



Proceedings For

Charleston Connections Conference: Innovations in Higher Education

The Citadel, Charleston, South Carolina
May 24, 2007

Sponsored by:

Charleston School of Law
Charleston Southern University

The Citadel
College of Charleston

Lowcountry Graduate Center
Medical University of South
Carolina
Trident Technical College

Charleston Connections Conference
Innovations in Higher Education
May 24, 2007
The Citadel Campus

8:15-8:45 Registration

Location: Outside Bond 165

8:45-9:00 – Opening Remarks – 165

9:00 – 12:15 – Teaching for Understanding: Active Learning and Assessment

Workshop with Dr. Diane Ebert-May, Keynote Speaker (Abstract & Bio Attached)

Bring a syllabus and assessments to work with during workshop

Location: Bond 165

12:15 – 1:30 – Lunch and Poster Sessions

Location: Regimental Commanders Riverview Room

Poster: Development and Initiation of a Peer Evaluation Process for Classroom Teaching

Author: Marlea Wellein, PharmD, MUSC

Poster: Creating a Continuum of Spanish Language Access and Interpreting Services

Authors: Laurine T. Charles, MHS, and Lilless McPherson Shilling, PhD, MUSC

Poster: Factors influencing College Selection and Satisfaction

Authors: DeRoma, V.M., Matthews, T.J. & Hanchon, T., The Citadel

1:30 – 2:30 – Concurrent Sessions

Symposiums – 1 Hour Sessions

1. How to Create an Excellent Learning Environment – **Bond 329**

Speakers: Shakaib U. Rehman, MD, FACP, MUSC, and M. Ishaq Zahid, PhD, The Citadel

2. Integrating Real-time Feedback in the Classroom with New Technology –

Bond 330

Speakers: Sydney A. Beckman, JD, and Gordon Russell, JD, Charleston School of Law

Oral Presentations #1 – Bond 251

1. Outcomes of Sexual Health Education: In –Person vs. Distance Learning

Speakers: Agnes Rivers, PhD, and Virginia M. DeRoma, PhD, The Citadel

2.

LiveText E-Portfolios: Assessment System from Two Views - Student and Instructor

Speakers: Mark Page, MEd and Kay D. Woelfel, EdD, The Citadel

Oral Presentations #2 - Bond - 346

1. Meeting the Varied Needs of Student Learners and the Institution: An Experience in Mixed-mode Course Delivery

Speaker: Richard Hernandez, Dr.PH, Trident Technical College

2. Tablet PC Enhancement of Powerpoint Presentation of Diagrams and Micrographs
Speaker: Karl Karnaky, Jr, PhD, MUSC
3. Virtual Learning Environments: Methodologies to Enhance Learning Outcomes
Speakers: Wade M. Chumney, JD, MSIS, and John J. Sullivan, ABD, Charleston Southern University

Oral Presentations #3 - Bond - 333

1. Teaching Leadership and Ethics to Adults
Speaker: Ray S. Jones, PhD, The Citadel
2. People for the Ethical Treatment of Developmental Math Students
Speaker: Stan Perrine, PhD, Charleston Southern University
3. Teaching with Toys: Providing Opportunities for the Articulation of Career Ethics
Speaker: Kathryn Richardson-Jones, EdD, The Citadel

Oral Presentations #4 – Bond 348

1. Helping South Carolina Children Avoid Tobacco Use
Speaker: Arnie Metz, MA, MUSC
2. The College of Charleston’s Center for Partnerships to Improve Education: Transforming Low Performing Schools
Speaker: Paula Egelson, PhD, College of Charleston
3. Recurrent Studies, Interdisciplinary Expansion
Speaker: Mikhail M. Agrest, PhD, College of Charleston

2:30 – 2:45 – Break and Poster Sessions – Bond 295

Poster: Development and Initiation of a Peer Evaluation Process for Classroom Teaching
Author: Marlea Wellein, PharmD, MUSC

Poster: Creating a Continuum of Spanish Language Access and Interpreting Services
Authors: Laurine T. Charles, MHS, and Lillless McPherson Shilling, PhD, MUSC

Poster: Factors influencing College Selection and Satisfaction
Authors: DeRoma, V.M., Matthews, T.J. & Hanchon, T., The Citadel

2:45 – 3:45 – Concurrent Sessions

Symposium – 1 Hour Sessions

1. Strategies for Evaluating and Assessing Learning (Symposium) – **Bond 329**
Speaker: Sara Calhoun Davis, PhD, College of Charleston
2. Problem-Based Learning for Civic Engagement in General Education Science Course – **Bond 330**
Speaker: John S. Peters, PhD, College of Charleston

Oral Presentations #1 – Bond 333

1. Andragogical Learning Strategies
Speaker: Keith Plemmons, PhD, PE, PMP, The Citadel
2. Using Immersion Learning and Learning Logs to Enhance Learning in a Class on Organization Behavior
Speaker: Tom Kent, PhD, College of Charleston
3. Instructing Through Animated Cartoons
Speaker: Kathy Zanin, PhD, The Citadel

Oral Presentations #2 - Bond 346

1. Virtual Legality: The Role of Copyright Law in the Online Environment
Speakers: Wade M. Chumney, JD, MSIS, and John J. Sullivan, ABD, Charleston Southern University
2. The Personality of Writing: Do Certain Personality Types Enjoy Greater Success in Writing?,
Speakers: Chris Fudge, MA, and Judy Burges, MA, The Citadel

Oral Presentations #3 - Bond 348

1. The Effectiveness of Multidisciplinary Primary Care Morning Report
Speaker: Shakaib U. Rehman, MD, FACP, MUSC
2. Economic Experiments as an Educational Tool
Speaker: Bill Woolsey, PhD, The Citadel
3. Incorporation of Professional Geotechnical Engineering Demonstrations into Senior Level Civil Engineering Courses
Speakers: Edward L. Hajduk, D. Eng, PE, and James K. Plemmons, PhD, PE, The Citadel

3:45 – 5:00 – Continuing discussions, Networking, wine and cheese Location: Bond 295

The Citadel
Teaching for Understanding: Active Learning and Assessment
May 24, 2007

Diane Ebert-May
 Professor, Plant Biology Department
 Michigan State University
ebertmay@msu.edu

Brief Workshop Agenda

Time	Activity
9:00 – 9:15 am	Welcome – Workshop Goals <ul style="list-style-type: none"> • Names, cooperative groups • What do you hope to gain from this workshop?
9:15 – 10:30	Engage : Nature of Scientific Inquiry Explore: <ul style="list-style-type: none"> • Teaching and learning challenges • Getting to the point with students’ prior knowledge and misconceptions
10:30 – 10:45	Snack Break
10:30 – 12:15	Explain: <ul style="list-style-type: none"> • Preparing to teach with backwards design • Active assessments and formats for active learning • Tools Assess: Workshop evaluation <ul style="list-style-type: none"> • Minute paper and or Muddiest Point

***Workshop Materials are on www.first2.org , Click Resources/ Click Workshop

Handouts:

1. Handelsman, J., D. Ebert-May, R. Beichner, P. Bruns, A. Chang, R. DeHaan, J. Gentile, S. Lauffer, J. Stewart, S. Tilghman, W. Wood. 2004. Scientific Teaching. Science. 304:521-522. [reading]
2. Blooms Taxonomy of Educational Objectives
3. Packet of Rubrics
4. Papers from Frontiers in Ecology used in Workshop:
 - Ebert-May D, Williams K, Luckie D, and Hodder J. 2004. Climate change: confronting student ideas. Frontiers in Ecology and the Environment 2(6):324-325
 - Williams KS, Ebert-May D, Luckie D, Hodder J, and Koptur S. 2004. Novel assessments: detecting success in student learning. Frontiers in Ecology and the Environment 2(8):444-445
 - Ebert-May D, Hodder J, Weber EP, and Luckie D. 2005. Unleashing problem solvers: from assessment to designing research. Frontiers in Ecology and the Environment 3(2):101-102.
 - Hodder J, Ebert-May D, Williams K, and Luckie D. 2005. Unraveling complexity: building an understanding of Everglades restoration. Frontiers in Ecology and the Environment 3(3):170-171.
 - Ebert-May D, Linton D, Hodder J, and Long T. 2005. Active Homework - preparation for active classes. Frontiers in Ecology and the Environment 3(5):283-284

References:

1. Assessment, Activities and Rubrics <http://www.flaguide.org>
2. Angelo, T, and P. Cross. 1993. Classroom Assessment Techniques: a handbook for College Teachers. Jossey-Bass, San Francisco, CA. 427 pp.
3. Bransford, JD, Brown, AL, and Cocking, RR. 2000. How People Learn: Brain, Mind, Experience, and School Committee on Developments in the Science of Learning. National Research Council, National Academy Press.
4. Handelsman, J., Miller, S and Pfund, C. 2006. Scientific Teaching W.H. Freeman & Company, 184 pp.
5. Nilson, L. 2003. In the Beginning: Course Design by Objectives. In: Teaching at Its Best: A Research-Based Resource for College Instructors. Anker Publ. Pp.260.
6. Smith, K., Sheppard, SD, Johnson, DW, and Johnson, RT. 2005. Pedagogies of Engagements: Classroom-Based Practices. Journal of Engineering Education. p. 1-15
7. Taggart, GL, Phifer, SJ, Nixon, JA, and Wood M. 2001. Rubrics: A Handbook for Construction and Use. Scarecrow Press.
8. Weimer, M. 2002. Learner-Centered Teaching: Five Key Changes to Practice. San Francisco: JosseyBass
9. Wiggins, G. and J. McTighe. 2005. Understanding by Design. Expanded 2nd Edition. Association for Supervision and Curriculum Development. Alexandria, VA. 371pp.

Diane Ebert-May
Department of Plant Biology
Michigan State University

Diane Ebert-May is a Professor in the Department of Plant Biology at Michigan State University. She provides national leadership for promoting professional development, evaluation and improvement of faculty, postdoctoral teaching fellows, and graduate students who actively participate in creative research about teaching and learning in the context of their discipline. She actively contributes to the educational initiatives of Ecological Society of America, served on the National Research Council (NRC) Committee on Evaluating Undergraduate Teaching, NRC Committee on Integrating Education with Biocomplexity, is a Fellow of the American Association for the Advancement of Science; is on the editorial board of CBE-Life Sciences Education (American Society of Cell Biology), and is an advisory board member of the National Academy of Engineering's Center for the Advancement of Scholarship on Engineering Education, and the Smithsonian Environmental Research Center (SERC).

Ebert-May's research team is developing and testing a model for faculty change in teaching undergraduate science, and model-based reasoning tools designed to enable students in large enrollment science courses to build conceptual understanding. She is PI of project FIRST II (Faculty Institutes for Reforming Science Teaching), an NSF-funded national dissemination network for science faculty professional development in teaching through biological field stations and marine labs. Her recent publications address pathways to scientific teaching based on active learning, inquiry-based instructional strategies, assessment and research. She teaches plant biology to majors and environmental science to non-majors in large enrollment courses. Ebert-May recruits and mentors science postdoctoral fellows and graduate students in teaching and learning research and teaches a graduate-level seminar on scientific teaching. Her plant ecology research continues on Niwot Ridge, Colorado, where she has conducted long-term ecological research on alpine tundra plant communities since 1971.

BS - University of Wisconsin, Madison, Department of Botany

MA and PhD - University of Colorado, Boulder, Department of Environmental, Population and Organismal Biology

Research Web Sites

<http://www.plantbiology.msu.edu/ebertmay.shtml>

FIRST II www.first2.org

CTOOLS ctools.msu.edu

Course Web Sites

ISB 202 Environmental Science and Organismal Biology

<http://www.msu.edu/course/isb/202/ebertmay/home.html>

PLB 203 Biology of Plants

<http://www.msu.edu/course/plb/203/home.html>

Selected Publications

Ebert-May D, Batzli J, and Weber EP. 2006. Designing research to investigate student learning. *Front Ecol Environ* 4(4):218-219.

Batzli JM, Ebert-May D, and Hodder J. 2006. Bridging the pathway from instruction to research. *Front Ecol Environ* 4(2):105-107.

Ebert-May D, Weber R, Hodder J, Batzli JM. 2006. Analyzing results: the tip of the iceberg. *Front Ecol Environ* 4(5):274-275.

Handelsman J, Ebert-May D, Beichner R, Bruins P, Chang A, DeHaan R, Gentile J, Lauffer S, Steward J, Tilghman S, Wood W. 2004. Scientific teaching. *Science* 304:521-522.

Ebert-May D, Batzli J, Lim H. 2003. Disciplinary research strategies for assessment of learning. *Bioscience* 53(12): 1221-1228.

ABSTRACTS

Poster
12:15 - 1:30
Riverview Room - Lunch

**Development and Initiation of a Peer Evaluation Process for Classroom Teaching.
Marlea Wellein, PharmD, MUSC**

Objectives: To develop an objective method to evaluate and improve classroom teaching, which will complement student evaluations.

Methods: Faculty within our department developed criteria to define the “Best Practices in Classroom Teaching”. Literature searches were performed to determine different methods and processes that could evaluate these criteria by means other than student evaluations. Colleges of pharmacy and colleges on the Medical University of South Carolina campus were contacted to discover what, if any, methods/processes they utilized.

Results: In keeping with the philosophy of the American Association for Higher Education, peer evaluation was chosen as the method for performance assessment. The peer evaluation process and tool, which specifically assesses the “Best Practices in Classroom Teaching”, were voted upon and accepted by the department. The faculty then evaluated a seminar with the peer evaluation tool in order to identify any conflicts and to internally validate its usefulness. The peer evaluation process will begin in the Spring of 2006.

Implications: Peer evaluation will be used to evaluate our department’s classroom teaching; therefore, validation of the tool and process is an objective for future research efforts. This objective may be achieved through student evaluations and evaluating the impact on individual teaching practices. In addition, areas of weakness may be detected with this process and help determine department needs for faculty development. If the process is widely accepted, the department plans to expand the peer evaluation process to include other areas of faculty involvement.

Poster
12:15 - 1:30
Riverview Room – Lunch
&
2:20 – 2:45
Bond 295 – break

Creating a Continuum of Spanish Language Access and Interpreting
Laurine T. Charles, MHS, and Lilles McPherson, Phd, MUSC

This session will present a variety of initiatives developed to meet the emerging language access and health care needs of the Hispanic/Latino community. These include grant-funded initiatives as well as volunteer service and outreach. The primary focus of these initiatives has been expanding the continuum of Spanish interpretation training, improving health care access, and providing cultural competence training for practicing health professionals. Partners include HOLA, AHH, and *ALLIANCEnet*. Health Outreach for Language Access (HOLA) is an interdisciplinary, inter-institutional collaborative to create a continuum of interpretation training and education to connect bilingual individuals interested service with the needs of the Hispanic/Latino community. HOLA members have conducted needs assessments surveys, obtained federal and foundation funding, sponsored mother’s morning out series, implemented a graduate certificate in medical and health care interpreting program, created oral and written examinations to qualify medical Spanish interpreters, and sponsored workshops in medical interpreting. Current projects are exploring ways to expand the Patient Navigator program at area health facilities. The Alliance for Hispanic Health (AHH) was created to provide a forum to organize outreach to the Hispanic community. The AHH has sponsored a speaker series on Hispanic health issues during Hispanic Heritage Month, conducted linen and school supply drives for migrant farm workers, provided Spanish interpretation for community health fairs and homeless shelter clinics, and raised funds to pay for cataract surgery for an 8-year old Mexican boy. *ALLIANCEnet* (Anytime/Anywhere Learning Linkages in Allied Health & Nursing Continuing Education) is a Duke Endowment project to provide training and continuing education courses for health professionals working in rural settings. The interactive online courses include objectives, self-assessments, video vignettes, case studies, and post-tests. Topics include cultural competence and working with health care interpreters. The session will also present plans for future initiatives and conclude with discussion and resource sharing among participants.

Poster
12:15 - 1:30
Riverview Room – Lunch
&
2:20 – 2:45
Bond 295 – break

**Factors influencing College Selection and Satisfaction
DeRoma, V.M., Matthews, T.J. & Hanchon, T., The Citadel**

Increasingly, colleges and universities are competing for students so that their institutions can grow. In both attracting and maintaining students, it is important to understand the factors that influence students' choices in university/college selection as well as their satisfaction with the selection of colleges with particular foci following admission. The current study evaluated The Citadel undergraduate students' perceptions of: a) advantages and disadvantages of attending current college; b) advantages of certain factors as they relate to academics (e.g., absence of Greek life), and c) the community atmosphere at The Citadel as it relates to social life on and off campus, size of city, location, and amenities (restaurants). Results of positive and negative perceptions have implications for administrative recruiting efforts and provide direction for areas of improvement to enhance satisfaction with choice of college.

Symposiums
1:30 – 2:30
Bond 329

How to create an excellent learning environment?

Shakaib U. Rehman, MD; M. Ishaq Zahid, PhD

Medical University of South Carolina/Ralph H. Johnson V.A. Medical Center, The Citadel University.

Rationale:

Usually, little attention is given to the importance of the learning environment, however all students can recall examples of poor and excellent learning experiences. Physical features of the learning environment are taken into consideration but emotional tone, level of stimulus and safety to reveal ignorance is often overlooked. This workshop will explore features of excellent learning environments and strategies to create such experiences.

Objectives:

Participants will

1. Understand the importance of elements of the learning environment in facilitating or impeding learning.
2. Identify factors, which improve the learning environment.
3. Identify environmental factors which inhibit learning
4. Develop strategies for improving the learning environment.

Format:

1. Videotape trigger. (10 min)
2. Large group interactive session on identification of factors of the environment. (10 min)
3. Discussion in groups of 3 of memorable learning environments (either good or bad) (10 min)
4. Large group interactive session with flipcharts on features of a good or poor learning environment. (15 min)
5. Large group interactive session on strategies to improve the learning environment. (15 min)

Symposiums
1:30 – 2:30
Bond 330

Integrating Real-time Feedback in the Classroom with New Technology
Speakers: Sydney A. Beckman, JD, and Gordon Russell, JD, Charleston School of Law

The presentation will discuss effective use of wireless response units (a/k/a 'clickers') and their functional integration with PowerPoint in the classroom. The presentation will provide a live interactive demonstration of the technology by providing the audience members with clickers so that they can be actively engaged as students. The presentation will demonstrate and discuss how instant feedback may be obtained and how this information may be used to adjust teaching techniques and materials 'on the fly.' Production of various reports will be demonstrated and discussed to illustrate how students' performance may be tracked permitting the instructor to offer additional assistance to those students who need it in those areas where they are deficient. This discussion will necessarily include challenges unique to the Millennial generation. The final part of the presentation will look at the future with integrated vpad (software) technology. We will discuss how this technology might be integrated into distance learning and whether it could be used video conferencing and online synchronous and asynchronous environments. The presenters will include results of a survey of students from the Charleston School of Law.

Oral Presentations #1
1:30 – 2:30
Bond 251

**Outcomes of Sexual Health Education: In-Person vs Distance Learning
Speakers: Agnes Rivers, PhD, and Virginia M. DeRoma, PhD, The Citadel**

Sex education is a key contributing factor in the emotional development of human beings. The ability to communicate about sex is essential to individuals who want to live a healthy sexual lifestyle. However, it is difficult to gather a community of learners because of busy lifestyles, physical confinement and affordability. Currently, it is unknown whether or not sexual health education learned through a solitary learning environment may offer the same benefits as community learning and this notion will be tested in this study. The prevention of pregnancy and sexually transmitted infections (STI) should also be given top priority in the area of health care. Health care practitioners should also be well-informed in areas of sexual health education and the prevention of pregnancy and (STIs). Specifically, physician assistants should be knowledgeable in the area of sexual health education because they are being trained to become professionals in behavioral medicine. The purpose of this present study is to compare the effectiveness of two mediums of sexual health education: distance learning and in-person presentation. The participants eligible for this study are teachers enrolled in a physician's assistant class at the Medical University of South Carolina. The sample will consist of 60 subjects. The content used during the training components will be controlled; however there will be but different mediums of delivery of the sexual health education content. The instruments used in this study will include the following measures: knowledge of sexual health, comfort in teaching sexual health, and effectiveness in teaching sexual health (in a brief role play) following each of the three exposures. The results will be discussed later on after all data has been collected for the study.

Oral Presentations #1
1:30 – 2:30
Bond 251

LiveText E-Portfolios: Assessment System from Two Views—Student and Instructor **Mark Page, M.Ed. and Kay D. Woelfel, Ed.D., The Citadel**

As part of The Citadel's School of Education data management system initiative, graduate students in the Educational Leadership program construct a professional portfolio using web-based tools through LiveText.

Student's View

From the student's view, LiveText E-portfolio provides an opportunity to communicate assignments with professors and receive timely feedback. Students organize class assignments; post internship activities for review; and, create a portfolio that meets career advancement goals and may be used as part of a job interview with potential employers.

LiveText allows the user to attach a document for review but has limited copy/paste features. Overall, the challenges of using LiveText are directly related to the technology ability of the user. The E-portfolio, in itself, speaks to the technology proficiency of candidates and the portfolio contents are a culmination of coursework activities and job-related experiences.

Instructor's View

From the instructor's view, LiveText E-portfolio provides an opportunity to create a standards-based document that is aligned with South Carolina and National Council of Accreditation for Teacher Education (NCATE) accreditation requirements.

The E-portfolio begins as a working professional document using a customized template that includes course and program requirements. The document becomes the repository for student work during the program—case studies, reflections, journals, technology plans, budget simulations, curriculum projects, internship logs, resume, and a leadership philosophy.

Assessment rubrics are imbedded in the portfolio allowing students to submit practice assignments for preliminary feedback scores followed by an official document submission to complete course requirements.

To view complete E-portfolio templates go to www.LiveText.com, visitor's password EC3FB23E. Student and instructor views of the LiveText E-portfolio will be shared at the 2007 Charleston Connections Conference.

Oral Presentations #2

1:30 – 2:30

Bond 346

Presentation Title: Meeting the Varied Needs of Student Learners and the Institution: An Experience in Mixed-mode course Delivery.

Speaker: Richard Hernandez, Dr.PH, Trident Technical College

Non traditional delivery systems have grown in popularity as colleges strive to meet the educational needs of their community of interest. One approach has been the use of Mixed-mode (Blended learning, Hybrid) courses. Trident Technical College has begun to employ Mixed-mode course offerings in an attempt to meet the increasingly complex lives of students, to facilitate learning, and to maximize the use of classroom space. This presentation will detail the planning, implementation, evaluation, and lessons learned as Trident Technical College developed a mixed mode option for course delivery integrating classroom and online components.

Oral Presentations #2
1:30 – 2:30
Bond 346

**Tablet PC Enhancement of PowerPoint Presentation of Diagrams and Micrographs
Karl Karnaky, Jr., Department of Cell Biology and Anatomy, MUSC**

Utilization of a Tablet PC in my PowerPoint lectures in a Molecular Basis of Medicine and a Histology and Embryology course this past year gave me an opportunity to discover the great power of this technology for teaching. Most of my slides include diagrams of cells and organelles, and light or electron micrographs which include very small structures. I wanted to be able to annotate accurately on each PowerPoint slide, with full screen projection sometimes not possible with conventional transparency projectors. Also, I wanted to make *de novo* drawings during lectures to supplement content already on slides. The Tablet PC was the perfect choice to achieve these and other important teaching goals. Live annotation added an element of unpredictability to the presentation that elicited student curiosity and attentiveness. Students appeared to be more engaged in writing down key points as I underlined, circled, or drew them on the slide. Significantly, labels and drawings are on the screen as long as the slide is projected, not the fraction of a second of a conventional laser pointer beam. After the lecture, I distributed a permanent digital record of marked slides on the course website. Student response was extremely positive to this technology. I will deliver the presentation at this CCC Conference with a Tablet PC so I can demonstrate its potential in the teaching of lectures utilizing diagrams and micrographs.

Oral Presentations #2
1:30 – 2:30
Bond 346

Virtual Learning Environments: Methodologies to Enhance Learning Outcomes
Wade M. Chumney, JD, MSIS and John J. Sullivan, ABD
Charleston Southern University

Objectives: Institutions of higher learning are facing increasing pressure to implement technology solutions in order to promote student success. The objective is to create a virtual learning environment which maximizes student learning of the course subject matter given the inherent constraints of the distance learning format. **Methods:** Weekly modules with various assignments were deployed to establish the online framework. Within each module were four components: 1) Objectives to be learned during the scheduled week; 2) Resources such as recorded lectures, PowerPoint presentations, and chapter outlines to assist with the assigned readings; 3) Quizzes to assess students comprehension of the material; and 4) Discussions to enable application of students knowledge to real-world examples and assess students articulation of key concepts. In addition, a midterm, final exam, and group research paper were administered. **Results:** Two objective measures were used to assess outcomes, 1) comparison of student learning outcomes via assessment of online student test answers with those taking the class in a traditional environment; and 2) student feedback in the form of course evaluations. The comparison of online students test responses to traditional students indicated that the online cohort's learning outcomes met or exceeded those of traditional students. Furthermore, student feedback was almost unanimously positive ("The instructor uses student lead discussions to stimulate thinking in each student. I've learned a lot through this method, because it encourages me to research a topic prior to posting a comment or a question."), with only one explicitly negative comment that referred to the wording of the syllabus ("He needs to clarify his syllabus."). **Conclusion:** The methodology used to foster student learning clearly appears to be successful according to the two objective measures applied. The critical learning components that most enabled student learning outcomes appeared to be the student-lead discussion questions and the website summaries.

Oral Presentations #3
1:30 – 2:30
Bond 333

Teaching Leadership and Ethics to Adults
Ray S. Jones, PhD, The Citadel

This paper addresses the question “What concepts and practices are particularly relevant to the teaching of leadership and ethics for adult learners?” The graduate course Leadership and Ethics: Organizational Development (Business Special Topics and Industrial/Organizational Psychology Special Topics course) was offered in Spring 2007 by the author. Preparation for the course included content relevant materials in leadership and ethical theory, as well as research into and application of the adult learning paradigm. The graduate students taking “Leadership and Ethics” are adults. A healthy body of literature establishes that adults learn in a qualitatively different manner than the pre-adult or young adult students who comprise the ranks of the undergraduate classes of South Carolina Low Country institutions. The adult learning approach is termed “andragogy” and has specific benefits for the teaching of ethics and leadership. This paper explores the andragogical concepts relevant to the teaching of leadership and ethics as they were applied to the graduate course Leadership and Ethics at The Citadel in Spring 2007.

Oral Presentations #3
1:30 – 2:30
Bond 333

People for the Ethical Treatment of Developmental Math Students
Stan Perrine, PhD, Charleston Southern University

More and more students (especially in South Carolina) are entering college under prepared for college level work. No discipline has experienced this phenomenon more than Mathematics. Charleston Southern, for a number of years, had a nationally recognized Developmental program. However, in recent years, the steady increase in the number of these students has put a strain on faculty and resources that can be dedicated to helping these students.

The purpose of this talk is to offer a couple of simple changes that have been implemented in our “Foundations Algebra” course that have made a significant impact on the students learning, and retention, of the course material. We will discuss the impact these changes have had on faculty teaching the course, the support necessarily provide by the administration, and the outcomes on the students, citing both improvements in current course success, but also, and more importantly, improvements in the success of the developmental students in subsequent courses for which we are attempting to prepare them.

Oral Presentations #3
1:30 – 2:30
Bond 333

**Teaching with Toys:
Providing Opportunities for the Articulation of Career Ethics
Kathryn Richardson-Jones, Ed.D., The Citadel**

Abstract: The use of toys in educational processes spans human history. If asked about their favorite toy, most children and adults can readily share experiences related to their favorite item. The language of play crosses generational, linguistic and cultural boundaries. Because of this, research on the effectiveness of the use of toys in the development of verbal abilities among children spans decades. Toys have also been used over the past twenty years to enhance science and math concept attainment and articulation throughout the United States in middle and secondary settings. However, there is limited evidence of the use of toys with adults in career development. If asked directly about their beliefs in a public setting, most adults feel uncomfortable. If adults are provided a toy in a group setting and asked to reflect on how the toy relates, as a metaphor, to their chosen career, personal boundaries are somewhat removed and the same adults are able to talk about the object and their beliefs from an abstract point of view. The resulting toy related discussion allows those in the group to articulate and clarify expectations and ethical norms related to their career.

This interactive presentation will focus on the use of toys and think-write-share activities as a means for providing opportunities for pre-professionals and professionals to articulate their beliefs about career ethics. Findings from the use of this method with pre-service teachers over the past two years will also be shared.

Oral Presentations #4
1:30 – 2:30
Bond 348

Helping South Carolina Children Avoid Tobacco Use
Arnie Metz, MA, MUSC

Using a partnership between Hanahan Middle School health education director Katie Tisdale, the principal Mr. Robin Rogers and the Medical University of South Carolina (MUSC) PA Program, we set out to prevent tobacco use by 5th grade children. First year PA students, will use a system of instruction called “Towards No Tobacco Use” (TNT) to increase the children’s knowledge of tobacco use and improve their refusal skills through peer negotiation, assertiveness, and self-esteem. Participants include middle school students (5th graders) whose cultural background approximates 50% white and 40% African American 9% latino, and 1% Asian. After an initial knowledge/attitude measuring survey to establish baseline knowledge, instructors (57 first year PA students at MUSC who have been trained in tobacco prevention instruction) administer a series of ten 45 minute classes aimed at increasing children’s knowledge of effects of tobacco, marketing ploys employed by tobacco companies and improving the children’s refusal skills. Post intervention measurement will be done at the conclusion of the ten classes. The two results will be compared in order to measure the effects of the instruction. Specific data collected will be destroyed at the conclusion of the study. Only aggregate data will be retained or disseminated.

Incidence and Prevalence:

22.9% of high school students in the U.S. are current cigarette smokers
10.1% of middle school students in the U.S. are current cigarette smokers
4,400 young people in the U.S. between age 12-17 initiate cigarette smoking every day
Approximately 2000 U.S. youth 12-17 become daily smokers every day

TNT:

Reduced the number of middle school students in east Texas who began smoking by 51%
Determined by the CDC to address all of the National Health Education Standards
Selected as one of only two tobacco use prevention “Programs That Work” by the CDC
Named a “Model Program” by the National Institute on Drug Abuse, and the National Cancer Institute
Named highly cost effective as a primary prevention program in reducing the adverse health outcomes of smoking

Oral Presentations #4
1:30 – 2:30
Bond 348

**The College of Charleston’s Center for Partnerships to Improve Education: Transforming
Low-Performing Schools
Speaker: Paula Egelson, PhD, College of Charleston**

Initiated in 2005, the purpose of the Center for Partnerships to Improve Education at the College of Charleston is to raise the level of educational attainment for students in poverty by utilizing the expertise of a wide and varied constituency working toward a shared vision. The long-term benefit of this effort is to prepare students to become highly skilled workers and informed, thoughtful citizens. This effort brings together public schools, school districts, higher education, the local community, businesses, and state resources with a focus on student achievement through teacher preparation and professional development.

There are three strands associated with the partnership. They include teaching and learning, community outreach, and research. The partnership works in several urban and rural schools in the Lowcountry. They are described below:

- A primary partnership focus is Burke High School located in downtown Charleston. A comprehensive school plan has been developed at the school; short-term activities such as tutoring, summer programs, professional development, and faculty team teaching are underway.
- There is also a partnership with Memminger Elementary School. Teachers and faculty members currently share instructional strategies, exchange ideas, and have created classroom projects.
- M/E-Gap classrooms are located in schools across Charleston. They are designed to accelerate the learning for overage students who are at least one year, and usually two or more years, older than their classmates. The partnership provides a coherent organizational and instructional model for this program.
- Accelerated Schools *plus* Partnership, a national school reform model, builds capacity at the school level to accelerate the learning of all students in selected South Carolina schools.

The Center’s work has long-term implications. If the partnership approach is validated as being successful, additional partnership development will be encouraged among universities, school districts, businesses, and non-profit organizations across the state and region. This support will take the form of technical assistance, funding, and/or professional development opportunities.

Oral Presentations #4
1:30 – 2:30
Bond 348

Recurrent Studies. Interdisciplinary Expansion
Mikhail M. Agrest, College of Charleston

This work expands the idea of presenting ballistics studies in the format of the “shoot for your grade” lab into related recurrent methodology [1,2]. It also shows the advantages of applying this method to a variety of topics in a wide range of disciplines such as fluid mechanics, thermodynamics, electricity, optics, and, through mathematical modeling, beyond traditional physics to chemistry and biochemistry, biology and geology.

The Recurrent method of studying a phenomenon or a device enhances the learning process by exciting students with the visualization of the results of their work. Based on a hypothesis or on an accepted theory, students examine the phenomenon in the forward performed study to use results of direct measurements to calculate unknown parameters. In the backward study students use the magnitude of those parameters to predict measurable parameters. Precision of the prediction depends on the quality of the results of the forward performed experiment.

Visual assessment of students’ prediction of the results emotionally involves them and makes the learning process more effective.

This approach brings popularity into the disciplines because it involves hands-on experience, using and testing the students’ results during their lab work. The recurrent approach enhances learning and helps students comprehend the material by using what they learned to predict new results and to check them within the same lab. This proposed approach improves the effectiveness of the teaching-learning process while being applicable to wide ranging disciplines. An exchange of similar experiences in your discipline will be highly appreciated.

1. M. Agrest. *Lectures on Introductory Physics I and II*. 249 pp. and 252 pp. with illustrations Thomson Learning. ISBN 1426625596, 2007, ISBN 0-759-39304-4, 2006

2. M. Agrest. *Lectures on General Physics I and II*. 257 pp. and 237 pp. with illustrations. Thomson Learning. ISBN 0-759-35047-7, ISBN 0-759-36060-X, 2005

Poster
2:20 – 2:45
Bond 295 – break

**Development and Initiation of a Peer Evaluation Process for Classroom Teaching.
Marlea Wellein, PharmD, MUSC**

Objectives: To develop an objective method to evaluate and improve classroom teaching, which will complement student evaluations.

Methods: Faculty within our department developed criteria to define the “Best Practices in Classroom Teaching”. Literature searches were performed to determine different methods and processes that could evaluate these criteria by means other than student evaluations. Colleges of pharmacy and colleges on the Medical University of South Carolina campus were contacted to discover what, if any, methods/processes they utilized.

Results: In keeping with the philosophy of the American Association for Higher Education, peer evaluation was chosen as the method for performance assessment. The peer evaluation process and tool, which specifically assesses the “Best Practices in Classroom Teaching”, were voted upon and accepted by the department. The faculty then evaluated a seminar with the peer evaluation tool in order to identify any conflicts and to internally validate its usefulness. The peer evaluation process will begin in the Spring of 2006.

Implications: Peer evaluation will be used to evaluate our department’s classroom teaching; therefore, validation of the tool and process is an objective for future research efforts. This objective may be achieved through student evaluations and evaluating the impact on individual teaching practices. In addition, areas of weakness may be detected with this process and help determine department needs for faculty development. If the process is widely accepted, the department plans to expand the peer evaluation process to include other areas of faculty involvement.

Symposium
2:45 – 3:45
Bond 329

Strategies for Evaluating and Assessing Learning
Sara Calhoun Davis, PhD, College of Charleston

This discussion will address two issues in classroom test creation in higher education, writing and evaluating 1) objective items and 2) essay items. Participants will have the opportunity to evaluate some of their own assessment items.

Part I: Do you rely on the good old instructor’s manual for your objective test items? Would you like to be able to evaluate the quality of these items and create effective test items of your own? The first part of this discussion will address criteria for writing and evaluating objective items that measure higher levels of thinking and reduce the “guessing factor” in student responses.

Part II: Do your students’ essay question responses fall short of your expectations? Would you like to increase the reliability of your evaluations of student’s essay responses? The focus of the second part of this discussion is assessment-centered design of essay questions and writing prompts. Participants will contrast the two types of writing prompts/essay questions which are typically used in classroom testing: restricted response and extended response. Additionally, participants will examine three critical criteria necessary for essay questions to meet the academic and practical needs of both respondents and evaluators: (1) to address important learning, (2) to provide appropriate student direction, and (3) to contain sufficient structure for ease of assessment. Finally, participants will explore specific criteria to determine what types of learning are best demonstrated with essay responses.

Participants will receive detailed handouts with guidelines for both writing and evaluating effective objective and essay items. Participants are encouraged to bring examples of essay and other test items for review and discussion.

Symposium
2:45 – 3:45
Bond 330

Problem-Based Learning for Civic Engagement in General Education Science Course
John S. Peters, PhD, College of Charleston

Educators have long been concerned that the traditional content-driven lecture/laboratory model of introductory science courses fails to adequately reflect the interactions of science with important societal issues. Traditional content-driven science classes often focus on teaching abstract concepts and theories that are context independent, rather than on ways this knowledge can be applied to help students make informed decisions about related civic issues.

The focus of this workshop will be to introduce faculty to Problem-Based Learning (PBL). The principle behind PBL is that the starting point for learning should be a controversial problem or issue that requires the application of scientific knowledge to fully understand the facets of the problem and find workable solutions. Students engage in collaborative learning, out-of-class research, and inquiry-based activities as they identify, explore, elaborate on, and integrate both scientific and non-scientific knowledge to formulate their recommendations for solutions. Workshop participants will explore pedagogical techniques used in PBL by participating in the initial stages of solving a real problem used in a biology course. Resources for finding and developing problems, suggestions for facilitating collaborative learning, and common implementation pitfalls will also be shared. Research into the effect of PBL on students' views about Science-Technology-Society relationships will also be shared.

Oral Presentation #1
2:45 -3:45
Bond 333

Andragogical Learning Strategies
Keith Plemmons, PhD, PE, PMP
The Citadel, Charleston, SC

Andragogical learning strategies differ significantly from pedagogical learning strategies. While both have their place in the educational process, the differences should be well understood by every educator.

This presentation explores adult learning theory and the associated andragogical learning strategies. Pedagogical assumptions about pre-adult learners will be compared with andragogical assumptions associated with adult learners. Contemporary and andragogical learning models will be compared to help differentiate pedagogical orientation from andragogical orientation. The elements of the andragogical process will be presented using the Technical Project Management (TPM) Graduate Certificate Program as a practical example.

Experienced adult professionals looking for career development expect an advanced level of instruction. These expectations necessitate a learning environment characterized by effective and innovative andragogical learning strategies. The strategies employed by the TPM graduate certificate program include:

- A comprehensive Capstone Project assignment that spans multiple courses,
- Assignment and project deliverables that must conform to industry standards,
- Course content supplemented by subject matter expert (SME) presentations and applicable assignments, and
- Case studies and assignments derived from project site visits and presentations.

Learning strategies with applicable examples will be presented. Feedback from the audience will be solicited to identify improvements and alternate approaches.

Oral Presentation #1
2:45 -3:45
Bond 333

**Using Immersion Learning and Learning Logs to Enhance Learning in a Class on
Organizational Behavior
Tom Kent, Ph. D., College of Charleston**

This presentation will describe one approach to enabling students to learn about organizational behavior through “immersion learning.” A brief review of concepts and some of the relevant literature will be followed by hands-on examples of exercises designed to have students give voice to their cultural realities as they experience organizational dynamics. The use of reflection to learn from the experiences will also be described.

Immersion learning models presented by Boud and Walker and by Sheared will be used as the basis for describing a process for structuring class room learning in a way that brings out the cultural perspectives that both enable and block students from “seeing” a larger reality related to people’s behavior in organizations. A large set of exercises that have been designed to highlight specific organizational dynamics will be shared with participants. The model will be used to create a framework for viewing those organizational behaviors.

Reflection via learning logs is a key part of the course. Schou’s 5 strategies for reflection in action will be described and a methodology for using those strategies to consolidate the immersion learning will be shared.

Oral Presentation #1
2:45 -3:45
Bond 333

Instructing through Animated Cartoons – A Teaching Innovation
Kathy Zanin, PhD, The Citadel

Fourteen years of teaching at the college level have taught me that students of all ages like cartoons! Animated PowerPoint shows are well-received by my students who claim that these cartoons make it easier for them to understand the more difficult concepts in my courses. Additionally, showing a cartoon breaks the monotony of lecture and helps students stay alert in class. In this presentation I will give a crash course on using a software package called Camtasia Studio to create professional-looking, narrated movies from PowerPoint files.

Oral Presentation #2
2:45 -3:45
Bond 346

Virtual Legality: The Role of Copyright Law in the Online Environment
Wade M. Chumney, J.D, MSIS and John J. Sullivan, ABD
Charleston Southern University

Copyrights are critically important in the modern academic environment. The virtual learning environment only amplifies the vital nature of copyrights. Unfortunately, most academics have a limited knowledge of this subject matter.

Teaching, at its core, is about the dissemination of information. The traditional method of protecting information has been the legal protections afforded by copyright law. Copyright law generally grants the creator of an original work of authorship which is fixed in a tangible medium of expression the exclusive right to distribute, perform, and display the work for a period of time. For most works the present period of protection is the life of the author plus seventy years. After this time period elapses, the work enters the public domain. There are those who argue that this is an inordinate amount of time for information to be kept from the public.

The ability of the Internet to transport information quickly and efficiently has had a tremendous impact on the protection afforded copyrighted works. The pervasiveness of the Internet has fundamentally altered the way information is distributed. The digital nature of the medium allows data to be packaged and sent across telecommunications lines from one point to another at astonishing speed. Because information can be copied and distributed so quickly and easily, the protections afforded by copyrights are increasingly difficult to enforce.

It is primarily the convergence of these two concepts—the extensive period of protection afforded copyrighted works and the ubiquitous nature of the Internet—that has resulted in the current dilemma faced by academics. There are several critical concepts that academics must understand to adequately address copyright issues, including: fair use, less restrictive licensing schemes, and the open source movement. The purpose of this presentation is to provide an understanding of existing copyright law and these various tools.

Oral Presentation #2
2:45 -3:45
Bond 346

The Personality of Writing: Do Certain Personality Types Enjoy Greater Success in Writing?
Chris Fudge and Judy Burges, The Citadel

Since the 1930's "three paradigms have predominated as models for teaching writing: current traditional rhetoric, expressivism (expressionism), and social constructionism" (Murphy & Sherwood 3). While current traditional rhetoric emphasizes writers' texts and expressivism emphasizes writers' creative processes, social constructionism focuses on sociocultural and historical settings where writers develop their understanding of language and knowledge. Unfortunately, many writing professors are unable to "foster multiple perspectives on writing" and teaching may not match learning (Bawarshi & Pelkowski 5).

For example, extraverted personalities may prefer "reflecting orally and bouncing ideas off others, rather than reflecting in writing," while introverted learners may prefer "reflecting on their own inner processes" and producing brief writing that might seem superficial to some professors (Callahan 11). Also, extroverted personalities need professors' expectations before beginning tasks and crave guidelines for performance/evaluation. However, introverted professors (the majority of college professors) may react negatively to directed instruction because they value the creation/ application of independent standards.

This workshop reviews sixteen personality profiles and presents research results matching MBTIs of 600-700 first-semester freshmen with their English 101 success rate ("C" or above). If a correlation exists between the MBTI and successful completion of English 101, then a correlation may exist between the MBTI and teaching strategies. This workshop addresses several questions:

How can we identify various personality types of writers? And
How can we use that knowledge to help students produce their best writing/learning?

Finally, how do we alter teaching strategies to better fit students' writing/learning preferences because "profiles provide a place to start" (Gladia 36)? The audience will learn classroom teaching strategies for each personality profile, will examine (in small groups) three case studies matching strategies with different profiles, and will project how these strategies can be used in other classroom settings.

Oral Presentation #3
2:45 -3:45
Bond 348

The Effectiveness of Multidisciplinary Primary Care Morning Report **Shakaib U. Rehman, MD, FACP, MUSC**

Statement of Problem

Despite the increasing numbers of health care professionals who recognize the benefits of a multidisciplinary approach to patient care, this philosophy is rarely taught to students/residents. Physicians teach medical students and pharmacists teach pharmacy students.

Objectives of Program/Intervention

1. To determine the teaching effectiveness of Pharm D's contribution in Primary Care Morning Report.
2. To determine the preference of learners regarding the format of educational activity i.e. "prepared and worked up cases" vs "unprepared cases" (as in the case of traditional "inpatient Morning Reports")

Description of Program/Intervention:

Multidisciplinary Primary Care Morning Report has been established at the RHJ VAMC in Charleston, SC. These one-hour sessions are conducted once weekly for all trainees who are rotating through primary care clinical training program. Participants include residents and interns in medicine, neurology, and psychiatry; pharmacy residents; and medical, pharmacy, and physician assistant students. A case based, interactive learning format is utilized and is often supplemented with brief didactic presentations. Physicians provide insight regarding physical assessment and differential diagnosis. Pharmacists provide insight regarding drug interactions, indications, contraindications, doses, and cost of medications as it relates to the clinical presentation. Respondent's opinion towards the primary care morning report is measured on a five-point Likert scale by using 14 items in the survey questionnaire.

Findings to Date

400 subjects completed the survey. Most respondents found Pharm D's contribution to have a great educational value (94%, $p < 0.0001$); most respondents were in favor of a prepared case presentation compared to spontaneous case presentation (93%, $p < 0.0001$). Overall participants' satisfaction on a five-point scale has averaged 4.7 on the 5-point Likert scale, which represents ratings between very good and outstanding. Logistic regression analyses are being performed and will be presented at the meeting.

Oral Presentation #3
2:45 -3:45
Bond 348

Economic Experiments as an Educational Tool
Bill Woolsey, PhD, The Citadel

In his seminal work in economic experimentation, Nobel-prize winning economist Vernon Smith had students participate in a double Dutch auction determining equilibrium price and quantity. The purpose of the experiment was to determine if potential gains from trade would be exhausted and the “market” price and quantity would adjust to equilibrium. This was to provide evidence about whether markets in the economy exhaust gains from trade and if market prices and quantities adjust to equilibrium.

Traditionally, students have been taught the concepts of equilibrium through definitions, descriptions of processes by which prices would adjust to equilibrium, and diagrams. Algebraic solutions to simple equations are sometimes used. Spreadsheets have also been introduced to illustrate the concept of equilibrium.

Can participation in an experimental auction result in improved student learning?

Three sections of macroeconomics students were given three different treatments. One section participated in the auction experiment before receiving the traditional approach. A second section learned about the concept of equilibrium, and then participated in the auction. The third group received only the traditional lecture. A short multiple choice pop quiz was given to the three groups and the average scores determined. The performance was poor and similar for all three groups. However, the group that participated in the auction first did best, the group that had the auction after the lecture did second best, and the group that did not participate in the auction did the worst. The differences, however, were not statistically significant.

The purpose of this presentation is to describe the experiment in more detail, and discuss the proper response to the results. Is the best response to not waste time with the auction? Should the experiment be repeated? Should changes be made in the procedure?

Oral Presentation #3
2:45 -3:45
Bond 348

**Incorporation of Professional Geotechnical Engineering Demonstrations into
Senior Level Civil Engineering Courses
Edward L. Hajduk, D.Eng, PE and James K. Plemmons, PhD, PE, The Citadel**

One of the educational objectives of the Citadel's Civil and Environmental Engineering (CEE) program is to provide a high quality course of study that integrates the important concepts of design with a solid theoretical and practical foundation to allow all graduates to seek professional careers in the private and public sectors. To assist in accomplishing this objective, CEE department courses routinely incorporate professionals in the civil engineering disciplines to expose students to actual projects and experiences.

Within the Citadel's CEE program, students are required to take three senior levels courses in geotechnical engineering, the discipline of civil engineering related to soils and foundations. These courses include an introduction course in soil mechanics, a foundation design course, and a laboratory course where students conduct testing to determine soil engineering properties.

Within the last 4 years, the Citadel's CEE departments' geotechnical faculty has enlisted several area geotechnical engineering and construction companies to perform demonstrations of subsurface testing, soil and foundation field testing, and driven pile installation on the Citadel's campus. These demonstrations expose students to concepts detailed in the three geotechnical courses while not burdening the CEE department with the expenses related to purchasing, operating, and maintaining the associated equipment. In addition, data collected during these demonstrations are directly incorporated into the geotechnical courses, allowing the students to apply "real world" data in their assignments. The geotechnical demonstrations performed by the local companies provide practical experience and data to Citadel CEE students, greatly assisting the meeting the program goals.

The following presentation explores the development and evolution of the involvement of the local engineering and construction companies into the geotechnical engineering component of the Citadels CEE program. In addition, summaries of the professional demonstrations to date and an evaluation of their effectiveness in the curriculum are presented.