispel preconceived notions that children's behaviors in school indicate parental disinterest as well as stereotypes of urban children as violent, hard to disciple, and disinterested in the learning process (Cross, 1993). Effective field experiences also provide future educators the opportunities to feel more comfortable with cultural, behavioral, attitudinal, ethnic, and language diversities. Initial negative feelings are minimized through the constant fostering of intra- and inter-personal relationships with students. While skills are developed in the classroom environment, practical experiences create more of an impact on the pre-service teacher. (Manning, 2000).

Another important aspect of an effective pre-service teaching experience is time spent outside the classroom in the community that helps to diminish misconceptions and negative stereotypes of children being educated in urban school settings. Unless prescribed urban educational experiences are mandated, the learning set is potentially non-existent and thus the pre-service teacher enters the vocational realm with a diminished skill set. (Cruz, 1997).

Methodology

Our research assess the practicum program in an effort to optimize the experience pre-service teachers have and also to better understand the specific mechanisms that lead to positive outcomes as indicated by existing research. This involves yearly data collection and analysis as well as continual refinement of both the program and our assessment tools.

Our quantitative data consist of pre and post experience surveys that ask participants about their expectations of and experiences with the urban setting and diverse students, learning goals, curriculum and content, teaching methods, classroom climate, discipline, and the relationships



they formed with students, parents, and teachers. We use these data better understand participant experiences, to compare participant expectations and experiences, and assess the influence of demographic variables on these patterns. Our qualitative data come from pre and post experience essays in which participants describe their personal strengths and weaknesses, fears, what they hope to learn, and what they will take away from the experience. We use these data to better understand student perceptions of the program and to clarify patterns we see in the quantitative data.

Our collaborative efforts have led us to refine our methods. For example, analysis of a survey question about interactions between teachers and parents showed low student satisfaction ratings. This led us to ask whether this was a reasonable question given the infrequent opportunities students have to witness such interactions and also to seek ways to increase these opportunities. We have also changed question language in order to be more precise regarding what we are measuring. One question about making curriculum understandable to students was deemed too general to provide useful feedback, so we split it into three questions that address student understandings, how teachers follow curriculum, and the clarity of the curriculum. The qualitative prompts were initially a simple daily journal. We later decided that pre and post experience essays on more defined topics would yield more useful data.

Data Analysis

Our findings suggest that student experiences with the program are overwhelmingly positive. Participants have high expectations and 80% say that those expectations were exceeded. Expectations were exceeded particularly in the areas of forming relationships with students and teachers, classroom management, student ability and enthusiasm, and their own comfort and confidence within the classroom. Areas where students were less satisfied are the extent to which cooperating teachers relinquish control, not enough exposure to ESL or LEP students, and a lack of opportunity to control the lesson plans they teach.

Conclusion

We find that participants from rural areas are more satisfied with their experiences than those from suburban areas in the areas of teaching methods, planning, fairness, and discipline. Participants who grew up in schools with lower rates of diversity report that their experience exceeded their expectations in the areas of using time effectively, discipline, teaching methods, and building professional relationships

References

Cross, B. E. (1993). How do we prepare teachers to improve race relations?. Educational Leadership, 50(8), 64-65.

Cruz, B. C. (1997). Walking the talk: The importance of community involvement in preservice urban teacher education. Urban Education, 12(3), 394-40.

Duarte, V., & Reed, T. (2004). Learning to teach in urban settings. Childhood Education, 245-250. Hampton, B., Peng, L., & Ann, J. (2008). Pre-Service teachers' perceptions of urban schools. Urban Review: Issues and Ideas in Public Education, 40(3), 268-295.

Manning, M. L. (2000). Understanding diversity, accepting others: Realities and directions. Educational Horizons, 78(2). 77-79.

Beyond the Paper: Collaborative Teams, Multi-Media Wikis, and Undergraduate Research

Christopher Penna Department of English University of Delaware

Abstract

This session explores how undergraduate research can be both incorporated into the class-room and enhanced through collaborative work and the use of a multi-media wiki. Through a mixture of discussion and hands-on activities, participants will learn how these teaching approaches can be purposefully integrated into a variety of classroom settings and can result in greater student engagement and interactive learning. Participants will see examples of successful student collaboration from both literature and business writing courses.

Introduction

This session explores how using a multi-media wiki as a platform for undergraduate research can easily be incorporated into the typical course and can enhance interactive learning and lead to improved performance. In many disciplines we typically assess student learning through tests or by papers. While these methods may determine what students can retain and repeat, they often seem to fall short of encouraging deep engagement with the material. Moreover, these activities are at a remove from what we as faculty members practice professionally (Dean et al.).

Conceptual Framework

An important premise behind this session is that by guiding students through a research process similar to what we as faculty members engage in, that is, a process whereby they make "an original intellectual or creative contribution to the discipline" (Council on Undergraduate Research) and by providing them with a vehicle for presenting their work to a larger audience beyond the classroom, we create opportunities for greater student engagement and foster interactive, authentic learning.

This session considers how a wiki can be such a vehicle for student research. While there are a number of platforms available for students to engage in collaborative work, particularly blogs and threaded online discussions, a wiki that allows for multimedia content seems to offer several advantages. Unlike other options, a wiki with its multiple contributors presents to the reader the appearance of a fixed page or presence (though, paradoxically, one that can always be revised). Moreover is Guth is correct

- Writing on a public wiki promotes collaboration beyond the classroom;
- Publishing online leads to an increased sense of responsibility and more accurate writing;
- Knowledge sharing on a public wiki gives students a sense of empowerment. (Guth 2007)

In addition to these benefits, I encouraged students to consider how other media (video, sound, images) could affect and, perhaps, enhance their work. Finally, I wanted them to be aware of the recursive, process-oriented nature of both writing and research— something a wiki is especially apt at reinforcing.



Findings

Collaborative projects among students, of course, can always present challenges (Rice, 2009; Fredrick, 2008); however with careful planning and scaffolding of assignments, instructors can minimize these things. On the positive side, there are many benefits for the students. They often feel as if they have become experts in the topic they've researched. They are also inspired when they see that their site receives hundreds of visitors a day and when they get comments on their work from strangers. Moreover the wiki page itself is something of a tangible artifact with a presence that the typical student paper does not have.

Conclusion

Using a multimedia wiki for collaborative undergraduate research projects has several advantages. As one student noted, there is a sense of creating a legacy. Additionally working on a wiki more closely replicates the trial-error, recursive nature of research in the "real world," and gives the student a tangible learning artifact that persists beyond the class and outside the classroom.

References

Council on Undergraduate Research: Learning Through Research http://www.cur.org/about.html

Dean, James M. et al. "Collaborating to the Ends of the Earth: New Frontiers in Faculty- Student Research Projects in Literature and Journalism." Undergraduate Research in English Studies. Eds. Laurie Grobman and Joyce Kinkead. National Council of Teachers of English. (123-142) 2010 Fredrick, Terri A. "Facilitating Better Teamwork: Analyzing the Challenges and Strategies of Classroom-Based Collaboration." Business Communications Quarterly. 71 (439-455). December 2008.

Guth, Sarah. "Wikis in Education: Is Public Better? WikiSym 2007 International Symposium on Wikis

http://www.wikisym.org/ws2007/_publish/Guth_WikiSym2007_IsPublicBetter.pdf

Plourde, Mathieu. "Wikis in Higher Education" 23 May 2008

http://copland.udel.edu/~mathieu/wiki/resources/2008-5-

23 Wikis in Higher Education UD.pdf

Rice. J.A. "Devising Collective Knowledges for the Technical Writing Classroom: A Course-Based Approach to Using Web 2.0 Writing Technologies in Collaborative Work Tutorial." IEEE Transactions of Professional Communication.52:3 (303-315) 2009.

"Ten Best Practices for Wikis in Education." Technology Teacher http://itcboisestate.wordpress.com/2008/05/21/10-best-practices-for-using-wikis-ineducation/

Learner-Centered Assessments can Double as Learning Experiences: Creating Tests that Teach

John D Rich, Jr., Ph.D. Professor of Psychology Delaware State University

This article leans heavily on the theoretical framework of learner-centered assessment, which emphasizes problem solving, higher order thinking skills, the promotion of a sense of ownership in learning, and a dialogic approach to instruction. (Greenberg, Lester, Evans, Williams, Hacker, and Halic, 2009; Huba and Freed, 2000; McCombs and Vakili, 2005; Weimer, 2002) In creating an assessment that would not suffer from the same critiques I had identified above, it was important to identify my goals.

The goal of most course exams is to measure the degree to which students have studied and understood the material. The assessment rubric that this paper describes below changes the focus from evaluating learning to being a primary instrument of learning itself. This assessment is project-based in nature, involves the use of higher-level questions, and taps into prior knowledge and experience. I believe that this assessment has a profound potential to teach students skills, rather than merely facts, and to increase the depth of processing of course material.

At the beginning of the semester, students were introduced to the idea that questions could have differing degrees of depth. I explained Bloom's Taxonomy (1956), and explained that the primary method of assessment in the course would involve the creation of questions that were at Bloom's level of "application" and above.

There were four submissions across the semester. Each submission required the creation of questions and summaries of two chapters at a time. It was important that students attended my lectures with an understanding of each chapter, so that I might be able to tap into prior knowledge (Based on Piaget and Inhelder's [1973] theory of cognitive processes, it is believed that a person who can assimilate new information with prior knowledge should be able to absorb more of the information than a person who is hearing material for the first time; see also Mayer, 2003). Therefore, in order to ensure that students had read each chapter before I presented my lectures, an assessment was due on the day each pair of chapters was introduced. This first assessment required students to create 5 "application" questions for each of the two chapters – a total of 10 questions. It was hypothesized that students would understand more of the content of the text if they were required to create relevance by connecting the text to everyday life. Additionally, students were asked to create three questions about the reading which they did not understand. I reviewed these three questions for all students, and made sure to answer any questions which were asked by at least five students.

After each pair of chapters had been discussed in class, a second assessment was due on the same two chapters, which required students to create three summary sentences about the main issues the chapter had covered, a page of elaboration on each summary statement, and then 5 questions which integrated one concept from one of the chapters with a concept from the other chapter. It was hypothesized that students would understand the conceptual thrust of both chapters to a greater degree when they were required to synthesize or evaluate disparate material.

One session before each assessment was due, students were asked (but not required) to bring in their rough drafts, and trade submissions with up to three students. It was hypothesized that these comparisons would give students a basis for evaluating their own work, and that the discussions that occurred in class would help students "fine-tune" the communication of their ideas.



Student As Producer: The Video Lab Report

Jill Rulfs, Jessica Caron, Allison Hunter and Michael Buckholt Biology & Biotechnology Dept and Academic Technology Center, Worcester Polytechnic Institute

Abstract

Creating media in the 21st century is as basic a skill as writing a sentence (Aiken 2008)... or writing a lab report? The video lab report as an alternative to conventional written reports may engage students in ways more consistent with their experience and preference and may also enhance metacognitive skills. Using available freeware, we introduced a video format in our introductory biology labs to replace one required written report. Student and TA reactions are reported.

Introduction

Creating media in the 21st century has become as basic a skill as writing a sentence (Aiken, 2008). This holds true across many professional disciplines; at scientific meetings, oral presentations are a common means of sharing results with more immediacy than the longer time frame required for publication allows (Toft, 1998). In order to function as professionals, beginning as undergraduates, students need to learn both genres of communication generally used in the community of scientists (Bell, 2001).

At the undergraduate level, students are asked to write lab reports, often using a framework common to professional publications, in order to advance their learning of both content and presentation. In order to develop students' oral presentation skills, we introduced the multimedia lab report into our introductory undergraduate biology laboratory sequence. In addition to the reinforcement of skills in oral presentations, we hypothesized that creating a time limited video based report would have added metacognitive benefits. Multimedia authoring has been shown to have a positive impact on students' attitudes toward learning in general and cooperative learning, an essential component of scientific investigation, in particular (Hay, 1994). The format we chose, a ten minute audio-visual presentation, has the potential to make students' self identification of their conceptual and procedural learning integral to their planning and thus explicit in their presentation (McFarlane et al, 2000). We hypothesize that this will also make assessment of student achievement easier. The study reported here is a pilot study conducted over two, sevenweek courses in our introductory laboratory sequence.

Methods

Over the 7 week course of an introductory lab at WPI, students would normally submit 5 or 6 laboratory reports. In two of those courses, one of those reports was replaced by an audio-visual (video) lab report. Students were provided with program guides to facilitate installation, running and use of two software programs. CamStudio was chosen for Windows users, and QuickTime for Mac OS users. Use of third program, ScreenFlow, was also available for students without the version of QuickTime that supports screen recording. The final product was uploaded to a You-Tube account with a limited access URL for viewing by faculty and graduate students involved in assessing student work. Videos were limited in time to ten minutes. Students worked in teams to produce the final presentation. All of the students had prior experience with individually written lab reports and were provided with a rubric by which the video report would be evaluated.

Student responses to the process and the product were solicited through distribution of an anonymous questionnaire for which they received bonus points toward their grade. Focus groups of students and TAs were also conducted after the project was completed.

Results

Initial student concerns focused on problems with the software, the unfamiliarity with the recording aspect of the report, and the need to work with a partner. After the first trial, 67% of the students preferred the written over the video lab report and 17% preferred the video format. The remainder (16%) were neutral in their response. However, in the second class in the sequence, where >50% of the students had previously completed a video report, these numbers shifted somewhat so that 29% percent expressed a preference for video reports and 21% expressed no preference. 50% preferred the written format. In the first and second trials, 60 and 67% respectively of the students surveyed felt their video report adequately conveyed their understanding of the material, while 17 and 10% respectively felt it did not. The remainder were neutral in their responses. While the sample sizes were unequal (86 vs. 47 students respectively) and each survey was distributed to only one cohort of students, these results do suggest that familiarity and practice may have an impact on student attitudes and subsequently on their acceptance of the technology. This is in keeping with published reports on technology acceptance (Davis, 1989; Venkatesh, 2003) It also suggests that with repeated use, students will become more adept at conveying their understanding in a multimedia presentation.

Specific comments in response to open ended questions on the survey as well as from the focus group indicate that some students recognized specific benefits from the project. These include: "I felt like I had to understand it better to put it in a few words."; "I feel like it allows you to be more "connected" to your results."; "It was more of a teaching style...if you don't know the material, you cannot teach someone."; "It forced the group to come up with the most important aspects of the lab." Even people who did not like the format expressed metacognitive bases for their dislike: "You have to have a clear plan/outline of what you want to say, so its almost like you have to write a lab report before you record, which takes up a lot of time."

Responses from the teaching assistants were mixed, although most of their concerns related to ease of grading and use of the grading rubric. In regard to cognitive gains, one TA felt it was a better way to assess student's knowledge because "they had to explain it in a concise manner rather then a longer, more drawn out manner with a lot of superfluous information that does not help make the point the student is trying to convey". They did report that overall it took about the same amount of time as grading a written report, although since students worked in pairs, the time was actually less than for individual written report grading.

Conclusions

With practice student objections to the video lab report appeared to diminish. Some student responses as well as TA observations suggested metacognitive benefits. Additional comments suggest that the video lab report may appeal to students with different learning preferences ("I felt oral explaining was better for me to learn and understand what was going on in the lab"). This should be explored further in future studies.



References

M. Aiken, Empowering students through filmmaking, OnCue 30:12-13, (2008).

E. Bell, The future of education in the molecular life sciences, Nature Reviews: Molecular Cell Biology 2: 221-225, (2001).

F.D. Davis, Perceived usefulness, perceived ease of use, and user acceptance of information technology, MIS Quarterly 13: 319-340, (1989).

McFarlane, A., Williams, J.M., and M. Bonnett, Assessment and multimedia authoring- a tool for externalizing understanding, J. Computer Assisted Learning 16: 201-212, (2000)

C.A. Torn, Oral presentations at scientific meetings, Herpetologica 54: S67-S75, (1998)

Venkatesh, V., Morris, M., Davis, G.B., and F.D. Davis, User acceptance of information technology: Toward a unified view, MIS Quarterly 27: 425-478, (2003).

Effective Questioning for Student Engagement

Julie A. Schrock
Department of Education, Meredith College

Abstract

Instructors typically find the content of their courses highly engaging, but their students may not always share the same level of interest and may not always be able to understand the relevance of the course content. This paper examines how questioning strategies differ in traditional and constructivist teaching, and then the author describes a rationale for developing questions to help students understand the relevance of the content to engage students meaningfully in instruction.

Issue being addressed

The ability to develop and effectively pose questions may be one of the most powerful tools available to educators. It is estimated that teachers as between 30 and 120 questions per hour, resulting in about 1.5 million questions being asked during the course of a teaching career (Sadker & Sadker, 2006). Thus the ability to develop meaningful questions and question effectively is a critically important skill for anyone in a teaching role.

Literature Review

Asking questions can serve a variety of purposes in the instructional process including keeping students cognitively engaged, helping students and teachers identify gaps in understanding, and helping students rehearse information. Effective questions can also create disequilibrium, and serve as scaffolding (Woolfolk, 2007). In addition, questions can serve to focus student attention and help engage students in content that is to be presented by helping them make a personal connection with the content.

Early process-product research examined the relationship between teacher questioning and student achievement (e.g., Redfield & Rousseau, 1981; Winne, 1979). Questioning has also been examined using the IRE (initiation, response, evaluation) format (Mehan, 1979). In this format the

teacher poses question, the student provides a response, and the teacher gives evaluative feed-back on the response. Questioning from this traditional teaching perspective typically involves moving through a series of questions based on a planned agenda, most questions are recall, lower order, or closed questions, correct answers are praised, and the ultimate purpose of the questioning is to evaluate what students know (Chin, 2007). However, Dillon (1985) asserts that the overuse of the IRE format can result in a lack of student engagement. In constructivist classrooms, the nature of questioning is different. Questions are generally more open-ended, and the instructor responds to student answers in a non-evaluative way. Questions are designed to encourage students to elaborate on existing understanding and typically require high-order thinking (vanZee & Minstrell, 1997b).

More recently, Chin (2007) examined the questioning approaches used by teachers and identified questioning strategies that can help students make connections to new material and thus make learning more meaningful. Making learning more meaningful should lead to students who are more engaged in the learning process.

Newby (1991) examined four different types of motivational strategies employed by first-year teachers and found that establishing the relevance of material to be learned was more highly correlated with student on-task behavior than any of the other strategies examined in the study. Strategies that established relevance were those that helped students answer questions such as "Why do I have to learn this?" or "What is the value of this?" (p. 195). These strategies made the learning tasks seem relevant to the students' lives.

Thus, combining a constructivist questioning format with the idea of helping students understand the relevance of content to be learned should result in student engagement. For example, in an undergraduate educational psychology course, one question the author has posed to students is "Consider the courses you are taking this semester. What are you learning that you expect to remember for the long-term, well beyond the time the course ends, what content do you expect to forget as soon as you finish the final exam and what makes the difference?" After students have had time to think about their response to this question, they are given the opportunity to share their thoughts. Responses are recorded on the board in two separate columns: remember and forget. Students are asked to consider their responses during a brief lecture on the information processing view of learning. Afterwards, students are asked to explain their initial responses based on the information processing system. What about the way the content was taught will result in long-term learning based on the information processing system, and what about the way the content was taught will result in quick forgetting, based on the information processing system. This question and the way it would be posed would be considered constructivist because it is an open-ended question, there is no one right answer. It requires higher-order thinking, students must analyze and evaluate their experiences, and all responses are accepted and acknowledged. As a result of participating in the questioning strategy, students have a personal experience to use to engage meaningfully with the content, and they connect the new content to existing experience, which should result in meaningful engagement and long-term learning. Anticipated Outcomes: Implementing this strategy should result in a number of desirable outcomes for course instructors. One, instructors must consider ahead of time how and why the con-

tent they are teaching could be made relevant to students. Then, by posing questions that help establish the relevance for students, they are helping to make the relevance of the content explicit to their students, which should result in meaningful engagement. Also, asking questions that are



open-ended and for which there are no wrong answers should enhance student participation. Learning Objectives:

- Examine questioning from traditional and constructivist perspectives
- Participate in a constructivist questioning strategy designed to result in meaningful engagement
- Develop knowledge to effectively implement constructivist questioning strategies

References

Chin, C. (2007). Teacher questioning in science classrooms: Approaches that stimulate productive thinking. Journal of Research in Science Teaching (44), 815-843.

Dillon, J. T. (1985). Using questions to foil discussion. Teaching and Teacher Education, 1, 109-121. Newby, T.J. (1991). Classroom motivation: Strategies of first-year teachers. Journal of Educational Psychology, 83, 195-199.

Mehan, H. (1979). Learning lessons. Cambridge, MA: Harvard University Press.

Redfield, D., & Rousseau, A. (1981). A meta-analysis of experimental research on teacher questioning behaviour. Review of Education Research, 51, 237-246.

Sadker, M. & Sadker, D. (2006). Questioning skills. In J. Cooper (Ed.), Classroom teaching skills (8th ed. pp. 104-150). Boston: Houghton-Mifflin.

van Zee, E. H., & Minstrell, J. (1997b). Using questioning to guide student thinking. The Journal of Learning Sciences, 6, 229-271.

Winne, P. H. (1979). Experiments relating teachers' use of higher cognitive questions to student achievement. Review of Educational Research, 49, 13-50.

Woolfolk, A. E. (2007). Educational Psychology (10th Edition). Boston, MA: Pearson/A.B. Longman.

The Application of Autobiographical Research and Transformative Learning in the Intercultural Communication Class

Hui-wen Tu Liberal Arts & Sciences Berkeley College

Abstract

In a college locates in NJ that comprised with student population of 31% Hispanic, 29% African American, 17% Caucasian, 4% Asian, and 19% of others, the learning of "Intercultural communication" benefit students' campus life. The instructor applied transformative learning and autobiographical research in a course project to refine students' communication skills. Through a systemically self-reflection and interview on intercultural communication experiences, the factors that contributed to positive or negative communication experiences are identified.

Introduction

The world is changing. Globalization changes our world, including our campus. Although students throughout the world no longer see the US as the primary place to study (Douglass & Edelstein, 2009), the number on international student population has been constantly increasing

in graduate and underrates programs (Fischer, 2009). Including the US foreign born students (with green card or citizenships) and the second generations of new immigrants, the trend of cultural diversity is adding up. Recent studies have shown that friendly environment. Acquisition of cultural knowledge and intercultural communication skills are deemed as crucial to create a comfort environment for cultural diverse students (Douglass & Edelstein, 2009; Zimmermann, 1995). In many cases faculty and students' cultural bias and self-center affect the learning and practice of intercultural communication. Individual self-fulfillment over acceptance of foreign ways of life blocks communication between students of different cultural groups (Oludaja, 1993; Douglass & Edelstein, 2009). To remove individuals' cultural bias and to facilitate the learning of intercultural communication skills, the instructor of Intercultural Communication class applied autobiographical research to students' research project. The aim of the class assignment has two folds: promoting transformative learning by students' self-reflection and evaluation on their own cultural identity; and refining communication skills though an in-depth interview and observation with an individual from other cultural group.

Methods

Autobiographical research is an approach of human life thought the author's point of view. From the reflections on life history or experiences, individuals' impressions on what and why the events happened present individuals' unique ideas and understandings on the observed phenomena (Rankin-Brown M. and Fitizpatrick, C.,2007; Solas, 1992). In this study the instructor apply autobiography research as a tool for students and the instructor to understand students' cultural bias and cultural preference.

Students are required to complete a research project—the collecting of Intercultural communication experience by autobiography writing. The whole research project is divided by 4 parts: First, student describes who she/he is and explains his or her cultural identity, and then each student will interview a person who came from a distinct cultural group (e.g., India, Native American, Chinese American). Students will write a description about this person, his and her original culture, and his/her experiences in U.S., includes the duration of living in the U.S., the environment, and the purpose of coming to U. S. Following students are required to explore the cultural patterns (beliefs, value, norms, and social practices) of that distinct cultural group and their own cultures, students may compare the two cultural practices. Finally students will review the first description about their cultural identities. Students will share their studies with the class in the final class presentation.

From students' class participation and research projects, 3 research questions are asked to evaluate the success of this study and course design:

- 1. Did students process critical thinking in the descriptions of their cultural identities?
- 2. Did students experience transformative learning in the process of interview and cultural observation?
- 3. Did students extend their understanding on cultural practice and cultural bias?

Findings

The data collection for this study relied on participants' self-descriptions. Data collected from 4 Intercultural Communication classes from Fall, 2009 to Winter 2010. 62 students participated in this study, 44 students are female, and 18 students are male. Students range in age from 21 to 56.



The class is a 300 level, which means only senior students could enroll to this class. The college comprised with student population of 31% Hispanic, 29% African American, 17% Caucasian, 4% Asian, and 19% of others. Not surprisingly, many of the students participated in this study speak more than two languages, and identified themselves as second or first generation of new immigrants. For the students who identified themselves with 2 or more cultural identities, they tend to believe that their cultural backgrounds help them to understand their participants' situations in US. Not all the students processed critical thinking while using autobiographical writing in describing themselves. For example, student Mark described himself as a local Brunswick guy, a common American man who works 5 days a week, and enjoys couch potato lifestyle during the weekend. For student like Mark who simply identified themselves as American, they tend not to aware of critical thinking in first stage of their writing. For students who have multi culturalbackgrounds, many of them process critical thinking in the first stage of their writing. However, for those who did not aware of critical thinking in first stage, later on many of them found they were processing critical thinking when compare the two cultural differences.

Most students declared they had experienced transformative learning in the process of this-project and in the final presentation. According to students' self-evaluation, they become more conscious about whom they are and their cultural practices, these students also feel more confidence in intercultural communication. Many of them identified that cultural distance between their own cultures and the foreigner's (their participants) cultural practices are the keys to their critical thinking and transformative learning. For students who interviewed the person came the similar cultural background, they feel their cultural background made them a good observer and good writer to describe and understand the process of acculturation. Most students agree that they learned their own cultural bias while conducting the comparison of the cultural practices. They also learned the cultural preferences from their own studies and their classmate's project presentations.

Discussion and Conclusion

The premise of this study is that individual actively and independently develops into the social condition of life surrounding them. In cross-cultural contact, cultural identity is always a product of continuously negotiation and adaptation. People may not always consciously aware of their cultural identities and bias when their communication styles and cultural preference fit into the main stream. In this study, autobiography study on one's cultural identity and the interview with someone from distance cultural groups are the strategies to promote critical thinking on cultural bias and cultural preference. Transformative learning is one of the results by which students reevaluated and revised their value system in order to understand their own satiations and other people's cultural practice.

References

Alkhazraji, K. M. (1997). The acculturation of immigrants to U. S. organizations: the case of Muslim employees. Management communication quarterly, 11(2), 217-265.

Bennett, J and Salonen, R (2007). Intercultural Communication and the New American Campus Change: The Magazine of Higher Learning, v39 n2 p46-50 Mar-Apr 2007. 5 pp 46-50.

Berry, J. W. (1990). Psychology of acculturation. In J. J. Berman (Ed.), Cross-cultural perspectives: Nebraska symposium on motivation (Vol. 37, pp. 201-234). Lincoln: University of Nebraska Press.

Brookfield, S. (1990). Using critical incidents to explore learners' assumption. In Mezirow, J. (Ed.), Fostering critical reflection in adulthood: a guide to transformative

& empancipatory learning (pp.177-193). San Francisco: Jossey-Bass.

Brown, L & Holloway, I (2008) The Initial Stage of the International Sojourn: Excitement or Culture Shock? British Journal of Guidance & Counseling. (v 36 n1 pp. 33-49) Feb 2008.

Douglass, J. & Edelstein, R. (2009). The Global Competition for Talent: The Rapidly Changing Market for International Students and the Need for a Strategic Approach in the US. Research & Occasional Paper Series. University of California, Berkeley, Center for Studies in Higher Education November, 2009

Oludaja (1993). Experiential Approach to Intercultural Communication. Paper presented at the *J*oint Meeting of the Southern States Communication Association and the Central States Communication Association, Lexington, KY, April 14-18, 1993.

Rankin-Brown M. and Fitizpatrick, C. (2007) A Confluences of Voices Negotiating Identity: An East Coast-West Coast Exchange of Ideas on Writing, Culture, and Self. Paper presented at the Conference on College Composition and Communication (CCCC), New York, NY, Mar 23, 2007.

Solas, J (1992). Investigating Teacher and Student Thinking about the Process of Teaching and Learning Using Autobiography and Repertory Grid. Review of Educational Research, v62 n2 p205-25 Summer 1992

No Accident: Catalyzing Teaching Excellence From the Start

Jan Worth-Nelson Interim Director Thompson Center for Learning and Teaching University of Michigan - Flint

Abstract

In a new faculty orientation pilot project, 15 new faculty from 11 departments were offered an array of pedagogical training and supports. Their participation required that they design one course each using best practices in syllabus design, learning outcomes, active learning strategies, and relevant measurement strategies. Built in were three categories of incentive stipends. Participating faculty praised the program but results in measurement agility and implementation of active learning strategies, while stellar in several cases, were mixed but promising overall.

Introduction

Many academic administrators believe, in a context of too much to do and not enough time, that the teaching component of a new faculty member's life can be taken for granted and that faculty will learn by trial and error and osmosis how to teach; it is the research/scholarship responsibilities that require support. In the Fall of 2010, the Thompson Center for Learning and Teaching (TCLT)



at the UM – Flint operated on a different premise: that, in fact, teaching abilities are not inherent, and that it made sense for the TCLT, which serves all four units on campus and reports to the Provost, to offer new faculty pedagogical training and support. Further, a campus-wide struggle with assessment practices, along with vigorous interest by a new provost toward active learning strategies, led the TCLT to the view that the "how" of assessment and enhanced learning strategies needed concrete and deliberate attention. Of 24 new faculty, 15 professors, from 11 departments and three out of four units, volunteered to participate in the Catalyst Course Design project. It required attendance at a series of workshops, development of a bestpractices syllabus with learning outcomes, active learning strategies and embedded measurement strategies. Each faculty was offered a participant stipend, a small fund to support active learning strategies, and an additional professional development stipend. In addition, CCD grants were awarded to two departments to support cross-course active learning.

Methodology

In Fall, 2010, the 15 new professors who volunteered to participate in the Catalyst Course Design project were asked to select one course from their Winter Semester teaching load and design it according to best practices and embedded assessment. They were required to attend a series of 10 workshops; develop a best-practices syllabus with learning outcomes, active learning strategies and embedded measurement strategies and meet with an evaluation expert in the Research Office. Most met individually with the TCLT director and with five Faculty Fellows. TCLT staff conducted class observations for 11 of the 15. Finally, each participant was required to submit a final narrative report with supporting documentation. Each faculty was offered a participant stipend, a small fund to support active learning strategies, and a professional development stipend. In addition, CCD grants were awarded to two departments to support cross-course active learning as an additional prod to active learning strategies in general on campus.

Results

Results after one year, while still being tabulated and assessed, are mixed but encouraging: new faculty praised the program and several produced dramatic results. Several participants struggled to adapt active learning strategies to their disciplines and to come up with ways to measure effects. However, their final reports reflected serious engagement with the foundational ideas of the project, and while results were not as richly implemented as we hoped, the prospect is good for further learning and, in short, enhanced individual and institutional commitment to teaching excellence. In fact, the CCD project has been recommended for continuance and appears on the latest draft of UM – Flint's emerging Strategic Plan.

Discussion/Conclusion

The instigating hypothesis for the project, that most new faculty do not come in with well-developed teaching skills, was supported by early evidence. Most of the volunteer group had taught few if any courses on their own, and most had little if any experience building a syllabus. In particular, they needed help on course design: the idea of devising measurable learning outcomes and connecting them to implementation strategies was very new. Most challenging of all was formulating active learning strategies: several participants asserted their lecture/testing sequence was, in fact, active learning and measurement enough. Others accepted the notion of

active learning strategies in principle but did not know how to create them for their discipline. But the discussions that the CCD program stimulated were a timely addition to campus culture, and the crossdisciplinary nature of those conversations was noted by many of the participants as highly valuable and generative to their pedagogy. Several new faculty said the first year already was too filled with pressures; they found designing a course around innovative principles a challenge – and asserted they thought they could do better in their second year. This actually is one of the hopes of the program – to develop a cadre of faculty open to best practices innovative course design and sensible notions of how to know if students are learning what we want them to learn.

References (used with faculty in the project)

Barr, Robert and John Tagg, "From Teaching to Learning - A New Paradigm for

Undergraduate Education," Change: Nov/Dec, 1995.

Boyer, Ernest. Scholarship Reconsidered: Priorities of the Professoriate. San

Francisco: Jossey Bass, 1990.

Medina, John. Brain Rules: 12 Principles for Surviving and Thriving at Work, Home,

and School. Seattle: Pear Press, 2008.

Palmer, Parker. The Courage to Teach. San Francisco: Jossey Bass, 1998.

Tagg, John. "Dispelling the Fog of Learning through SoTL," International Journal for The Scholarship of Tagghing and Learning Vol. 4. No. 2 (Ind. 2010)

ship of Teaching and Learning, Vol. 4, No. 2 (July 2010).



COLLEGE AND UNIVERSITY
TEACHING AND LEARNING



THE LILLY CONFERENCE

CONCURRENT SESSION ABSTRACTS



Bridging the Gap: An Exploration of Tensions between Pedagogical Reforms and STEM Students' Learning Needs

Emily Tancredi-Brice Agbenyega, Urban Education, Temple University

The need for pedagogical reform in gateway science courses is urgent; these courses simultaneously provide points of entry and act as barriers for students, particularly underrepresented minorities (URM) and females. Various pedagogical reforms in the sciences have been proposed to foster students' academic achievement; however, these reforms often insufficiently address students' perceived learning needs. This paper highlights a gap revealed in student/professor interviews between professors' pedagogical strategies and students' articulated needs. Creating spaces for professors and students to bridge this gap could be invaluable for all students striving to succeed in science courses.

Experiencing the College Clasroom, Experiencing its Contexts

Margaret Austin-Smith, University of Maryland, College Park

In this session, I take seriously the need to understand how students experience the college classroom and the ways of knowing they develop there. I take seriously the need to understand how students "construct their thought" (Freire 1993: 111) about the meaning they make of their classroom experiences. How have these meanings been shaped by their participation and successes in "test-taking cultures" (Valli and Croninger 2008), or "banking concepts of education" (Freire 1993)? I attempt to get at this through a series of open-ended, semi-structured interviews, conversations, dialogues, and focus groups with undergraduate students currently enrolled in several introductory-level sociology courses at a large, public university.

Teaching Students Research Skills: A Model for Integrating Information Literacy Instruction into the CORE

Calida Barboza, Library, King's College

King's College faculty from the Theology Department and the library collaborated to develop an information literacy module that was implemented in a revision of a course in the CORE curriculum. This presentation offers samples of a series of small assignments designed and selected to reduce students' reliance on websites of questionable authority and increase their familiarity with and use of high-quality sources for academic research. The assessment data gathered during this project shows that students cited a wider variety of resource types and fewer sources of questionable authority. Future modifications and reflections on the experience will be discussed.

Can We Talk? How to Lead Discussions about Race and Diversity

Pamela Barnett, Teaching & Learning Center,

Donna Marie Peters, Sociology, Mary Etienne, Teaching & learning Center,

Temple University, USA

Classroom diversity can lead to significant learning outcomes, both cognitive and affective (Gurin, et al, 2002). Ideally, students learn from the content and from each other. Yet students are often reluctant to talk openly in diverse classrooms as they fear saying something wrong or offending others. Professors may be as reluctant because of the potential for class conflict. The session will engage participants in a dialogue about diversity, modeling some practical strategies participants can then use for building groups of students that share motivation and trust.



Strategic group building is a powerful tool for ensuring productive, not damaging, conflict. **Setting Yourself Apart on the Academic Job Market: The Academic ePortfolio**Gabriele Bauer, Center for Teaching and Learning, University of Delaware
Paul Larson, Economics, University of Delaware

In these challenging economic times, academic ePortfolios serve as a powerful means to illustrate academic growth, scholarly engagement, and effective teaching practice. This session outlines how doctoral students can develop a reflective, integrative portfolio for the postgraduate academic job market. Students, guided by a conceptual framework, use Google Sites to create their portfolios. Participants will use the portfolio framework, discuss benefits and challenges for both students and instructor, and identify resources needed. A doctoral candidate will discuss how the portfolio creation enriched his teaching practice and development. Participants will consider ways to support academic portfolio creation at their institutions.

Cornerstones of Good Teaching: A Template for Improving Teaching and Learning Spencer Benson, Center for Teaching Excellence, University of Maryland, College Park

More than twenty years ago, the American Association of Higher Education (AAHE) published the brochure, Seven Principles of Good Practice in Undergraduate Education authored by Chickering and Zelda Gamson in 1987. The seven principles provide a tried and true framework for thinking about teaching, and student learning. Working with various faculty, we (CTE) have developed a template which we call "Cornerstones of Good Teaching." By cornerstones, we mean essential, basic principles that help guide teachers in the construction of courses activities designed to forge deeper learning understanding and student engagement. In this presentation, participants will learn about the three cornerstones and engage in a discussion on how they might apply them to their own teaching.

Breaking the Cycle: Helping Students Think Critically About Their Own Education David Blackmore, English, New Jersey City University

In this interactive workshop, we will explore the ways in which helping students analyze critically their past and current educational experiences can lead them to take a more active role in their university education and help them to break out of some of the more disempowering cycles of the educational system. I will explore some of the challenges of working with students who enter my urban university from woefully inadequate public school systems and offer specific instructional strategies for engaging students in an analysis of their own education. Through small-group discussions and brief writing exercises, I will engage workshop participants in an examination of their own educational experiences while modeling pedagogical approaches that can be applied across a wide range of disciplines.

Evaluating Your Teaching in Experiential Settings

Phyllis Blumberg, Director of the Teaching and Learning Center, University of the Sciences in Philadelphia Faculty teach in experiential settings including precepting students in clinical settings, supervising students in field work, mentoring graduate and undergraduate students in research, facilitating laboratory courses, and teaching in studio or performing arts courses. Many faculty may not self-evaluate their experiential teaching, despite the role that documentation and assessment can have in legitimizing and improving this teaching. Faculty lack tools to assess these types of teaching. Participants will discuss ways to

self-evaluate experiential teaching quality for improvement, professional development and for inclusion in teaching portfolios. Participants will self-assess the quality of their teaching in these experiential settings using setting-specific rubrics.

Myth about the Academic Quality: Teaching Quantitative Courses Online vs Face-to-face

Vigdis Boasson & Emil Boasson, Central Michigan University

There has been an on-going debate about the effectiveness and academic quality for online teaching, especially in numerically-oriented courses in finance. The main concern is whether online teaching could achieve the same level of academic quality, complexity and rigor as teaching in a traditional face-to-face setting. Academic debates on this question are inconclusive. Our study explores the myths about the academic quality in teaching quantitative finance courses online and compares the student learning outcomes of the same MBA finance course offered in an online environment versus in a traditional face-to-face environment.

Improving Teaching and Writing by Mastering Basic Imagination Skills

Robert Boice - Emeritus Professor of Psychology, Stony Brook University

This plenary session is based on current research serving as the foundation for a forthcoming book focused on building higher minds by way of learned skills of imagination. We've known since Darwin and Freud that where natural selection and its instincts ended, humans were then able to build higher minds by way of learned skills of imagination. But we are remiss in educating our professors to think and feel in mental images that allow new potentials for self-control and success. Research suggests that exemplary professors more often think, teach, and write in mental images than in verbal ways.

Exemplary New Professors: A Summary of 22 Years of Study

Robert Boice - Emeritus Professor of Psychology, Stony Brook University

There are fundamental differences in the behaviors of new faculty who are successful versus those who are not. Drawing on extensive experience studying new faculty, this session will be a discussion of a summary of information pertaining to what exemplary new faculty do "right out of the gate."

Engaging Students in Academic Writing with Annotated Bibliographies

Evan D. Bradley, Linguistics and Cognitive Science, University of Delaware Laura M. Evans, Family Science, University of Maryland, College Park

Writing literature reviews is an important research skill. Introductory courses often teach research writing via term papers, which can be overwhelming for students, leading to procrastination and poor quality papers. Additionally, instructing students to write quality research papers in limited time is challenging for instructors. Annotated bibliography projects can ameliorate these problems, letting students focus on the research process, and giving instructors flexibility to monitor progress, check group collaboration, and adapt projects to different student populations, subjects, and schedules. Rubrics and examples of annotated bibliography projects will be presented, and suggestions for customizing them for various situations will be discussed.



Collaborative Teaching: The Good, the Bad, and the Ugly?

Thomas Broyles, Agricultural and Extension Education, Virginia Tech Susan Clark, Human Nutrition Foods and Exercise, Virginia Tech Kim Niewolny, Agricultural and Extension Education, Virginia Tech Peter Doolittle, Learning Sciences & Technology, Virginia Tech

The practice of collaborative teaching in higher education has emerged in recent years. It is often characterized as a complex interweaving of scholarship in interdisciplinary studies and transformative education. Collaborative teaching models, however, are not the same to all scholars and educators. Approaches used to describe these practices often include: team teaching, co-teaching, and panel instruction. Drawing upon literature and current research, the purpose of this presentation is to explore the role of collaborative-based curriculum and instruction. Specific attention will be given to practical strategies to enhance interdisciplinary collaboration in higher education and the scholarship of teaching and learning.

Teaching for Student Empowerment

Drick Boyd, Eastern University

What do we mean when we say we want to empower students to take charge of their learning? Using the problem-posing approach of Paulo Freire and Ira Shor, this session will explore the dynamics of power in the typical college classroom, and explore ways in which we can legitimately empower students to actively participate in the content and process of learning in our classrooms.

Handy Little Avatar: How Teaching in the Virtual World Engages Identity, Connection and Culture

Gloria Clark, Pennsylvania State University

Increasingly, avatars have become an accepted way of interacting in the digital environment. From video games to Café World on Face book, students take the opportunity to change or enhance themselves before interacting with others. Four years of teaching in Second Life have revealed ways in which students construct identity in order to connect with a society where cultural cues are altered from their day-to-day perceived reality. This presentation will explore the intersections of identity, connection and culture within a virtual society.

Effective Strategies for Hiring the Best New Faculty Mary Clement, Teacher Education, Berry College

All who work in higher education have experienced the difficulties associated with a weak new hire. This session provides training for those involved in hiring new faculty, so that administrators and search committee members have the skills needed to select the best candidate. Topics include writing a clear job description, how to evaluate candidates' paperwork, how to write behavior-based interview questions that ascertain if a candidate can truly do the job, creation of objective guidelines for final decisions, and how to avoid illegal questions. Attendees will leave

with a blueprint for hiring quality faculty.

A College-Wide Graduate Teaching Assistant Training Course in Natural and Mathematical Sciences

Lili Cui, Physics, University of Maryland, Baltimore County

Suzanne Braunschweig, Interdisciplinary Science Program, University of Maryland, Baltimore County
To train teaching assistants and prepare graduate students to be future faculty, the College
of Natural and Mathematical Sciences at the University of Maryland, Baltimore County (UMBC)
created a one-credit GTA training course for all incoming GTAs. Designed by a group of faculty
members from the mathematics, chemistry, biology and physics departments, the course aimed
to improve participants' pedagogical knowledge rather than content knowledge. The course was
piloted in both Spring 2009 and Fall 2009 semesters. This presentation will cover the rationale,
design, execution, outcomes, and lessons learned from this pilot experience.

Have iPad, Will Travel: Learning Communities As Professional Development for a "World of Constant Change"

Charlie Crawford, Dean Business & Workforce Education, Tacoma Community College Andy Duckworth, eLearning, Tacoma Community College Becky Sproat, Library, Tacoma Community College Joann Munroe, eLearning, Tacoma Community College Mark Bieraugel, Library, Tacoma Community College Gina Hatcher, Business Applications Programs, Tacoma Community College

Following Wenger, White and Smith (2009) who note that "what is most interesting about the interplay of community and technology is our ability to learn together", the TCC eLearning department uses face to face learning communities for faculty development in eLearning. Putting a Kindle or an iPad in the learners' hands, the department engages faculty and professional learners in peer mentoring around digital fluency and experimentation and exchange around emerging technologies. This presentation addresses the question "Why use face to face learning communities for learning to teach online?"

Engaging Faculty and Professional Learning Communities to Find Scholarly Solutions for Your Teaching and Learning Challenges and Opportunities

Milt Cox, Founder of the Lilly Conferences, Editor-in-Chief, Journal of Excellence in College Teaching, Center for the Enhancement of Learning and Teaching, Miami University

We will sample a few highlights of last year's annual 3-day June workshop for those starting, working with, and or facilitating faculty and professional learning communities. We will then look for ways that you might apply this approach to your teaching and learning challenges and opportunities and perhaps turn the result into the scholarship of teaching and learning. There will be opportunities for questions and dialogue.

College Classroom Management: Taming the Unruly Elephant in the Room Michael Dabney, Teaching & Learning Center, Hawaii Pacific University

Effective classroom management has no one-size-fits-all model, but five simple principles provide clear guidance for a professor's choices, increase the chances of calm and order, reduce the probability of disruptive behaviors, and increase the trust that underlies successful learning. In this session we will (1) identify those principles, (2) learn to apply them to classroom problems, with examples from many sources, including the audience, and then (3) Leave the session with practical solutions to common problems, and empowerment to manage



anything that comes your way.

Getting My Bearings: The Year in Review In Our FLC on Critical ThinkingJulie Daoud, English, Thomas More College

Fifteen years into my teaching career, I decided that I wanted to make it a priority to rethink my teaching pedagogy. As a faculty member in English who devotes most of my time to reading literature and researching contemporary literary criticism, this meant putting down my primary research and revisiting a dusty black binder of practicum notes from graduate school to get reacquainted with of the philosophies and theories that have informed the way that teach. At about the same time that I was beginning to take a critical look my pedagogy—its origins as well as the relative efficacy as it has played out in the classroom over the last dozen-or-so-years, the SACS-inspired Faculty Learning Community (FLC)1 on Critical Thinking was developing through the work of our SACS liaison, Alana Ghent. This was certainly a boon for my momentum. In other words, the concurrence of the FLC on improving Critical Thinking through enhanced teaching was, to me, like finding myself in a high performance car on an autobahn with light traffic and high visibility: the conditions couldn't have been more optimal for me to put the pedal to the medal and to traverse a welcome road toward change. Even better, because the FLC offered a collaborative experience, I would be able to negotiate the experience—for better or for worse with fellow colleagues—each invested in exploring better roadmaps toward fostering critical thinking on campus.

Learnings from My Forty Years of Experience with Cooperative Learning Neil Davidson, University of Maryland, College Park

Since the late 1960's, a number of approaches have been developed for cooperative and collaborative learning in the classroom. A strong research base for cooperative learning includes outcomes such as enhanced student achievement, academic retention, development of critical and creative thinking, and positive group and intergroup relations. I have been involved in the development of cooperative learning for the past forty-plus years, and will share some of my learnings during that time period, including: considering the rationale for cooperative learning, my experiences with a variety of cooperative learning procedure, addressing effective techniques for classroom management with cooperative learning, and consideration of the critical elements of all cooperative learning models. Finally, we will reflect on the connection between cooperative learning and critical and creative thinking.

Getting to the Heart of the Matter: Structuring Affective Learning for UndergraduatesSarah DeHaas, Education, Juniata College

Although learning is considered to be primarily cognitive, the affective (emotion) channel plays a critical role in teaching and learning. Referred to as transformative learning (Mezirow, 1990, 1991), this approach can facilitate learners' understanding of content, knowledge, and skills. Undergraduates benefit from opportunities that require application of concepts to facilitate understanding (Krathwohl, 1964). By incorporating the affective mode within the concept application process, emotions facilitate undergraduates' understanding of ideas, reflection of attitudes and perspectives, and, as the end result, the development of professional behavior. This presentation will offer a teaching model for promoting learning through the use of emotions.

Blog and Wiki Journaling and E-Portfolios about Themes of Nature and Place Memory Engages Student Voices

Maryann DiEdwardo, English Department, Lehigh University

My original framework for teaching freshman English composition in computer enhanced classrooms based on Socratic Methodology Model, student-directed learning, E-portfolio, blog and wiki in learning communities engages student voices. Create a classroom community where students participate as active learners by technological friendly models. Through my own experience of basing my newest novel entitled The Passing Light on a travel diary, I create strategies based on the travel journaling of Thoreau. My students create E- journals as primary sources for essays. Writing based on keen observation and self discovery as a part of learning to write. Information processing generates active students.

Creating Engaging and Interactive Online Learning Environments with SoftChalk

Andy Duckworth, eLearning, Tacoma Community College

Alexis McMillan-Clifton, Written & Oral Communications, Tacoma Community College

Let's face it--much of the online text we post for student consumption, no matter how thrilling content-wise, looks flat and unattractive on a computer screen. Why ask students to read something that we would at best skim ourselves? Softchalk offers a way of overcoming flat-text syndrome, by helping us create attractive, inviting online presentations. This word processing-like software allows users to combine text, media, and activities to make content memorable and engaging. This session will illustrate why, when, and how to use SoftChalk and share some examples of how it is employed at Tacoma Community College.

Self-Reflection: Understanding Ourselves as Educators in the Context of Diversity.

Mary Etienne, Teaching and Learning Center, Temple University Pamela Barnett, Teaching and Learning Center, Temple University Donna Marie Peters, Sociology, Temple University

Self-reflection is a central aspect to learner-centered teaching (Brookfield, 1995). In particular, self-awareness is important for facilitators of discussions on issues of diversity because:

1. A deeper understanding of how our social identities inform our perspectives can empower us to better understand others and their social lenses. 2. Knowledge of how we interact in groups can improve our practice. 3. Our ability to speak openly and honestly can enable our students to do the same. This workshop will provide an introduction to developing self-awareness and using self-reflection as a tool for teaching in diverse classrooms.

Connections: Designing First- and Second-Year Courses for Integrated Learning

David Eubanks, Associate Director College Park Scholars, University of Maryland

In this session, participants will learn about a collaborative effort to redesign courses for ten interdisciplinary living-learning programs. We will review the ways faculty and staff revisited curricula and program outcomes, grounded courses in effective pedagogies, and aligned with a new general education plan. Participants will consider ways to enhance community with colleagues from other disciplines, redesign courses to meet shared learning outcomes, and update assignments in ways that facilitate active learning. We will visit questions of student engagement and academic rigor as we address the challenge of helping students make connections between courses, disciplines, and community.



Instructional Strategies that Work: Preparing Teachers for Diverse, Inclusive Classrooms

Amy Eva, Teaching and Learning Department, Seattle University

This study examines co-teaching curricular practices that integrate the perspectives of educational psychology and special education. Two teacher-researchers, partnered in revising a foundational course in teaching and learning, use survey-based results and observational data to identify the instructional strategies that are most frequently and effectively used by teacher candidates in the field. The outcomes contribute to the emerging research base on co-teaching and integrated teacher education programs and how they better prepare future educators for inclusive classrooms. Furthermore, the design of the project could provide a template for other programs engaged in self-study, formative evaluation, and subsequent program revision.

In the Mood, for a Science Related Career

Victoria Fawcett-Adams, Education, Shenandoah University

As a high school science teacher, I am familiar with the lackluster enthusiasm of students. This manifests itself as a lack of interest in the career sciences, and there is little motivation to choose a science career as an adult. This phenomenon has a trickledown effect on general academic achievement, college goals and career decisions. This researcher feels that the spark necessary for a renewed interest in the sciences can be fostered and nurtured, and that this negative trend will eventually be turned into a positive trend, to the benefit and interests of the United States.

Effectively Integrating Small Group and Teamwork into the Classroom

Sharmila "Pixy" Ferris, Communication, Center for Teaching Excellence, William Paterson University

Research repeatedly and consistently demonstrates the value of small groups/teams as a pedagogical tool. Group work allows students to engage in discussion, clarify their own and evaluate others' ideas, retain information, and become critical thinkers who take better responsibility for their learning. Yet merely having students work in groups does not automatically promote positive group outcomes. There are many factors to be considered in facilitating effective cooperative group processes. In this session we will examine some of these factors, drawing from the disciplines of Communication and Management. Participants will receive guidance on developing group activities, participate by engaging in some teamwork, and will leave the session with three group/ team activities that should be useful in most disciplines.

Cognitive Neuroscience Learning Theories Coupled with Technologies: A Conduit for Deep and Lasting Learning

Henry Findlay, Tuskegee University

Recent research studies have added much to the literature and our understanding of how the brain functions in teaching and learning. When mobile technologies are combined with cognitive neuroscience learning theories -- the intersection of cognitive neuroscience, education, and psychology, significant and deep and lasting learning can be realized. Mobile technologies, such as the cell phone, if properly built into the instructional process, can enhance the motivational levels and the academic performance of college students. This session will highlight how to use brain-based

research findings in conjunction with selected technologies to promote deep and lasting learning.

Enriching the Process: Integrating Technology and Promoting Student Learning through Institutional Collaboration

Richard Freishtat, Office of Pedagogical Support, Widener University Thomas Evans, Office of Information Technology Services, Widener University

This session highlights the way learning drives technology advancement through a "tag team" model of faculty enrichment. Collaboration between the Office of Pedagogical Support and Instructional Technology results in a comprehensive support for faculty looking to further integrate their teaching with technology and for the process of transitioning courses to hybrid/online format. Learn about and contribute to dialogue that highlights integrated efforts to foster pedagogical best practices and innovation integrating technology in ways that promote student learning.

Classroom Humor as a Means of Reducing Stress and Enhancing Performance

Patricia Friel, Social Sciences, University of Cincinnati, Clermont College

This presentation focuses on the role of humor in helping students reduce their anxieties about communicating in classroom settings, whether one-on-one, in small groups, or in public speaking contexts. A pilot instrument, referred to as the Multi-Modal Measurement of Response Domains (MMRD), was used as a pre- and post-test of students' anxieties following varied scenarios of students' and/or instructors' use of humorous jokes and stories in various classroom contexts. Results focus on the role of positive humor in building interpersonal relationships, establishing group cohesiveness, leveling the playing field for constructive competition and conflict, and aiding in critiques and feedback.

"Light Their Fires": Increase Motivation of At-Risk Students with Active Learning & Other Motivational Techniques

Kathleen Gabriel, Education, California State University, Chico

Many students come to college motivated, but when academics become strenuous, their enthusiasm waivers. To reach the pinnacle of the undergraduate college experience, graduation, students need to be engaged and connected, but they also need to develop self-discipline and perseverance. This interactive workshop will present proven practices and strategies for increasing students' engagement and motivation. First, examples of learner-centered teaching that engage & motivate students will be demonstrated. In addition, way to provide additional support and encouragement will be discussed. Participants will leave with ideas for increasing and stimulating their students' effort and performance along with a list of references.

There Is No "I" in Team-Based Learning: A Faculty Collaboration

Bernard Gee, Psychology, Hobart and William Smith Colleges Elizabeth Ramey, Economics, Hobart and William Smith Colleges Jamie Bodenios, Psychology, Hobart and William Smith Colleges

This interactive presentation will describe the experiences of an informal "team" of faculty at a liberal arts college using team-based learning (TBL) for the first time. We discuss the common practices we implemented, comparing and contrasting student learning outcomes. Results included positive student response, and enhanced preparedness for certain activities. In addition to our experience with TBL inside the classroom, we discuss the importance of the collaborative process we developed with each other outside of the classroom. We believe our unique contribu-



tion to this discussion lies in our insights about how our collaborative community enhanced our TBL experiences.

Frugal Innovations for Student Engagement: Collegial Sharing

Stephen Gilbert and Sally Gilbert, TLT Group

Technology can help faculty improve student engagement in courses—without adding unrealistic workloads for their students or themselves—even when money and time are especially scarce. Working in small teams, participants identify "low-threshold" course improvements and develop strategies and resources for sharing those improvements effectively, rapidly, and beyond the usual 5-10% of faculty colleagues. Worksheets and online templates enable easy development of paper bookmarks for collegial sharing.

http://tlt.gs/FISEwrkshpRESOURCES

The Use of Oral Presentation of Data Analysis in Student-Centered Classrooms to Enhance Learning)

Nirit Glazer, Education, University of Michigan

Given the importance of active learning, the course featured in this study includes oral presentation of data analysis to facilitate student learning. Despite the potential value of integrating oral presentation in a science course, it is unclear whether students perceive learning. This study investigates students' perceptions of their ability to create and analyze data in an introductory Chemistry course. Results show that students who were more active in the presentation assignment perceived learning more than students who did not present. The presentation will explore the teaching approach, main findings, and practical suggestions for implementation.

Challenges with Consistency in Teaching and Grading across Sections in a Multiple Section Course

Nirit Glazer, Education, University of Michigan

One of the main challenges in large science courses in higher education especially those with multiple sections, is to monitor what is going on at the section level and track the consistency across sections in both instruction and grading. In this session, I will explore the issue of consistency in teaching and grading across sections in a multiple section course, which is very important and until now not found much in the research literature. To cope with that problem, I suggest an assessment model that shows the combination of various assessment tasks of both formative and summative assessment.

How Do Students Construct Knowledge? An Examination of a Collaborative Research and Writing Assignment

Karen Gocsik, Institute for Writing and Rhetoric, Dartmouth College Laura Braunstein, Baker-Berry Library, Dartmouth College Cindy Tobery, Center for the Advancement of Learning, Dartmouth College

How do first-year college students craft their understanding of the many unfamiliar topics that they encounter? In this session, we will share findings from analyzing four years of a collaborative research and writing assignment. In this assignment, students composed a wiki article in Blackboard, which preserves the article's drafting and source history, permitting us to trace its evolution and to determine how students used sources to craft their understanding. Participants will be given various snapshots of the wiki assignment that students

produced and will work in groups to articulate what they see re: the evolution of knowledge.

Crossing the Digital Divide: Using Low and High Technology to Activate Student Learning

Char Gore, Health Information Management, Tacoma Community College Jennifer Sipert, Health, Justice, and Human Services, Tacoma Community College Melissa Stoddard, Emergency Medical and Health Services, Tacoma Community College Erik Laurentz, Administration of Law & Justice, Tacoma Community College John Miller, Nursing, Tacoma Community College

Learning curves for new tasks can be steeper for some students and faculty than for others, and each presenter in this session has developed one or more good strategies to lessen stress and deepen the student learning experience. For several of our presenters the key is to start with technology that we already use--cell phones, audio and visual files, simulations, games. For others, lecture capture, synchronous chat, and productivity suite tools are used in new and engaging ways. For all of our presenters, social presence is key, and technology is a bridge from new techniques to deeper learning.

Preparing Future Faculty for Institutional Fit

Morris Grubbs, The Graduate School, University of Kentucky Linda Worley, Mondern and Classical Languages, University of Kentucky

This interactive workshop focuses on strategies for helping future faculty discover the type of institution for which they may be best suited. With nearly 90% of faculty jobs in the U.S. located at institutions other than those granting doctoral degrees, U.S. graduates are wise to prepare themselves for work environments that are very different than what most of them have known in their graduate work. Strategies for preparing students to enter and succeed in the range of faculty work at their targeted type of institution, such as faculty shadowing and reflective writing, will also be presented.

Creating Teaching Community, Developing Faculty Self-Authorship

A. Baris Gunersel, Teaching and Learning Center, Temple University Pamela Barnett, Teaching and Learning Center, Temple University Mary Etienne, Teaching and Learning Center, Temple University

There is compelling research about self-authorship and the benefits of "learning partnerships" (Baxter Magolda, 1999, 2001, 2004, 2007, 2008). Our qualitative study on the impact of an intensive faculty development program applies these concepts to understanding the development of university educators. In this session, we will share main research findings from our study, invite participants to share and examine programs and experiences that have influenced their own self-authorship, and generate ideas about the types of programs, structures, and experiences that can create "teaching as community property" and influence faculty self-authorship as educators.

A Wrinkle in Time: Creating 21st Century Readers

Heather Haverback, Elementary Education, Towson University

As many 21st century college students are not engaging in reading for pleasure, reading scores for American adults continue to decline simultaneously. This study investigates how college students feel professors can assist them in becoming reengaged with reading for pleasure. The findings in this study indicate that college students are interested in reading for pleasure; however, they do not feel that they have the time. Tips for professors on how to reengage these students



include time, autonomy, and interactive tools, which will help to inform students and motivate them to be reintroduced and reengaged in reading for pleasure.

Civic Engagement, Service Learning and Scholarship in Practice: Defining and Evaluating Pedagogies for Active Learning

Lynne Heighton, Chemistry & Biochemistry, University of Maryland, College Park Amanda Berger, Lilly Fellowship Project, University of Maryland, College Park Steven Buzinski, Lilly Fellowship Project, University of Maryland, College Park Paul Dean, Lilly Fellowship Project, University of Maryland, College Park Theresa Donofrio, Lilly Fellowship Project, University of Maryland, College Park Abram Fox, Lilly Fellowship Project, University of Maryland, College Park Ali Selvi, Lilly Fellowship Project, University of Maryland, College Park Lenea Stocker, Lilly Fellowship Project, University of Maryland, College Park

With the revision of their general education plan, the University of Maryland created a new pedagogical category: scholarship in practice. Yet questions exist as to how scholarship in practice is defined and how it compares and contrasts with service learning and civic engagement. This mixed methods study seeks to identify the characteristics that instructors attribute to each term. Understanding current attempts at defining, valuing and incorporating civic engagement, service learning, and scholarship in practice into pedagogical practice will help highlight specific needs for future resources helping instructors, faculty, and administrators utilize all three pedagogical categories more effectively in their curricula.

Student Driven Library Instruction

Tolonda Henderson, Gelman Library, George Washington University

While active learning strives for instruction that is student-centered, it does not necessarily disrupt the dichotomy of the instructor as the owner of knowledge and students as recipients. In the context of library instruction, this session will introduce a student-driven approach that encourages students to think for themselves, values both the knowledge they bring into the classroom, and builds upon the frameworks with which they construct meaning. Inspired by the work of Paulo Freire, this approach invites students to generate content, make meaning, and set the pace of learning.

Using Rubrics, Peer Review, and Standardized Tests to Foster Metacognition about Writing among College Freshmen

Jennifer Herman, Director of Instructional Support, Niagara University

The primary responsibility to improve poor student writing is often delegated to required, first-year student composition courses. However, one semester is rarely enough time to help students develop from oft-mediocre high school writers to the proficient, scholarly writers demanded by faculty in upper-level courses. What first-year writing faculty can do, however, is develop in their students the ability to analyze a piece of writing, articulate the elements that add to that writing's strengths and weaknesses, and reflect on the quality of their own work. This session will demonstrate how one writing instructor used a combination of the writing section of the GRE, a holistic rubric objectively evaluating three fictitious student writing samples, and a peer review and self-analysis of students' own work to foster metacognition among first-year writing students.

Exploring How Peer Interaction Using Wikis Influences ELLs' Rhetorical Analysis: A Journey of Rhetorical Transformation

Nabila Hijazi, English, University of Maryland, College Park

Wiki use improves students' writing as it intellectually transforms them in ways that aren't prevalent in traditional classrooms. The monologic and dialogic writing tasks that occur in wikis have important implications for student participation. Students who are shy gain another vehicle to feely articulate their ideas and be more interactive. The study allows research and practice inform each other in ways that help develop pedagogical practices aimed at engaging ELL writers in 21st century academic literacy skills. Results from this study will contribute to a community of inquiry, discussion about curriculum design, and reflection on teaching and researching.

Engaging Students with Stories: Using Cases in Large Non-Major Biology Lecture Allison Hunter, Biology and Biotechnology, Worcester Polytechnic Institute

Non-major biology course curricula can become what is known in teaching lore as 'canned' lecture courses involving rote lectures, multiple choice tests, and few active learning pedagogies. However, non-majors biology is arguably the most important course a biology department offers because in today's world, every citizen needs a certain amount of biological literacy. Case methodology has been shown to engage students and has also become feasible in large lectures due to the use of personal response systems (clickers). Clicker cases were used in alternating units in a large non-major lecture and student's attitudes toward biology and learning gains were measured.

Thinking about Grading

John Immerwahr, Villanova University

Mark Twain famously remarked about the weather that everyone talks about it, but no one does anything about it. Grading is the opposite, we all do it, but we seldom talk about it. In this workshop we will use clickers (audience response devices) to isolate agreement and disagreement on several controversial questions about grades. We will then discuss (and debate) some areas of agreement and disagreement. The hypothesis for this session is that two competing models are behind many questions about grading, and we will discuss the implications of these models for teaching practice.

Building Community and Citizenship: Benefits of the Inside-Out Prison Exchange Program Michelle Inderbitzin, Sociology, Oregon State University

The Inside-Out Prison Exchange Program offers the unique opportunity for college students to share class with inmate students in a prison setting for a full quarter. This session will describe the basic model, discuss strengths and weaknesses, and will offer examples of successful class projects. The session will highlight the power of this transformative learning experience to build students' interest and civic engagement.

High Tech/ High Touch: Interactive Pens Integrate Traditional Skills and Digital Media in the Classroom

Kathy Jackson, Schreyer Institute for Teaching Excellence, The Pennsylvania State University Timothy Johnson, Landscape Architecture, The Pennsylvania State University

You have probably heard about the use of high-tech interactive pen displays that allow you to write or draw directly on a monitor. There are numerous advantages to these tools including, the



ability to go beyond traditional techniques and an all digital workflow. Yet there are many questions to be answered. Will these pens make much difference in our classrooms? How does their use influence design behavior and visual thinking? In this session we will share how we integrated these devices across our curriculum and discuss our preliminary findings from surveys on students' perceptions and insights of these tools.

Bringing Real World Experiences to the Classroom

Debra Jezek, Chicago Public Schools, Brighton Park Elementary

It is important for students to see the connection between what they are learning in school to what is going on in the real world. This is true at all levels of the educational process. In this session I would like to share the experiences I had as an observer and participant in a research lab at IIT and how I brought these experiences back to my classroom to enrich the learning environment for my fourth graders.

Educating the Masses: Fostering Active Learning and Student Engagement In Large Classes

Barbara Johnson, Health Policy and Management, Jackson State University

As enrollment of students increase and resource pools decline at colleges and universities, faculty often are at a loss when it comes to teaching essential content to large numbers of students. Classroom size, engagement of students, and evaluation of learning are frequent issues that challenge faculty time and energy. Evaluation of learning in large class settings often becomes problematic for faculty. This presentation will focus on teaching strategies and evaluation methods developed for an undergraduate course in healthcare management.

Promoting Active, Meaningful Learning

Prent Klag, College of Education and Human Development, Southern Utah University

Active, meaningful learning is achieving deep understanding of complex ideas that are relevant to students' lives. In recent years, researchers have formed a strong consensus on the importance of engaged learning in schools and classrooms. This consensus has stimulated the development of specific indicators of engaged learning. This action-based, experience-rich presentation will introduce participants to the indicators of engaged learning, show how they can act as a "compass" for reforming instruction, and demonstrate how sustained, meaningful student learning can take place in the classroom and the community.

Developing the OBTL Curriculum with Blended Learning to Enhance Student's Learning Effectiveness

Chi-hung Leung, Psychological Studies, The Hong Kong Institute of Education

The study aims to develop an OBTL curriculum in Early Childhood Education (ECE) to demonstrate exemplary cases of effective teaching and learning in the undergraduate ECE programme. The project will include continuous assessment, group presentation, self-learning, and individual assignment to assess students' learning outcomes. A self-learning system is setup in the e-learning for students to monitor their learning progress during the semester, including two on-line exercises and review of learning outcomes. The presentation was evaluated in self-evaluation, peer evaluation, and lecturer evaluation. A pre-post study and dual-scaling analysis were conducted to understand students' learning effectiveness of the

above courses.

A Portrait of the Student as a Young Wolf: Motivating Undergraduates

Darby Lewes, English & Gender Studies, Lycoming College

Using a highly trained service dog, Darby Lewes' highly irreverent, completely interactive and frequently unpredictable session is designed to help any teacher looking to develop students' enthusiasm, abilities and confidence and as an aid for anyone who is responsible for groups and teams. Described by Darby as "a pedagogical version of the Jerry Springer Show," the session invites participants to cheer, boo, race one another and a dog, compete for medals and handsome silver trophies, proudly wear ridiculous hats and learn subversive ways to motivate their students. And they do!

Active Learning, Globally

Carl Lundgren, Manufacturing and Mechanical Engineering Technology, Rochester Institute Technology Josh Turner, Mechanical Engineering Technology, Rochester Institute Technology Adam Walker, Public Policy, Rochester Institute Technology

Ten Rochester Institute of Technology and thirteen American University of Kosovo students formed teams to develop energy and environmentally focused enterprises in Kosovo. The AUK students have a policy and economics educational background while the RIT students are from a variety of majors. Both undergraduates and graduate students participated. The active, project based learning has resulted in a significant educational experience beyond the classroom.

The Co-Teaching Experience in Higher Education--A Case Study

Rui Ma, Education, University of Maryland College Park

Graduate student co-teaching is a well-established practice among higher education institutes. This presentation explores both the conceptual and the operational aspects of co-teaching, based on the presenter's experience of co-teaching an undergraduate teacher preparation course. Using co-teachers' on-going reflective writings and work correspondence (including postings on a collaborative web blog), as original qualitative data for a case study investigation, the presentation focuses on perspectives of the co-teaching experience as well as principles and collaborative skills that can help make the co-teaching a successful endeavor. Moreover, the presentation will reveal how the co-teachers grow professionally from this experience as future faculty.

What We Know About Active Learning Methods...and Why We Should Care

Claire Major, Higher Education Program, The University of Alabama

A number of recent books and articles have suggested that students are not learning as they should at institutions of higher education. These works often seem to place the blame squarely on the shoulders of faculty, in part for failing to hold students to high standards and in part for their failure to use teaching methods that actually improve student learning. In this session, we will consider the promises and perils of evidence-based teaching approaches in higher education, we will consider what research has shown about teaching approaches that have been documented to improve student learning in higher education, and we will consider participant experiences with various teaching approaches that improve student learning outcomes.



Turning Your Traditional Lesson Plan into an Active Learning Lesson Plan in 10 Minutes

Abby Mandel, Physical Therapist Assistant, Northern Virginia Community College

This interactive session will demonstrate how to take the lecture notes that have been used in a traditional lecture classroom and turn them into an active, student centered lesson plan without "lecturing", in just a few easy steps using tools that are easy to use. This user friendly, easy method can be used by any teacher who has been lecturing for one year or 30 years. It can be used in a classroom of 15 students or in a classroom of hundreds of students.

The Social Media Project: Developing a Personal Brand

Melissa Martin, School of Management, George Mason University

Much of the discussion of social media and students' employment prospects focuses on the negative: avoiding harmful consequences from Facebook posts, for example. But these tools also offer the opportunity for students to begin to build a personal brand that can be an asset on the job market. This session will describe the Social Media Project used in George Mason's Internet Marketing course, including project goals and content and the comments of participants.

A Conversation About Grading

Jennifer McCrickerd, Philosophy, Drake University

Who are grades for? Students? Future employers? Graduate Schools? What are grades supposed to do? Encourage learning? Assess learning? Predict future behavior? Report personality traits? Help our students get their first jobs? Is there a way to grade that ethically achieves all these goals or must some be sacrificed to achieve others? And if some much be sacrificed, which ones? Join us for a conversation about what we do, avoid, fear, hope, worry about and what's worked, hasn't and might.

The Vocation of Teaching: Holistic Understanding of Ourselves & Our Students Jennifer McCrickerd, Philosophy, Drake University

How we understand ourselves and our role is in the classroom significantly shapes what we do in the classroom. Recent neuroscience and philosophy provides compelling evidence that we understand our world, inescapably, through metaphor and analogy and that, further, these are shaped by our bodily experience in the world. In this session we will draw on participants' understandings of who they are as teachers and discuss consider how these conceptions influence our understanding of what learning is, what teaching is, who our students are and who we are (in and out of the classroom). We will also discuss the need for multiple conceptions and how research about learning, students and ourselves might will continue to challenge some of the conceptions we currently hold.

Mindful Technology: Protecting Ourselves and Faculty from Tidal Waves of Information

Ben McFadyen, Teaching and Learning Technologies Center for the Advancement of Teaching & Learning, Elon University

As purveyors, providers, and experts of technology, we have a responsibility to carefully listen to faculty and students and shield them from techno-babble, from the recurring avalanche of innovation that often drowns potential improvements in learning. When we view ourselves as

consultants rather than technicians, we free ourselves to see new opportunities to help faculty clarify and focus on their goals by asking questions rather than answering them, and by providing vetted roadmaps – not solutions - that may or may not include advanced technologies. In this highly participative session, we will take a candid look at ourselves as consultants first and technologists second.

Videotaping Student Performance: Technical, Logistical, and Legal Challenges

Tim McGee, Teaching & Learning Center, Rider University

This session will recount a faculty member's experience recording student speeches to support multiple goals, including program assessment, grading, artifact production, peer review, and self assessment. Single-take, unedited recordings of students who signed a release were uploaded to YouTube as "unlisted" videos and embedded into Blackboard for non-anonymous peer review within hours of in-class delivery. Students who did not sign the release were given the option of receiving peer feedback about two weeks after delivering their speeches, once their recordings were uploaded to ShareStream. All students received DVDs of their recorded speeches at the end of the term.

Fostering Active Learning in Large (and Small) Classes

Sue McMillen, Mathematics, Buffalo State College

Fostering active and collaborative learning in large, content-heavy classes is challenging. Using techniques such as interactive assignments, participatory reviews, and effective openings can help address the challenges of active learning in large classes. Come and experience strategies that have proven to successfully engage students in classes of several hundred.

Understanding the Student Perspective: How to Create Open, Inviting, and Responsible Learning Environments Using Technology.

Alexis McMillan-Clifton, Written & Oral Communications, Tacoma Community College Candyce Rennegarbe, Adult Basic Education, Tacoma Community College Christopher Soran, eLearning, Tacoma Community College Rachel Goon, Library, Tacoma Community College Mark Bieraugel, Library, Tacoma Community College

Through this panel presentation, an open educational resource advocate, a reference librarian specializing in information literacy, an e-Learning specialist, a Universal Design for Learning program chair, and an online Composition faculty member will bring diverse perspectives to the topic of how best to view a college and its technology through a student's eyes. This panel will emphasize the highly integrated nature of learning, flowing from the classroom to the library to the computer lab and back in a non-linear manner. Presenters will demonstrate how small steps taken up front in course design can empower students throughout their college careers.

Finding the Research on Teaching & Learning

Jeanette McVeigh, Information Science, University of the Sciences in Philadelphia

You know your discipline and how to find the present and past published research in it but how do you support your good teaching with the research on active learning from the literature of pedagogy? What research has been done and how do you find it? This session explores the strategies for finding this research in books, journals and other documents in ERIC, the government's free education database, and Google Scholar, a good resource for cross-disciplinary topics. Also examined is personalization with MyERIC's saved searches, Google Scholar Prefer-



ences, ways of keeping current with journal table of content alerts and more.

Merging the Writing Curriculum into a Career Context

Christine Mellon, Communication Studies, Wilkes University

Higher Learning Institutions are committed to increasing student achievement in all areas of the academic program to ensure graduates leaving schools are ready for graduate studies and the workforce. This paper outlines an applied curriculum project designed to meet this educational mission. The goal of the applied project was to increase individual student progress scores by 10% in the broadcast communications curriculum. The objectives included introducing fundamental writing competencies and technology skills into the curriculum's authentic learning activities. The report summary details the purpose, tasks, collaborations, and successes associated with the project.

Models of Collaborative Learning2: How One Faculty Learning Community Implemented Nine Models of Collaborative Learning

Nancy Mills, Academic Support, Saint Cloud State University
Sarah Petitto, Chemistry, Saint Cloud State University
Matthew Vorell, Communication Studies, Saint Cloud State University
Cath Stilwell, Social Work, Saint Cloud State University
Jane Minnema, Childhood & Family Studies, Saint Cloud State University
Steven T. Ratliff, Physics, Saint Cloud State University
William Cook, Biology, Saint Cloud State University
Kristin Gulrud, Biology, Saint Cloud State University

Lalita Subrahmanyan, Center for Excellence in Teaching & Learning, Saint Cloud State University
Nine faculty teaching different courses (biology, chemistry, college reading, communication,
early childhood, microbiology, physics, social work and special education) participated in a faculty
learning community focused on incorporating collaborative learning. The resulting collaborative
learning on the part of the faculty yielded significant benefits. Members assisted one another in
designing, implementing and assessing collaborative learning models, thus enhancing cross-disciplinary understandings of evidence, research and assessment techniques and building community, and social connections, This lively group will share their experiences creating a community
of faculty learners across disciplines and will give participants opportunities to ask questions and
share their community-building ideas.

Models of Collaborative Learning: How One Faculty Learning Community Implemented Nine Models of Collaborative Learning

Nancy Mills, Academic Support, Saint Cloud State University
Sarah Petitto, Chemistry, Saint Cloud State University
Matthew Vorell Communication Studies, Saint Cloud State University
Steven T. Rataliff, Physics, Saint Cloud State University
William Cook, Biology, Saint Cloud State University
Kristin Gulrud, Biology, Saint Cloud State University
Cath Stilwell, Social Work, Saint Cloud State University
Jane Minnema, Childhood and Family Studies, Saint Cloud State University
Lalita Subrahmanyan, Education, Director Center for Excellence in Teaching and Learning
Saint Cloud State University

A faculty learning community consisting of nine professors teaching courses in biology, chem-

istry, college reading, communication, early childhood, microbiology, physics, social work and special education incorporated collaborative learning into courses, varying by level and size. Planning occurred fall semester, implementation spring semester. Presenters will briefly share their designs and the results of the projects. Participants will then have time to ask questions and work with the planning processes used. By the end of the session, participants should have a sense of how to select, implement and assess specific collaborative learning models that are most appropriate for their classrooms and disciplines.

Experiential Learning for Future Teachers: Action Research in Teacher EducationCara Moore, Urban Education, Temple University

This presentation will chronicle the teaching methods used by a teacher educator at Temple University. Experiential learning assignments for three different courses, Service Learning, Inclusive Education in a Diverse Society, and Social Studies Methods will be presented. Each of the courses required students to complete field work in the city of Philadelphia. Students reflected on their experiences as they related to the course goals and their future teaching. This presentation will give insight into the myriad of ways in which students can learn course content and prepare for careers as teachers.

Universally Design Your Classroom

Carl Moore, Urban Education, Temple University

If all humans were of a similar cultural and racial origin, our learning needs would still vary. In this highly interactive workshop participants will both practice and participate in Universal Design Learning (UDL). UDL is an educational construct that allows for both learning and teaching to be free of barriers that learning differences usually obstruct. If you would like to add strategies to your teaching toolkit that will situate you as a more inclusive teacher, this workshop is for you. Come learn how to 'universally design your classroom' with multiple means of representation, action/expression and engagement!

Got Swagga?: Using Hip Hop Pedagogy to Engage Learners

Carl Moore, Education, Temple University

This discussion will engage its participants in a highly interactive walk through the 5 elements of hip hop concurrently exploring culturally responsive pedagogy. In this session 'Hip Hop heads' to those who have limited or no knowledge of Hip Hop culture will have the opportunity to explore Hip Hop in their own way. At the end of the workshop all participants will have knowledge of how to employ the elements of Hip Hop to engage learners, and at the very least a little extra "Swagga."

Beyond Established Language Teaching Paradigms: The Case of IntercomprehensionMarkus Muller, Romance, German, Russion Languages & Literatures, California State University, Long Beach

The Intercomprehension method of teaching Romance languages has seen growing popularity in Europe. This presentations will provide the audience with both theoretical and practical information on how French (Italian, Portuguese) can be taught from an intercomprehension perspective to the rapidly growing number of Spanish speakers in high school and collegelevel foreign language courses by tapping into and maximizing their already present linguistic



knowledge of a Romance language. This session intends to demonstrate how the systemic approach to the teaching and learning of one language in a particular family of languages fosters metalinguistic awareness and improvement in comparative and critical thinking.

That Might Work with Your Students...But IT Won't Work with Mine

Joann Munroe, eLearning/Faculty Development, Tacoma Community College Monica Monk, English for Academic Purposes, Tacoma Community College Chalu Harris, Fresh Start Program, Tacoma Community College Gina Hatcher, Business, Tacoma Community College

This presentation addresses the commonsense notion that using technology in some courses is "risky" and "might work well for some students, but not for mine." Following Banks (2006) who argues that technology is both a site of struggle and possible liberation, the presenters demonstrate how their own informed risk taking in high stakes developmental courses results in students' increased willingness to become successful risk-takers themselves in an academic setting. Drawing on Garrison and Vaughan's (2008) observations around creating communities of inquiry and Lehman's (2011) work on social presence, this session is about forwarding student engagement and self-authorship (Baxter-Magolda) using technology.

Asynchronous Synchronous Learning in Online MSET (Math/Science/Engineering/Technology) Courses

Lawrence Newcomer, Pennsylvania State University

There is no lack of data and expert opinion recommending the use of synchronous learning activities in online courses. What usually is lacking is a time when the instructor can actually get an online class together for a synchronous online experience. This presentation illustrates how recording/playback capabilities in online meeting software can be used to capture synchronous online events attended by a small portion of the class, and then shared with other students asynchronously. Specific applications will be discussed and their effectiveness evaluated by comparisons between a control and experimental section of a Discrete Math course for IST majors.

Is Problem-Based Learning the Key to Active Student Learning?

Maria Pappas-Rogich, Nursing, Walsh University David Brobeck, Education, Walsh University Phillip Kim, Business, Walsh University Jaime Paz, Physical Therapy, Walsh University

Creating an academic culture that facilitates the growth of active learning - one that encourages the implementation of the sort of evidence that demonstrates the power of student engagement - can be difficult at smaller universities. At Walsh University we have used the vehicle of an interdisciplinary Faculty Learning Community (FLC) to help create this sort of culture through the investigation of Problem-Based Learning (PBL). Our panel will explore the trials and tribulations of using FLCs to foster faculty-student engagement through PBL, and the ability to assess results that we believe will lead to the long-term acceptance of active learning.

Integrating Basic Principles of Undergraduate Research in Freshman Interest Groups Gerald Lee Ratliff, Academic Affairs, The State University of New York

Integrating basic undergraduate research principles into Freshman Interest Groups (FIGS) is

an instructional model that introduces first year students to the notions of creativity, inquiry, and discovery. An introductory FIG program also recognizes first-year students are in an initial stage of transition and assimilation as they adjust to their new role as independent thinkers while, at the same, exploring new social settings that will help define their heightened sense of personal identity.

Achieving Deep Learning in the Classroom through the Use of Web-based Collaborative Technology Tools: Stakeholder Reactions

Lawrence Ressler, Social Work, Taylor University

This session will present qualitative and quantitative evaluative responses of students, department faculty, and an advisory committee related to an effort to achieve deep learning in a traditional undergraduate classroom by utilizing web-based collaborative technologies. The course was a redesigned course in a social work department taught by a professor with 21 years of undergraduate and graduate teaching. After 8 years of academic administration as dean and provost, this course is his reentry into teaching with a determination to embed his teaching with interactive, web-based technology including wikis, blogs, the internet, Adobe Pro and Skype. The session will present lessons learned.

Let's Work Together: Advancing Active Learning (and Teaching!) through a Community of Practice

Kate Riera, Family Science, University of Maryland, College Park Laura Evans, Family Science, University of Maryland, College Park Amanda Berger, Family Science, University of Maryland, College Park Barbara Singer, Family Science, University of Maryland, College Park

Effective active learning strategies are key to student engagement in the classroom. With limited time allocated to teaching preparation, instructors are sometimes isolated and at a loss for ways to successfully engage their students in course material. A community of practice in which instructors learn from each other, receive support, and share methods for active learning greatly enhances both the instructors' and students' classroom experiences. During this session presenters will discuss their experiences participating in a teaching focused community of practice and the successful strategies they have implemented to advance active learning in their classrooms.

Strategic Career Planning and Work-Life Balance

Susan Robison, Principal Professor Destressor

Long-term work-life balance requires a combination of two things: a vision of what is needed for success professionally and personally and the ability to make effective short-term sacrifices. This practical interactive workshop designed for graduate students, recently hired faculty, and the faculty development professionals who help them transition to life in the Academe will explore the strategic career skills that academics in higher education need to achieve Great Work and a Great Life.

Collaborative Initiative for Evidence-Based Teaching and Learning

Elizabeth Roe, Nursing, Saginaw Valley State University

A project will be described that increases learning related to Evidence Based Practice (EBP) and is beneficial to community partners while helping nursing students develop critical



thinking, information literacy, and EBP skills. Nurses in agencies identify practice concerns and students evaluate sources of evidence using an evidence rating system, summarize the results, and make recommendations. This project helps students see the relevance of evidence to practice and communicate with the agencies. In addition, this project has the advantage of helping agency nurses keep informed on the research literature and develop mentoring skills with the students.

How Much is Enough?: A Self-Study of Teaching Practices Using Social Media

Esperanza Roman-Mendoza, Modern & Classical Languages, George Mason University

Social media open exciting opportunities for communication in authentic situations beyond the classroom walls. Nevertheless, a variety of factors can prevent students from taking full advantage of these learning opportunities. One of these factors is the role instructors play when using a particular technology. In this paper, the self-study research methodology is applied to assess the connection between how technology was used to prepare, deliver and facilitate instruction, and the way students perceived and used those technologies for their own reflective learning. Examples from the instructor's teaching journal, students' reflective journals and class surveys will be presented for discussion.

Introduction to Integrated Course Design for Significant Learning

Stewart Ross, Director of Center for Excellence in Teaching and Learning, Minnesota State University, Mankato

There are many ways in which faculty can improve teaching and learning for themselves and their students. No area is more beneficial than creating significant learning experiences for students through an integrated course design. This interactive workshop takes participants through a system of integrated course design that encourages the development of meaningful learning goals, active teaching strategies, and quality assessment—all integrated into a powerful course that can transform the classroom into an exciting laboratory of learning. By focusing on learner goals, teaching activities and assessment of learning, participants develop a template they can use in creating their own course that integrates these three areas. Participants in the workshop learn the basic foundational knowledge involved with course design including terms and concepts that are used in creating quality courses.

Drawing from a Blank: Communicating Concepts Without Drawing Experience

Jeff Schwartz, Design, Ringling College of Art and Design

David Foote, Advertising, Design Ringling College of Art and Design

A presentation and discussion of a cross-discipline, multi-course collaboration between First Year Writing Foundation and Design faculty from Ringling College of Art and Design. The result was a project-based learning experience that actively engaged first year, first semester students -- with no prior drawing experience -- in collaboration, writing and concept development. Student development included rapid and accurate renderings resulting in a greater confidence to communicate their conceptual ideas.

Battling Rote Memorization: The Role of Retrieval Practice and the Spacing Effect in Teaching Fact Based Courses

Nicholas Serrano, 2011 Enid A. Haupt Fellow, Smithsonian Institute

This research stems from experiences teaching undergraduate design students a plant

taxonomy course, resulting in an inquiry on the most effective way to instruct fact-based science material. The challenge of teaching abstract thinkers intricacies of a rule-based science necessitates focusing on how students learn rather than what they learn. Research on learning theories show why behaviorist learning, or the "mind as a sponge" method traditionally employed, needs to be complemented with contemporary tactics. Two phenomena observed in the cognitive sciences, the testing effect and the spacing effect, are used to reconceptualize how the course is structured. Specific examples and action points are outlined and implications for pedagogy in horticulture and landscape architecture are discussed. Additional methods of social constructivist learning are also suggested as ways of providing even deeper instruction in non-traditional ways.

Writing Questions that Click with Learners

Ike Shibley, Chemistry, Pennsylvania State University, Berks

Student response systems can actively engage students with course content when questions are well written. This session will explore ways to develop the most engaging questions possible in your course. Usina a worksheet, session participants will start rewriting questions that are provided and progressing to writing questions of their own. Participants will be asked to share some of their best questions to provide examples of 'questions that click.'

Media Theory in the Age of Digital Video Production

Don Snyder, Media and Communication Studies, University of Maryland, Baltimore County

UMBC's Media and Communication Studies program emphasizes critical media literacy, intercultural communication, and new media and applied communication, which we view as essential to the education of students entering the communities and workplaces of the 21st century. One of the required courses introduces students to major theorists within the discipline of mass communication and media studies. Within this course, students are briefly instructed on basic digital video production skills. Students create videos during the semester which explore a specific theory of the media. This presentation will describe the process, discuss relevant issues, and show successful examples.

Using Online Reading Quizzes and Clickers to Enhance Student Preparation

Phillip Sokolove, Biological Sciences, University of Maryland, Baltimore County

"Clickers" are being used frequently in large science classes to support active learning. Arguably, the best use of time in an active learning classroom is to engage students in interactive exercises where they use content information to solve problems and/or answer questions that elicit high-level cognition. Unfortunately, student often fail to bring to the classroom the content knowledge needed to engage at such levels. In this session we examine how online reading quizzes and in-class clicker questions can be combined to accomplish an often elusive pedagogical goal: How can I get students to read the material prior to class?

Learning in the Open: Faculty and Student Perspectives of Blogging to Support Reflective Practice

Sarah P. Southall, Curriculum & Instruction, Virginia Commonwealth University Jeff Nugent, Center for Teaching Excellence, Virginia Commonwealth University

This session will examine how the intersection of reflection and openness on the web is



impacting faculty and student perspectives of what it means to teach and learn. In using blogs to engage students in critically reflective practice, discussion will focus on the opportunities and challenges of teaching and learning on the web, and how participating within an open online culture have the potential to impact education.

The "5 Minute Workshop" in 7 Minutes: At Play in the New Culture of Learning

Christopher Soran, eLearning, Tacoma Community College
Andy Duckworth, eLearning, Tacoma Community College
Monica Monk, English for Academic Purposes, Tacoma Community College
Charlie Crawford, Dean, Business and Workforce, Tacoma Community College
Chalu Harris, Fresh Start, Tacoma Community College
Joann Munroe, eLearning/Faculty Development, Tacoma Community College

This fast-paced, interactive session moves participants through 7 tools and classroom applications, Educause "7 Things" literature, and 7 minute presentation limits with a nod to Todd Zakrajsek's award - winning "5 minute workshop" model. Because they are using and teaching technology, session presenters playfully claim a two-minute handicap to implement Todd's strategy for quick, practical workshops that are immediately useful to faculty and prompt thinking while pointing to directions for future research. The session adapts Todd's 3-part model: 1) Teaser/problem/challenge 2) explore and engage 3) Provide tools/ solutions to demonstrate the connections between using technology and achieving deeper learning.

Teaching Women's Studies: Exploring Student Engagement in Technology-Rich Collaborative Learning Communities

Kimberlee Staking, Women's Studies, University of Maryland, College Park

This presentation draws the perspectives of often underrepresented voices, those of students, into conversations about learning in higher education. Mapping student interactions with one another as they collaboratively constructed new understandings through engaging diverse topics in the field of women's studies, it illuminates the multi-faceted dimensions of learning that students experienced in two technology-rich learning communities. Data from undergraduate courses taught at the University of Maryland in 2007 is used to comparatively explore narratives generated in distinct environments, juxtaposing those constructed in a traditional face to face classroom with those constructed in an entirely online environment that crossed transnational borders.

Encouraging Critical Thinking- A New Developmental Model for Nursing EducationJoAnn Stevens, Nursing, The College at Brockport, State University of New York

Nurses need to be able "to think on their feet." An essential component for nursing graduates' orientation to health facilities is the ability to critically analyze clinical situations and problem solve. Studies indicate that most new graduates do not meet expectations for entry-level clinical judgment ability (del Bueno, 2005). Nurses new to hospital systems are increasingly challenged by higher numbers of complex patients with higher acuity levels and substantial co-morbidities. Consequently, our new health professionals need the best possible mentoring for critical thinking (CT) in order to plan and execute excellent patient care over time.

Games that Teach: Five Low-Tech Favorites

Steve Sugar – ISD, University of Maryland, Baltimore County Greg Williams – Director ISD Program, University of Maryland, Baltimore County Linda Raudenbush, ISD, University of Maryland, Baltimore County

Is your topic as exciting to your learner as it is to you? If not, then you should consider adding five smile-provoking learning games to your classroom mix. And, what happens when the "lights go out?" These five low-tech games can be played anywhere, at anytime, needing only paper, pencil, and commonly found game accessories and/or household items. In this highly interactive workshop, you will first experience the joy of playing five crowd-pleasing games in a variety of playing formats. Then, after game play, you will learn from a games writer and adult ed expertshow to adapt each game for your next class, with minimum resources and rework. Finally you will take-home a participant's manual containing each game template with tips on how to resource, prepare, set-up, and conduct each game.

Interview for Diversity Understanding

Georgiann Toole, Education, Shepherd University

This session offers a description and demonstration of the development and implementation of one-on-one interview techniques designed to allow teacher education students to explore and appreciate individual diversity. Originated for students in an introductory teacher education seminar, this active-learning exercise requires students to consider factors related to diversity by conducting extensive interviews with individuals who differ from themselves in terms of ethnicity, culture, gender, age, socio-economic status, and/or learning style. Results of the exercise, as well as techniques for its implementation, will be presented.

Asking Students to Think about What They Say and Why They Say It

Karel Updyke, College of Business, Butler University

I notice students can provide adequate definitions of concepts, but then seemingly forget what they say when trying to solve problems. Therefore, I began to use a series of questions by asking students to reflect on what they think and why they answer questions and try to solve problems in a particular way. This way, students must actually think about the definitions and then why and how they should use the definitions to solve problems. This blends several concepts about learning theory, such as King and Kitchener's reflective judgment, Prince's active learning, and Perkins and Blythe teaching for understanding.

Using Online Discussion Boards to Foster Social Interdependence among Learners

Amy Van Kleunen, Physical Therapy, University of the Sciences in Philadelphia Carol Maritz, Physical Therapy, University of the Sciences in Philadelphia

Online learning communities provide a unique forum for the Millenial Generation to communicate. Using online discussion boards to develop a learning community allows students to hone affective skills in a "safe" environment by giving honest feedback and validating other's viewpoints. Through social constructionist theory, students develop their own opinions by hearing other's ideas and expressing their own nascent values. The online learning community creates a sense of social interdependence that improves the flow of information among learners. Learners in our online class reflected positively on the experience, noting



better quality and quantity of class participation in discussions compared to in-class.

Get Your Head into the Game!—Easing the Transition from Student to Successful Faculty Member

Kimberly Van Orman, Philosophy, Institute for Teaching, Learning and Academic Leadership University at Albany

Graduate student expectations about faculty positions and the reality of the job are often at odds with one another. Participants will reflect on their faculty career goals, consider the kinds of commitments faculty positions at different types of institutions typically entail, and learn how to take advantage of campus resources to improve one's chances of success (Especially, to prepare you with ideas about questions to ask to make effective use of a mentor). This session is aimed at graduate students planning careers as faculty members, but would also be appropriate for those who work with graduate students planning faculty careers.

Extending Traditional Computing Lectures through Interactive Learning Objects Giovanni Vincenti, Computer and Information Sciences, Towson University

Undergraduate computer science education requires a significant shift in the way students perceive problems and problem-solving, which is summarized by the concept of computational thinking. As online learning has reached all aspects of education, we have developed a reusable learning object that aims at helping students in the transition towards a more structured approach to problem-solving. This presentation summarizes our efforts and the reactions of the students to the first introduction of our learning object in the pilot study. We also lay a plan for the next steps, opening our future works to suggestions for improvement.

Student Engagement and the Art of Selling

Laura Vosejpka, Natural Science, Northwood University & Dow Chemical Company

Are college students customers? Ask this and be ready for a hot debate! Faculty members often give a resounding "No", but students, and their parents, often have a different point of view. Whether you believe that a college student is a customer or not, THINKING of them as a customer allows you to approach their learning experience in a completely different way. Applying the principles of selling to your classroom, will allow you to create an active, engaging experience where both student and professor maximize value in the exchange.

On Your Mark, Get Ready, Build Your Learning Community

MaryAnn Walters, Teaching and Learning Center, The Pennsylvania State University-Fayette
An increasing number of community colleges and universities are incorporating
Learning Communities within their institutions, not only as a means to support their
students' persistence in earning a college degree, but to support the faculty who provide instruction for the degree as well. While the design, implementation, and assessment of such an
initiative requires the collaboration of various campus entities, the foundational
coordination of front-line academic support services requires the establishment and
operation of some form of campus learning center. This workshop provides strategies and tactics for starting and maintaining a learning community, even on the most frugal of budgets.

Making It Count: A Workshop for Prospective Authors and Reviewers of SOTL Publications

Gregg Wentzell, Managing Editor of the Journal on Assessment at Miami University

This session, led by the Managing Editor of the Journal on Excellence in College Teaching, is for those interested in developing their classroom research project or conference presentation into a publication. Activities will include review of the scholarly process for SoTL projects and evaluating prospective manuscript submissions. Participants will leave this session with an understanding of the standards and methods of scholarship that are consistent with the acceptance criteria for SoTL publications.

Using Electronic Learning Portfolios Across and Through an Undergraduate Business Curriculum

Jennifer Wright, Drexel University

In today's technological, competitive and engaged classroom, learning portfolios can provide a means to combine reflection, documentation and collaboration. This workshop will present multiple uses and examples of learning portfolios. It will look at successful implementation of an electronic online system used across a curriculum in business, writing and the humanities and also through specific foundation, core and capstone courses. It will also demonstrate benefits to both student learning and institutional mission and goals.

How Students Learn: Strategies for Teaching from Cognitive, Social, and Physiological Psychology

Todd Zakrajsek, Center for Faculty Excellence, University of North Carolina at Chapel Hill

An educator does not simply present information, give tests/papers, and then assign grades. If that were the case, well, then teaching would actually be much easier. As educators, our task is to bring about as much growth as possible within our students. Growth consisting of new foundational knowledge, more sophisticated ways of looking at and understanding one another, the ability to solve problems that do not yet exist, a better understanding of what it means to be educated, and a deeper recognition of how to learn independently. This session will draw on the areas of cognitive psychology pertaining to information processing as it relates to human learning and memory, physiological psychology to investigate how external influences such as exercise and nutrition impact the brain, and social psychology to better understand how knowledge of ourselves and our interaction with others mitigates all learning. As this session will be conducted relatively late in the day, interactive learning will be implemented to draw on the energy of social interation, engaged learning will be used to keep your cognitive processes involved, and movement will be used to demonstrate the impact of physiology on the learning process.

Achieving Success in Team-Based Structured Business Courses

Christopher Ziemnowicz, School of Business, University Of North Carolina at Pembroke Ed Damman, Instructional Designer, Allen College

This presentation reviews the experience of team-based learning in undergraduate business courses. The teaching strategy involves creating an environment where students are responsible for learning on an individual and team basis. This instructional strategy distinguishes itself by involving students as members of teams sharing information and working together on



projects. This process changes the role of the instructor. Successful methods will be described, as well as some of the problems encountered in the design of team-based learning. This includes the types of assignments and why peer evaluations are an important part of the course grading system.

Classroom Work to Complex Team-Based Projects

Christopher Ziemnowicz, School of Business, The University of North Carolina at Pembroke
Teaching in the management discipline requires incorporating active learning in the
undergraduate classroom and advanced field projects at the graduate level. Examples will be
shared how to develop a learning environment making the students partners, co-developers,
and active stakeholders in mentored, experiential, multi-source learning that combines voices
and insights from academia and practice, multimedia sources, and listening to expert guest
speakers and outside experts. Students teach each other through in-class project presentations
and team-based collaborative mentored work. Students are guided through two-stage, structured individual and team-based projects where the individual projects feed into and support
more complex and complicated team-projects.

Creative and Active Teaching and Learning: Reflections of a Carnegie/CASE U.S. Professor of the Year

John Zubizarreta, English, Director of Honors & Faculty Development, Columbia College

One of our perennial questions as educators is the thorny issue of what defines creative and active teaching and learning. We invest much of our work in the notion that innovative, dynamic pedagogies help to facilitate rich, transformative learning. Certainly, the U.S. Professor of the Year program sponsored by the Carnegie Foundation and the Council for the Advancement and Support of Education celebrates the kind of excellent teaching that results in deep and lasting learning. This workshop presentation by a recently named Carnegie/CASE award recipient is a hands-on, interactive opportunity to explore the theoretical and practical benefits of creative and active teaching for the sake of producing significant learning.



TEACHING AND LEARNING



THE LILLY CONFERENCE

POSTER SESSION ABSTRACTS





What Can Your Students Do for One Point?

A. Hameed Badawy, Electrical and Computer Engineering, University of Maryland, College Park
To get feedback from students is tricky and hard sometimes. We gave the students some motivation to give us feedback about the usefulness of a particular course's usage of the Blackboard instance of the course. We gave the students a freebie point for participation in a survey that tried to gauge how the students use the website and what is effective and resonates with them and what does not. We were able to verify the data we got from the students with the access statistics that Blackboard collects automatically.

Learning through Discovery: Student-driven Participatory Learning Approaches to Capstone Work

Dolores Bertoli, Allied Health and Human Services, Alvernia University

From time-honored Socratic pedagogy to problem based and evidence based teaching and learning, education's goal (Latin: e-ducere -"to lead out") remains the same: to excite and engage the learner actively in discovery and critical thinking, allowing for concrete application of knowledge. Engaged informed teaching and learning can be attained through fluid, integrated use of tools from several methodologies. This presentation will describe integrating varying instructional strategies in teaching capstone coursework. Modeling the oldest teaching and learning process known, Socratic pedagogy (andragogy), in combination with evidence based inquiry an atmosphere was created of teaching by discovery, focusing the learner's attention on concrete application and critical reasoning.

Course Continuity with Perseverant Wikis

Evan Bradley, Linguistics and Cognitive Science, University of Delaware

Wikis have become valuable tools for collaborative projects. A characteristic of wikis which has not been fully exploited in their educational applications is the ability to build content from one iteration of a course to the next. This kind of wiki creates course continuity, benefiting students and instructors. Students can learn about wikis by exploring, and building on previous work. Instructors maintain a portfolio documenting student work, which may become a subject area resource suitable for the public. An example of such a "perseverant" wiki will be illustrated, and suggestions for incorporation into a variety of courses will be discussed.

Integrating Research on Happiness in the Teaching of Economics/Pilot Project

Alejandro Cañadas, School of Business, Mount Saint Mary's University Caroline Eick, School of Education and Human Services, Mount Saint Mary's University

This work tries to challenge the way we teach economics to undergraduates. Teaching economics has been associated with teaching the fundamentals of neoclassical economics. The last financial international crisis brought a lot of skepticism and criticism to the science for being the culprit of the crisis. We believe that this is actually an opportunity to re-think and apply new methods of teaching economics based on moral grounding by applying a multidisciplinary approach that is connected to the pursuit of happiness. Our proposal is a practical implementation that has been tested in a real class of "Introduction to Macroeconomics."

Achieving Mutual Learning Goals in Physics and Nursing

Jo Anne Carrick, Nursing, Pennsylvania State University, The Behrend College

While faculty have embraced active learning approaches, the fully integrated active learning classroom has not been well defined or researched. However, a student centered active learning classroom has been used in the physics discipline with much success in learning outcomes and student engagement. The learning goals for students in both nursing and physics are similar, requiring students to transition from rules based knowledge acquisition to competence is practice. Participants will engage in experience of the SCALE-UP classroom (Student Centered Active Learning Environment for University Programs) and also gain insight on the perceived and real barriers to that transition.

Impact of Computer-Based Simulation on the Achievement of Learning Outcomes

Lindsay Curtin, Pharmacy Practice and Pharmacy Administration, Philadelphia College of Pharmacy, University of the Sciences

Laura Finn, Pharmacy Practice and Pharmacy Administration, Philadelphia College of Pharmacy, University of the Sciences

The study objective was to determine if prior computer based simulation (CBS) impacts outcomes of mannequin based simulation (MBS). In this randomized, controlled, prospective study, all students (n=200) enrolled in the required practice laboratory course were randomly divided into teams that were sectioned into "CBS first" (CBS before MBS) or "MBS first" (MBS before CBS) groups. Students completed activities in the sequence determined by section assignment and then submitted a post-activity survey. Teams accomplished learning objectives, assessed by mannequin survival, more frequently in the CBS first group (41.2% vs. 5.6%; p=0.018). Most subjects (96.5%) recommended continued use of simulation activities.

"Tina Turner Karaoke Day" and Other Ways to improve Learning through Student Performances

Ryan Curtis, Psychology, University of Maryland, College Park

Students remember more when they act things out. They even remember more when they just watch someone else act something out. Getting your students to perform in your classroom can facilitate learning in any subject. This presentation will explain why your students learn through performance. Then we will demonstrate and discuss both high-tech and low-tech ways to encourage performance in the classroom. These ideas go beyond role-playing and presentations.

Validity of Student Participation in the Assessment of Learning

Godwin Djietror, Geography, Marshall University

The purpose of this paper is to illustrate that student participation in the assessment of learning is a valid component of the active learning process. The poster presents comparisons of students' assessments of their own completed class assignments using a rubric with the instructor's assessments of those assignments, and points out that the exercise is an important way in which students can be actively involved in the process of learning.



Building a Professional Development Program for Graduate Students

Jennifer Douglas, Office of Graduate Education & Life, West Virginia University

During the past two years, the Office of Graduate Education & Life has created a suite of professional development programming for graduate students across West Virginia University, from a Preparing Future Faculty workshop to a Certificate in University Teaching to an Entrepreneurship Academy for the sciences. In a decentralized university structure without a graduate school or a Center for Teaching and Learning, our office has sought to build alliances and partnerships across different colleges at WVU. This poster will address our institutional mandate, the planning and research phase, the stages of implementation, and initial data from completed programs.

Evaluating Student Online Discussion Forum Posts to Improve Teaching Methods that Promote Thinking

Grace Earl, Department of Pharmacy Practice and Administration, University of the Sciences After viewing presentations on health care topics, students used a discussion forum to post new information learned. Qualitative analysis of posts (n=150) revealed modest depth as 34% addressed quality of patient care, 27% addressed safety, and 17% addressed access to care. The course was redesigned. To engage students in higher level thinking, the instructions used increasingly explicit grading criteria. For semester 1, 2 and 3, percent of students earning all points were 93% (n=140/150), 84%(n=94/115), and 64% (n=87/136), respectively. New changes will add homework to allow for practice and feedback reinforcing expectations.

Creating Community of Learners among Under-represented Students at a Liberal Arts College

Monica Feazell, Chemistry, Trinity Washington University, DC Minerva San Juan, Philosophy, Trinity Washington University, DC

The liberal arts curriculum has always understood that science is a central liberal art. The recent spate of specializations and departmentalization of the sciences has not had the balkanizing effect at Liberal Arts Colleges that it has had a Research Universities. Trinity Washington University's College of Arts and Sciences has a strong history of requiring and supporting strong programs in the sciences.

Helping Student Teams Build Abstract Processes One Concrete Step at a Time

Deirde Folkers, Information Sciences and Technology/Academic Affairs, The Pennsylvania State University More and more students today have trouble with the process of problem-solving and learning. Accustomed to multiple choice testing and structured tasks, they often have trouble with "stickier" problems that require integration of knowledge and creation of a unique solution. This poster will illustrate a classroom approach that allows students to experience the iterative nature of the problem-solving process first-hand and to explore different avenues and perspectives in problem-solving. The poster illustrates the application of this approach to an introductory computer programming class, but supporting handouts will illustrate how the approach can be adapted to a variety of other disciplines.

The Most Awful Thing: A Struggle against Silence in Classroom Discussion

Annette Formella, English/Communication, Baker College of Clinton Township

Instructors often face insecure student voices in the classroom. Many instructors choose to combat this frustrating silence by integrating technology into the course framework; however, it does little to inspire face-to-face discussion. Collaborative learning in the classroom can help students when it includes an element that allows for anonymity, just as online communication does. This "best practice" presentation aims to provide instructors with a face-to-face framework that gives even the most timid students confidence to have a voice in classroom discussion through role play and adapting the anonymity online personas provide.

Effect of Models, Dissections, and Virtual Dissections on Anatomy and Physiology Learning, Retention, and Perceptions

Reimi Hicks, Biology, University of Maryland, College Park

Sara Lombardi, Marine, Estuarine, Environmental Science, University of Maryland, College Park

Multiple options for visualizing anatomical heart structures exist for human anatomy and physiology classrooms including models, dissections, and virtual activities. However, the differences in learning outcomes between these approaches are understudied. This study aims is to determine the effectiveness of organ dissections, virtual activities/dissections, and models on learning outcomes, learning retention, and attitudes towards science and anatomy and physiology. Preliminary findings suggest that models are the most effective of the treatments for enhancing student test scores, whereas virtual dissections are least effective. The findings of this study can be used in curriculum development laboratories exercises at institutes of higher education.

Toward a More Reliable Method for Assessing Cultural Competence

Sherick Hughes, Curriculum and Instruction, University of Maryland, College Park

One major charge of the 2010-2011 CTE-Lilly Fellows of the University of Maryland was to engage an academically critical exploration of cultural competence. Cultural competence among has been typically assessed with retrospective self-reports. The purpose of this study is to determine whether a faculty/teacher dyad of color using the Cultural Competence Continuum (CCC) as an ordinal scale can reliably rate preservice teachers' culturally reflective writing (i.e., written responses to stereotypic urban classroom-based Tyrone and Tyree vignettes).

The Accidental Learning of the Disengaged Student

Meshagae Hunte-Brown, Biology, Drexel University

To reduce the number of service courses offered in Biology, non-major students who traditionally have been separated into four courses were consolidated into two courses. To address differences in credit hour requirements of the major departments, some students were required to take a lab along with lecture, while students with lower credit requirements took lecture only. Students who took the lab consistently performed ten percentage points better on exams than their counterparts. Further, students who did not take the lab also performed more poorly than students from their own majors who in previous years were required to take the lab.



What Can TLC Do for Your Faculty?

Meshagae Hunte-Brown, Biology, Drexel University

Traditionally little emphasis is placed on the quality of instruction in higher education; many faculty are not trained to perform the very function for which they were hired. Administration attempts to address this through institution-wide faculty development but techniques may not be widely adaptable. The Biology Teaching Learning Circle (BioTLC) addresses quality teaching and is a model with specific aims that can be tailored to most disciplines in small and large programs. The TLC dramatically increased awareness of the responsibility of the instructor in a tuition-driven climate, has positively impacted collegiality and has increased potential for top-performance among participants.

Using Self-Assessment Rubrics to Develop a Teaching Improvement Plan for New Faculty

E. Amy Janke, Behavioral and Social Sciences, University of the Sciences in Philadelphia Phyllis Blumberg, Director of the Teaching and Learning Center, University of the Sciences in Philadelphia This poster describes new self-assessment rubrics that identify specific aspects of teaching to change and outline possible paths to improvement. Applying the rubrics early in a professional career can help clarify the strengths of current pedagogic approaches and aid in the distilling of these into developing teaching philosophy. The poster illustrates how the rubrics can be used to create a teaching improvement plan. Self-examination via the rubrics encourages an evidence-based approach to teaching, and informed planning in organization and delivery of courses, choice of methods/technologies, assessment strategies, and application of these approaches in the future.

Academic Clinical Partnerships: Educating to Improve Quality and Safety

Judith Joy, Nursing, Colby-Sawyer College

Colleen Warren, Professional Nursing, Dartmouth-Hitchcock Medical Center

This poster describes initiatives by a clinical and academic partnership to cross-pollinate safety and quality practices using clinical Microsystems strategies. Students learn best when concepts are actively situated in the environment of practice. Classroom examples drawn from real clinical concerns become vital infrastructure for student learning. Building a rich culture of interdisciplinary learning in the clinical setting also depends upon collaboration with academic partners. Microsystems principles are used to frame unit quality improvement projects and orientation for clinicians and students to the learning environment.

Changing Perspectives: Seat Location and Presentation Effects Influencing Manipulations Between 3-D Models and 2-D Diagrams

Bryna Kumi, Education, Curriculum & Development/ Chemistry, University of Maryland, College Park In Organic Chemistry, students must learn to translate between 3-D models and 2-D diagrams. Instructors often teach translation tasks using a specific perspective which they consider to be the most visually-accessible for students. Instructors often teach to the center of a lecture hall; which puts some students at a disadvantage when attempting to visualize a molecule through an instructor's perspective. We find that the instructor's perspective is not easily accessible to all students in a lecture hall. The use of a document camera to display models is examined as a method of reducing the difference in perspectives due to seating.

Applying the Life Story Approach to Teaching Leadership

Christopher Leupold, Psychology and Leadership Studies, Elon University

The life story approach to fully understanding not only a person's past, but also his present and future, has gained tremendous popularity and credibility over recent decades. The concept of authentic leadership, a form of leadership that requires tight alignment between behavior and values on a variety of dimensions, has similarly grown in popularity in business and academic settings. In a course in which authentic leadership was the core topic, students completed an intensive life-story assignment. This presentation will include the specific processes and elements of the life-story assignment, as well as its positive outcomes and implications.

If You Show You Really Care, I Will Learn More

Christopher Leupold, Psychology and Leadership Studies, Elon University

This study incorporated two frequently-studied variables in organizational behavior research, organizational justice (OJ) and perceived organizational support (POS), into a college classroom environment. POS (the extent to which students felt supported by the instructor); and OJ (the extent to which students felt the instructor treated them fairly) were found to not only predict students' final course grades, but also their self efficacy around their ability to improve. POS and OJ also significantly predicted their course evaluations of the instructor. Specific findings and their implications are discussed, particularly in terms of how instructors can elevate POS and OJ in their classrooms.

Using Technology as a Tool in the Development of Student's Problem Solving Skills

Madhu Mahalingam, Chemistry & Biochemistry, University of the Sciences Elisabeth Morlino, Department of Chemistry & Biochemistry, University of the Sciences Elisabetta Fasella, Department of Chemistry & Biochemistry, University of the Sciences

Problem solving ability is an important part of many disciplines. The ability to solve problems is dependent on the knowledge base as will as the ability to interconnect the concepts involved within the field. The technology currently available can be used to build the knowledge base as well as model the connections. The goal is to improve students' problem solving skills in General Chemistry by raising the level of problem solving gradually prior to recitation outside class, using technology, such as online homework systems, online quizzes, and personal response system in class culminating in higher level problem solving in recitation.

Pilot Study: The Impact of a Teaching Intervention on Cultural Awareness and Sensitivity in an Associate Nurse Program

Lorraine Mancuso, Nursing, Great Bay Community College

Reflective, interactive learning methods focusing on cultural awareness and sensitivity are advocated in teaching culturally competent approaches to patient care. Approaches that impact student attitudes and values are time intensive. This pilot study tests the impact of a classroom module on cultural awareness and sensitivity of senior nursing students. A pre-test post-test methodology using the "Cultural Awareness and Sensitivity Inventory" addresses the question, "Does interactive classroom learning impact cultural awareness and sensitivity in senior nursing students who have already had cultural competence education"? The results from this study will help guide educators in prioritizing content of cultural competence curriculum.



School-Wide Curricular Efforts to Enhance Teaching Scholarship

Laura Mandos, Pharmacy Practice/Pharmacy Administration, University of the Sciences

Enhancement of the variety of teaching methods utilized by faculty and promulgation of teaching scholarship within the Philadelphia College of Pharmacy has been approached by faculty and administration using a variety of measures that includes teaching and learning methodologies: a workshop on active learning techniques at a required college-wide retreat, highlighting approaches of both senior and junior faculty in large classes; inventorying faculty-reported application of these techniques in required courses as a "snapshot" quantification of both time spent and types of activities being used as well as a faculty-driven elaboration of a shared college-wide comprehensive educational philosophy.

Graduates of Bachelor Degree Hospitality Programs: Working or Not Working in the Hospitality Industry Survey

John Mellon, Business, Misericordia University

This study collected and analyzed empirical data to form a guide for determining which specific courses should comprise a bachelor degree hospitality management program. A survey instrument was mailed to the BS in Hospitality Management alumni of Marywood University, Scranton, Pennsylvania. Eighty-eight (88) surveys were mailed to all hospitality management alumni. Returned surveys n=49 for a fifty-six (56%) percent return rate. A major utilization of the survey results will be to analyze courses that represent the hospitality industry segments in which a majority of the alumni are employed and to develop an action plan for revisions to the curriculum. These reasons can be universal, not specific to Marywood University alumni.

The Biology Taboo Wiktionary: A Student-Developed Tool to Promote Learning in an Introductory Biology Course

Jeffrey Olimpo, Curriculum & Instruction, University of Maryland, College Park

Most introductory courses in the biological sciences are inherently content-dense and rich with jargon that can oftentimes be confusing to novice students. This presents a challenge to instructors, who strive to engage students in developing true, concrete understanding of the terminology. To address this concern, we developed and implemented a Biology Taboo Wiktionary that provided students with an interactive opportunity to review and describe concepts they had encountered during their first semester of introductory biology. Post-course data indicated that >75% of student utilized the Wiktionary and felt it enhanced their understanding of course content beyond traditional didactic instruction alone.

Developing Interdisciplinary Undergraduate-Faculty Learning Communities that Promote Professional Growth and Student Learning

Jeffrey Olimpo, Curriculum & Instruction, University of Maryland, College Park

School reform efforts and the professional development opportunities designed to support such change have long been of interest to the educational community. While effective components of faculty professional development programs have been detailed extensively, little has been explicitly stated regarding the design and implementation of similar, interdisciplinary programs for undergraduate students. In this session, we briefly present interview data demonstrating that such programs augment students' critical thinking skills and promote professional

growth. Additionally, participants will work collaboratively to outline appropriate components of interdisciplinary undergraduate programs and to propose ways in which these components can be assessed across various educational contexts.

Step Away From the Text: Introducing and Supporting Innovation in a Writing Center Tutoring Context

Heather Robinson, English, York College/City University of New York

Writing Center tutors often rely on having students read their own papers aloud as the primary strategy to begin a tutoring session. As widespread as this practice is, though, there has been little inquiry into its efficacy as a tutoring tool. In this presentation, I discuss the effectiveness of incorporating two different tutoring strategies, concept-mapping and tutor read-aloud, into college Writing Center sessions. Both strategies were received positively by students and tutors, but the study revealed difficulties in getting students to try something new, as well as raising questions about how best to provide support for implementing innovations.

Action Learning for a Life Time: The Changing Idiosyncrasies of Leadership

Lillie Sapp, Faculty Development & Curriculum Design, Army Management Staff College Action Learning (AL) involves working on real problems, focusing on learning and

Action Learning (AL) involves working on real problems, focusing on learning and actually implementing solutions. It is a form of learning by doing. Pioneered by Professor Reginald Revans of Salford University, Manchester England, and developed worldwide over the last 50 years, it provides a well-tried method of accelerating learning which enables people to handle difficult situations more effectively.

Using Student Debates to Connect Biological Concepts to Current Issues of Importance to Society

Florence Schmieg, Biological Sciences, University of Delaware

To increase student scientific understanding and to foster appreciation for the importance of science to society, I include an interactive component in the Introductory Biology course that I teach. The format of the exercise is a student debate on a controversy that is related in some way to the biological sciences. Cooperative teams of students are assigned by lottery to a topic and side for the debate, write a paper, prepare a handout, and present an oral debate to the class. Here I will present examples of student work, student opinions, and my assessment of this active learning strategy.

Creating Communities of Faculty and Students Using Inquiry Based Learning

Ruth Shields, Center for Teaching and Learning, Hobart and William Smith Colleges Portia Dyrenforth, Psycholoogy, Hobart and William Smith Colleges

The Teaching Fellows (TF) program has created two distinct communities of learners. Students collaborate using a model of inquiry-based learning. The program not only supports faculty in using the inquiry model but also facilitates discussions about pedagogy between departmental colleagues. This interactive workshop will engage participants in the model of inquiry and discuss the transferability of the model across different types of institutions. Discussion will highlight how to train students in the model and how the program can help to engage faculty and students to help create a supportive, inclusive educational environment on campus.



Educational Goals and Insight from Classroom Experiences Reported by Graduating Seniors in Science Majors

Corinn Sinnott, Cell Biology and Molecular Genetics, University of Maryland, College Park

The Teaching and Learning Center in the University of Maryland's College of Computer, Mathematical, and Natural Sciences helps faculty adopt effective teaching practices and develop innovative curricula. To assess the Center's impact, we surveyed graduating seniors to identify their educational goals and obtain insight into classroom teaching practices. Most students perceived critical thinking as their top educational goal. The majority of students felt that instructors designed courses to build on previous knowledge and half of students felt that their instructors took into account their learning style. We plan to use this survey every semester to document changes in teaching practices.

The "Charge Nurse": Novice Managers in the Simulation Laboratory

Debra Walden, School of Nursing, Arkansas State University

This poster describes an active learning strategy implemented in a simulation laboratory to develop principles of first level management, teamwork, and collaboration in novice nursing students. Students enrolled in the first practicum course functioned as "charge nurses" for peer "care teams" in simulated patient assignments. Responsibilities of the "charge nurse" included organizing, directing and coordinating the assigned simulation experience. Group process techniques for team-building and management were employed. "Charge nurses" debriefed utilizing a self assessment tool developed by faculty. Descriptive statistics demonstrated student preference for this active learning approach as an introduction to management principles.

Do You Feel What I See?

Margaret Mary Wharton, Mathematics, Shenandoah University

Teaching Precalculus to Blind students, vision-impaired, or those students with tactile learning styles. Since universities and colleges must teach all students (any who do not read Braille), this method does not use sight to teach precalculus 1.

Reaching Beyond Office Hours - Using Online Discussion Tool to Advance Teaching Undergraduate General Chemistry

Natalia White, Chemistry and Biochemistry, University of Maryland, College Park Dominique Downing, Chemistry, University of Maryland, College Park

Teaching general chemistry laboratory to undergraduate non-majors is improved by employing an on-line asynchronous discussion. A traditional approach involves face-to-face interaction of students with the instructor during lab and office hours. More than often such interaction is not effective due to the size of the group, limited number of hours or lack of confidence on the student part to ask questions in front of their peers. These obstacles can be overcome in guided on-line discussions that allow students and instructors alike to engage in a meaningful discussion of a topic a and express their thoughts without being pressed.

June 2 - 5, 2011

Inside Out: Modeling Active Learning through Campus and Community Engagement

Vickie Williams, Education, University of Maryland, Baltimore County Sue Small, Education, University of Maryland, Baltimore County Lawrence Slusky, Education, University of Maryland, Baltimore County

Engaging students in active learning requires a different approach to traditional teaching, both inside and outside of the classroom. Building on the wisdom of John Dewey who promoted active learning and reflection, this presentation chronicles the development, implementation, and evaluation of a first year seminar, "Ethics, Diversity, and Social Justice in the Context of Schooling," that incorporates service-learning, interactive discussions, case studies, multi-media, and problem-based learning. Through community engagement and student-centered activities, this class builds retention and connections to campus and develops civic responsibility in students who become agents of social change on their campus and in their community.

The Evolution of a Critical Thinking Faculty Learning Community: From Development to Dissemination

Frank Wray, Biology, University of Cincinnati-Raymond Walters College

In 2009 the authors initiated the creation of a faculty learning community dedicated to the discussion of critical thinking in classroom. What started as a loose-structured journal discussion group soon evolved into a learning community that not only involved scholarly discussion of critical thinking, but also encompassed development, peer-review, implementation and dissemination of critical thinking assessment in the classroom. As a result, this faculty learning community has created a cohort of faculty who are engaging in the scholarship of teaching and learning and sharing that knowledge with their peers.

Thank You to Our Conference Co-Sponsors

Harrisburg Area Community College

Tacoma Community College

Temple University

University of Maryland, College Park

University of the Sciences in Philadelphia

The IDEA Center

Stylus Publishing

Jossey-Bass Publishing

Journal of Scholarship of Teaching and

Learning

www.lillyconferences.com/dc

Please visit our website for information on co-sponsorship opportunities for the 2012 Lilly Conference - DC

Lilly Conference

COLLEGE AND UNIVERSITY
TEACHING AND LEARNING



Lilly International Conference

NOVEMBER 17 - 20, 2011

Oxford, OH

Hosted by: Miami University

Lilly National Conferences

SEPTEMBER 22-25, 2011

Traverse City, MI

Hosted by: International Teaching Learning Cooperative

FEBRUARY 3-5, 2012

Greensboro, NC

Hosted by: University of North Carolina at Greensboro

MARCH 16-17, 2012

Pomona, CA

Hosted by: International Alliance of Teacher Scholars

JUNE 1-3, 2012

Bethesda, MD

Hosted by:

International Alliance of Teacher Scholars

www.Lillyconferences.com