**The Thirty-Ninth
Annual Conference of the
International Society for
Exploring Teaching and
Learning (ISETL)**

October 8-10, 2009

Philadelphia, PA

Proceedings

ISETL is dedicated to the study of instruction and principles of learning in order to implement practical, effective methods of teaching and learning; promote the application, development and evaluation of such methods; and foster the scholarship of teaching and learning among practicing post-secondary educators.

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A Comparison of Writing Strategies and Multiple Choice Tests on Text Comprehension and Retention

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Textbooks provide essential information for students to master their academic material in college courses. Assuming that students study/comprehend text assignments successfully, professors can plan class time to elaborate or enrich the information presented in texts. Two common approaches to promote completing text assignments in a timely manner and assessing comprehension are to require students to complete writing assignments such as summarizing based on their study and to administer tests covering the required reading material.

Writing assignments are appealing to some professors because of the perceived benefits that writing is purported to have on learning. Writing promotes learning because more intellectual activity is required to write about a topic than to only read about it.   For example, Newell and Winograd (1989) demonstrated that learners were able to generate more accurate gist of text when they wrote summaries than when they wrote outlines or answered study questions. As a result of research on writing activities, it may be possible to construct a hierarchy of the impact of writing activities on comprehension reading alone is less effective than reading and underlining which is less effective than reading and taking notes which is less effective than reading and writing summaries.

The influence of tests on learning has been widely investigated with a consistent conclusion that classroom testing impacts student learning. Subsequent research has supported the powerful relationship between classroom testing and student learning (e.g., Butler, Karpicke, & Roediger, 2007; Crooks, 1988; Martinez, 1999) while seeking to identify the sources of the impact of classroom testing.

In this study, three writing assignments (summary, outline, and personal statement) were compared with individual chapter multiple choice quizzes on the grades students achieved on a comprehensive course-end multiple choice examination covering all the chapters in the required text. One purpose of this study was to compare three types of writing to investigate possible differential effects on a course-end comprehensive multiple choice test on the required course text. A second purpose was to compare writing to test taking as strategies that promote text comprehension indicated by performance on a course-end comprehensive multiple choice test on the required course text. One notable feature of this study is that it was a component of actual classes in which grades were assigned with students who were studying the content to meet graduation and certification requirements.

Students enrolled in two sections of a required teacher education pre-service educational psychology course at a large mid-Atlantic research university served as the participants. The two sections of this course were randomly assigned to either writing or quiz conditions. Students were assigned to study the textbook, Educational Psychology: Developing Learners, 6th edition (Ormrod, 2008a) following a schedule that required them to submit an assignment on a chapter of the text each week of the term to receive credit for the assignment.

Students were given a 45-item multiple choice pre-test drawn from the text author-supplied test item pool (Ormrod, 2008b) on the second day of class (3 items for each chapter of the 15 chapters in the text). Due to restrictions imposed by the institutional human subjects review board students were given the option of completing a 45-item multiple choice post-test covering the whole text (3 items for each chapter of the 15 chapters in the text) administered on the final day of class for the term. The post-test was also drawn from the author supplied test bank. Thirty-three of 39 students completed the post-test administered on the last day of class. The post-test grades were not included in calculating students' course grades.

Students in the morning class (N=18) were required to submit one of three writing assignments for each chapter in the text: outline, summary, or personal meaning. One of the three writing paper assignments was randomly applied to five of the 15 chapters of the required text. Thus, students wrote five summaries, five outlines, and five personal meaning papers. Instructions on how to write each of these papers and examples were given for each of the writing to learn assignments

Students in the afternoon class (N=21) were required to complete an online 15-item multiple choice quiz for each of the 15 chapters in the textbook; the online program through which the tests were delivered was a commercial course management program (Blackboard). All items in these chapter quizzes were drawn from the item pool supplied by the text author (Ormrod, 2008b).

The mean of the pretest scores of the writing section (N=15) was 25.8667 (SD=3.7391); the mean of the pretest scores of the multiple choice quiz section (N=16) was 25.6875 (SD=4.5125). A one-way ANOVA indicated no significant difference between groups (p=.9054). Thus, both classes began with the same prior knowledge about the content of the text

The mean of the post-test scores of the writing section (N=16) was 32.1875 (SD=3.7727); the mean of the post-test scores of the multiple choice quiz section (N=17) was 31.2941 (SD=5.8818). A one-way ANOVA indicated no significant difference between groups (p=.6086). Thus, both classes completed the course with essentially the same understanding of the text.

To investigate the extent to which students learned the material in the text, a t-test was conducted comparing pretest and post-test scores. The mean of pretest scores was 25.7742 (N=31) and of post-test scores was 31.6129 (N=31). This was significantly different (p=.000004). Thus, students demonstrated increased knowledge of the text material from the beginning to the end of the course.

To examine the possibility of differential effects of the writing assignments on the quality of students' performance in doing the writing, an ANOVA was applied to the grades students received on each type of writing assignment. The mean grade of summary papers (N=16) was 61.2650 (SD=6.3757); the mean grade of outlines (N=16) was 68.8750 (SD=4.3186); and the mean grade of personal learning papers (N=16) was 70.6875 (SD=2.7256). There was a significant difference between groups (p=.000004). Further t-tests between groups indicated a significant difference between summary and outline grades (p=.0007) and between summary and

personal meaning grades (p=.00001), but no difference between outline and personal meaning scores (p=.1660). Thus, students got significantly lower grades writing summaries than they received for writing either outlines or personal meaning papers.

To investigate whether students writing improved as a result of practice and feedback during the term, ANOVAs were conducted comparing scores of first assignments to those of last assignments. All assignments demonstrated significant improvement over the period of the course.

Finally, to rule out possible effects of text features differentially influencing quiz achievement, the quizzes were grouped according to corresponding writing prompts: summaries, outlines, and personal meaning papers. The post-test scores were grouped into the same chapter organizations as the writing assignment questions. ANOVA revealed no significant differences between groups (p=0.2151).

It appears that writing had no discernable beneficial effect on text comprehension over chapter multiple choice quizzes as measured by grades on a summative multiple choice test. It does appear that students gained some benefits in the writing section because the quality of their summaries, outlines, and personal papers increased over time. These effects can be influential to an instructor who wants students to read the text yet is time-limited in the area of grading.

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Creating Personal Connections with Students within the Classroom Context:
A Motivational Force for Learning?

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Presentation Objectives:

1. To discuss the necessity of creating good relationships between students and instructor for learning within the classroom.
2. To illustrate specific techniques in obtaining personal information from students.
3. To demonstrate methods in helping students conceptualize course content, requirements, and student expectations through "personal connections".
4. To facilitate discussion among attendees.

Presentation Audience:

Faculty and administrators

Presentation Activities:

Discussion and demonstration of methods of creating personal connections that can formulate a relational foundation that has been shown to facilitate conceptualization of course content.

Description:
This presentation focuses on the premise that it is important to create an atmosphere of motivational learning that is founded on the relationship between students and the instructor that results in the mutual sharing of personal experiences, values, beliefs, and course content. It must begin with the instructor getting to know each student, even in large classes with more than 100 students. Through this personal connection, the content can become personally meaningful for the students.

For the past 30 years I have set two primary objectives for the first two weeks of each semester. One is to obtain some primary educational and personal information about each student. In order for me to be effective in the learning process we have initiated, I need to obtain information about each student. I inform them that their answers to these questions will not affect their grade and will be treated with complete confidentiality. The primary purpose for this writing exercise is to initiate the students' storytelling process whereby I can learn about them through their own stories-their names and faces, along with the personal information that they have shared. Their evaluations of courses consistently indicate that they feel empowered when they write about themselves in this non-graded assignment.

I then ask them what specifically they want to learn in this course, what they expect from me, and what they expect from themselves. I compare myself to a waiter in a restaurant that wants to know what they would like to eat before they see the menu, an unexpected analogy which always generates laughter, letting me know that the students are engaged. I tell them that I want to be aware of their learning desires as they relate to this class before I might change their perceptions by discussing the course syllabus.

Their next task is to answer in a minimum of two sentences the first question: "From a personal perspective, why are you taking this course?" I then have them write about past and present experiences that they have had, and I ask them a series of questions to assist them in this process. I let them know that their responses will give me insight into them as "personalities", not just members of an audience.

I instruct them to pass into me their student photo-ID cards before writing a minimum of six paragraphs describing themselves from a "personal perspective", including experiences with family, friends, and school. I encourage them to share aspects of themselves that will help me to get to know them. While they write, I leave the room to photocopy their cards so that I can begin the process of connecting their writing with their faces. I believe that my being out of the room while they write this section creates fewer restrictions in their personal sharing.

I normally have no more than 60 students in my classes, so this orientation is workable, and I have used it in classes with 130 students. If the instructor can assimilate the students' personal stories into her/his memory, she/he can select stories and examples for that class which will relate more directly to individual students. As instructors we need to resist the temptation of seeing teaching as a process of primarily transmitting content, for it can hamper the way students understand and apply new knowledge.

My second objective is to explain the syllabus and what are my expectations for each student. In regard to my expectations of the class, I talk specifically about the course requirement of "class participation" which enhances the course as the instructor and students all feel free to share their own perspectives on the topics of the course. The goal is for students to experience a sense of initial ownership to the class as a group and course content. Through this process the instructor begins the process of building a positive relationship with students.

Once this relationship has been established and as we go through the semester and the process of learning content and its many applications, I relate examples that are often stories that correspond to specific content. As this process of learning continues, I have found that students often "open up" and relate their own personal and cognitive experiences through "class participation". I believe that this is a result of what we experienced in class during the first two or three weeks of the semester. Through various research studies that I have conducted and have incorporated into "learning applications", I have found that these types of "connections" do indeed facilitate students' learning and create unique applications of course content for them both from their own perspective and the essential aspect of learning course content.

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Knitting Practice-to-Theory:
Becoming a novice learner & empathetic teacher

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Objectives:

The problem: How can I get highly intellectual undergraduates to develop empathy for novice learners? How can I support highly cerebral students to use theories to understand, deeply and personally, the individual as learning-in-activity and learning-in-the-world. In this workshop-style presentation faculty and undergraduate students from Swarthmore College will share a touchstone/empathy activity from an undergraduate education course through engagement in learning to knit. The Knitting Project has three primary goals:

1. to provide a common experiential touchstone for challenging learning theories;
2. to develop empathy for novice learners in pre-service teachers;
3. to expand the boundaries of what our US culture understands to be appropriate, normal, and useful classroom learning.

Audience: We would like college/university faculty who wish to explore the goals of empathy in learning and the applications of cases and touchstones for exploring theory to attend this session.

Activities: We will begin with a three-minute digital movie on how a professor came to use knitting with undergraduates in a rigorous education class. Next, we will share the course goals and show, through an actual knitting lesson (for participants who wish to try we will have knitting needles and yarn on hand to show what the first 10 minutes of our knitting lessons looks and feels like) and a simulation of a later-in-the-semester discussion of Lave & Wengers Situated Learning: Legitimate Peripheral Participation and A. Sfards learning theory as metaphor, how learning-to-knit/becoming-a-knitter functions as a touchstone of novice learning for theoretical learning. Included in a handout will be testimonies from undergraduate reflection journals and a preliminary analysis of journals and interviews of undergraduates who have participated in this project.

Description:
I have taken the leap of trying this knitting idea in the last fifteen minutes of the 2nd week of an elementary education class at a rigorous liberal arts college. I am pre-tenure, I know that I am taking what feels like a huge curricular and professional risk, and I am not sure if this will work. Some students are enthusiastic, most are skeptical, and at least one is openly hostile. But they all have their yarn and needles, after having visited the local yarn shop. Three students have some knitting knowledge and I have volunteered them to be knitting tutors, with basic casting on and knitting instructions for a scarf in hand. I have also invited a local knitting "expert," an 11-year-old homeschooler, into the class to be my teaching assistant.

Five minutes in and chaos reigns. The noise level is up. Faces show intense focus, frustration, and confusion. Hands and colorful yarns are everywhere. Out of the back of the room I hear Christopher shout above the din, "Diane!!!!! If this was learning to read, I would quit now!" And in that moment I have the beginning of an answer, Christopher's glimmer of empathy. I'll clutch that glimmer tightly until even hostile Kallie is on board this empathy/touchstone train.

The undergraduates at Swarthmore College, including pre-service teachers, tend to be quite cerebral. They have found "book" learning to be easy. They are often challenged to truly understanding how difficult it is to learn something new, especially something like reading/writing, which most found so easy to learn that they cannot remember ever having not known how to do so. I want them to remember or newly empathize with what it means to struggle to learn. Further, I want them to ground theory in practice through a common touchstone, a standard upon which to judge and understand theory in authentic learning activity. I want to break down the boundaries of what counts as learning. While I have had students find experiential touchstones for understanding learning theories in their individual pasts, this retrospectivity did not provide the common experience that would allow them entry into transmissionist, constructivist, and participation theories of learning (Sfard, 1998; Lave & Wenger, 1991).

In the past fifty or so years attention to the phenomenon of empathy can be seen as a moral construct (Gribble & Oliver, 1973), as therapeutic (in medicine and counseling), and as an entry point for multi-cultural perspectives (Cress & Holm, 2000). Its most current educational conceptualization can be found as a habit of mind (Meier, 1995; Costa & Kalick, 2009) and one of six facets of understanding promoted by Wiggins & McTighe (2005). Campano's definition joins learning and multicultural goals when he states that empathy is to "vicariously imagine, feel compassion for, and express solidarity with another's condition" (2007, p. 81). It is this solidarity that I wish to foster among teacher-learners.

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Impact of Learner Characteristics on Elements of a Blended Course

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This presentation reports the results of a study designed to empirically explore the theoretical model of the impact of individual learner characteristics on student performance in a blended course (Anderson, 2000). Based on a review of the literature Anderson suggested that selected attributes of the learner could be used to predict students' performance and liking for various components of a web based course. The specific nature of the individual course components would affect the extent to which the learner characteristics were predictive of outcomes. The learner characteristics believed to be critical to performance were: field dependence; locus of control; active vs. passive orientation; learning style; self-regulation; metacognition; tolerance for ambiguity; anxiety; self-efficacy; and motivation.

The present study focused on the predictive variables of: learning style; tolerance for ambiguity; self-efficacy; motivation; test anxiety; self-regulation; and metacognition. Performance measures were recorded for three components of the course that varied in the amount of autonomy required of students. In addition a survey was administered to students to assess those individual elements of the course they found most appealing and those they found most objectionable.

Participants
Participants were 44 psychology majors enrolled in an introductory computer applications course in a comprehensive college in central NY. They represented all four academic years.

Materials
Three surveys were administered to students in order to assess individual learner characteristics. The first measure was the MSTAT which has been shown to be a reliable measure of Tolerance for Ambiguity (McLain, 1993). The second consisted of the 44 items from the MSLQ which are frequently used to assess self-efficacy, intrinsic value, self-regulation, test anxiety and metacognition (Piintrich & DeGroot, 1990). The final survey was the VARK which can be used to assess students' preferred instructional modality (Visual, Auditory, Read/write, Kinesthetic) (Fleming, 1995). Weekly performance measures were aggregated to arrive at scores for each of the three course components; these scores were subsequently combined to produce the overall course grade. Students were also administered a survey to assess their use of the various ancillaries for the text based tests as well as their subjective perceptions of various elements of the course.

Procedure
The course consisted of three discrete elements. First, students were required to complete on line assessments of the chapters in the assigned text. This component dealt with the introduction of the basic hardware, software and operating elements of computers. In order to prepare for the tests students had access to the text book, on line audio PowerPoint shows, practice tests and web

based chapter summaries. Tests consisted of 20 multiple choice items which could be taken at any time up until the specified deadline. Tests could be completed in any manner the student found most beneficial, including open book. The second component of the course required students to master weekly modules based on the programs in the Office 2007 suite. These modules consisted of self paced guided on line tutorials. Material from these modules was subsequently reviewed and applied in the weekly lab meetings. The third component of the course consisted of applying the Office 2007 programs in instructor led activities introduced in the weekly lab meetings.

Results and Discussion
Parametric and nonparametric statistical analyses are currently being conducted to ascertain the nature of the relationship between the predictor variables and the outcome measures. These analyses will examine the relationship for each course component in isolations as well as the students' overall performance. In addition the match between students' preferred instructional presentation mode and their use of ancillary supports as it relates to their performance will also be examined. Initial analyses suggest robust support for the theoretical model proposed by Anderson (2000).

Presentation structure
The proposed presentation will briefly review the theoretical model for the interaction of learner characteristics and academic performance (Anderson, 2000). It will then discuss the specific learner characteristics of interest in this study. The elements of the course as they relate to cognitive demands on the student will be presented. Finally, the data analysis will be reviewed and examined with respect to its applicability to instructional design. While the data for the present study were collected from psychology majors in a computer applications course, the design of the components of the course are general enough that the structure of the elements could be applied to content from a wide range of disciplines.

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Turning Work into Play: Applying the Reacting
to the Past Games to New Disciplines

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Objectives

Participants will:
1)Become familiar with the Reacting to the Past game concept, and its potential for application to other disciplines
2)Question how their own course structures may or may not enhance student engagement
3)Share ideas about increasing student engagement in their own courses by using concepts that challenge students differently, like the Reacting to the Past games.

Audience

The audience for this presentation is for faculty and those working with Teaching/Learning Centers.

Activities

There will be a presentation discussing the application of the Reacting to the Past game concept to a class in Educational Psychology. Then there will be discussion among the group about how we might turn "work" into "play" in other disciplines and courses.

Description

Student engagement is a challenge for almost every teacher. As professionals, we must decide how to coordinate content covered in a course with the type of instruction we provide. Research has shown our traditional teacher-centered methods often result in rote memorization that is not retained long-term and is not easily transferred to new situations. Thus, the question becomes how to teach the content of a discipline in a way that is engaging, and helps students realize its applicability to the world and their own lives.

Research has indicated that one way to increase student engagement is to turn "work" into "play." Many psychological studies have demonstrated that "play" can be turned into "work" by offering rewards for behaviors that individuals are naturally inclined to participate in; the result being that individuals are then less likely to engage in the activity that they once found innately interesting. However, the opposite is also true. If "work" can be turned into "play," then the mindset of students can be altered; they are more motivated and engaged, often reporting that they didn't realize until later that they were learning so much.

In this session, we will discuss how to turn "work" into "play" through the use of the Reacting to the Past game concept. These games have been used successfully to teach historical events as well as general studies courses where perspective taking, interacting with complex ideas, and multiple perspectives is emphasized. We will discuss, however, ways to apply these games to content areas other than historical events. Starting with an example from an Educational Psychology course, we will discuss how to apply this game concept to different courses and contexts. The particular challenges and rewards of this approach will be discussed, including its impact on deep learning, as well as student feedback about the learning experience.

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Designing and Assessing Courses and Curricula: A Practical Guide, Robert M. Diamond

Is Faster Any Better? A Comparison of Two Versions
of an Experiential Team-Building Course

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Purpose:
In our fast-paced world, higher education has been required to adapt to new adult student schedules. Subsequently, traditional 15-week semester courses are now offered in a variety of formats, such as 8-week courses, online courses, accelerated weekend courses, and even "Saturday College" programs. Many colleges now market accelerated courses, as well as accelerated undergraduate and graduate degree programs. Students often prefer two weekends because of fewer trips to campus, closer learner-instructor relationships, and community spirit that is fostered through lengthier class times (McCarthy & Silliker, 2006). Yet, the question arises from faculty and administrators as to whether accelerated formats provide the same amount of learning for students. Further, students sometimes perceive accelerated courses to be less difficult because of the streamlined time element. However, little formal examination has been conducted to determine whether such alternative time formats truly differ or provide the same learning outcomes. Such an examination is even more critical for courses that use the pedagogical approach of experiential learning. Experiential learning emphasizes the use of students' active participation in the learning process to facilitate the building of skills and self-confidence for transfer outside of the classroom. This poster provides a detailed comparison of such an experientially-focused course, an undergraduate team-building and group dynamics course, which was taught in two formats: one meeting per week for 15 weeks, or intensive day-long sessions for 2 weekends. The comparison was conducted to examine the effectiveness of the formats in relation to specific attitude and learning (behavioral) variables.

Literature:
With the introduction of technology, examinations of pedagogy have recently focused on similarities and differences between web-based or online courses and traditional in-class courses. Yet, few formal evaluations have been conducted for different types of in-class courses designed for experiential learning. Of those evaluations, many have found conflicting results.
Several researchers did not find any differences in learning outcomes based on course format. One such evaluation by Schmidt and Richter (2006) showed that differences in 3 designs and formats resulted in similar effects for teaching management consulting skills. Williams (1992) examined the effects of different scheduling formats on the academic achievement of graduate students in education. The formats included a night class in a 15-week semester, a weekend class which met 4 times each semester, and a summer course offered over 8 weeks. The findings indicated similarities in academic achievement between the varied schedule formats.
However, other researchers found differences based on course format. Some like Petrowsky reported more favorable results for the longer format. Petrowsky (1996) compared a 2-week macroeconomics course to a 15-week class. Results indicated that the 2-week course was

perceived as being more stressful, and student satisfaction and mastery of the material declined for the shorter format. Yet, others reported more favorable results for the shorter, accelerated courses. Lombardi (1992), for example, examined general special education programming in various concentrated time formats. Those in 2- and 3-week formats made greater gains than those in 5- and 15-week formats. Two researchers examined the effects of the distribution of instructional time on the acquisition of a foreign language. Hinger (2006) found the shorter intensive course format resulted in greater group cohesion, and Serrano and Munoz's (2007) results suggested that concentrating the hours of instruction in shorter periods of time is more beneficial for student learning. Most recently, Hallman (2008) examined the effectiveness of an accelerated nursing program. She concluded that accelerated nursing students are performing better in their nursing courses, and performing as well in their pass rates of their comprehensive exams as the students in non-accelerated programs.

Finally, a few studies examined retention of information following the completion of accelerated courses. Seamon (2004) compared a pair of educational psychology classes and found that, initially, students in the intensive version of the course performed significantly better than students in the semester-length course. However, follow-up three years later failed to find any differences between the formats. Likewise, Van Scyoc & Gleason (1993) compared learning in a microeconomics class. Students in the 3-week course performed better on achievement tests than those in the 15-week course, but the advantage disappeared when knowledge retention was measured.

Method:
Participants included undergraduate students from a variety of majors at a small private liberal arts college in Pennsylvania. All participants were enrolled in a 200-level psychology course, titled Team Building and Group Dynamics. This course provided an overview of teams and groups in a social and work context. Content included: the evolution and development of teams, the emergence of member roles and leaders, decision-making and problem-solving techniques, communication processes, power and conflict issues, management of diversity, and team-building strategies. Experiential exercises and group tasks and projects were emphasized.

Prompted by requests from the adult college students, this course was revised from a traditional (one meeting for 15 weeks) format to an accelerated (intensive two weekend) format. The total in-class time (37.5 hours), content, projects, and assignments for the course remained identical.

Regardless of format, the number of students in each course ranged from 20 to 24 each time it was offered. Data were collected from 96 participants, including 62 students from 3 accelerated weekend courses, and 34 participants from 2 non-accelerated courses. At the beginning and end of each course, participants completed a lengthy survey with open and closed-ended questions that assessed their attitudes and opinions about the course material and format. The questionnaire also measured changes in 30 detailed behaviors relating to team building and group work, as well as changes in their self-confidence in handling specific aspects of group situations.

Results:
Descriptive statistics were computed for all self-evaluation data. Mixed 2 X 2 analyses of variance were used to assess differences in attitudes and behaviors over time (before and after the course) based on the type of course format (traditional semester-long versus accelerated weekend). The differences between course formats were far less pronounced than expected. Although there were some isolated differences in scores between the two groups, attitudes and behaviors did not appear to be affected by format.

Overall, students' perceptions of their ability to work effectively in teams or groups significantly changed over time, regardless of course format. Specific results indicated many positive changes in attitudes as a result of their experiential learning, suggesting that the course content, exercises, and assessment techniques were effective for delivery over a 15-week or accelerated time span. Similar results were found for their behavioral changes. That is, many positive behavioral changes were reported by students after the completion of the course for both course formats. Only a few significant differences in behaviors existed based on course format. In addition, both course formats showed similar effects in terms of studentsincrease in self-confidence levels to work with others. All detailed changes will be presented and discussed.

Discussion:
The present examination of course delivery in two formats suggests that courses can be modified and offered in alternative time periods, without jeopardizing their effectiveness. The implications of these findings are that programs can offer courses in various formats to meet the demands of both the traditional and adult learners. While online delivery of courses satisfies the needs of the adult learner, the content of some courses cannot be adapted for computer delivery, such as the course examined here. For those courses in which experiential learning is required to facilitate the transfer of skills from the classroom to the workplace (e.g., team building), alternative course formats other than online delivery must be considered. Accelerated course delivery in two or three weekends, rather than a 15-week experience, appears to satisfy the demands of the adult learner and alleviate concerns that the course will not be of the same quality or perceived difficulty level. This examination shows that many of the same behavioral changes occurred as a result of the course after delivery in either format.
It appears that what matters for teaching team-building skills, is that educators make this topic area the
explicit focus of this course, and that they choose an interactive experience-intensive setting in which participants engage in exercises that enable them to practice those skills. Thus, educators should focus on the content and type of experience rather than concentrate on the specific delivery design. Even relatively short on-campus offerings can be quite effective in changing behaviors and raising the self-confidence of the students in team-building tasks.

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Successful Collaboration: Bringing Education and Content Area
Faculty Together to Improve Teaching, Candidate Learning,
and the Preparation of Secondary School Educators

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Introduction:
Within teacher accreditation circles, one frequently hears the phrase "it takes a whole college to create a teacher." A paradigm predicated upon the hypothesis that teacher education programs are not stand-alone entities separated from the liberal arts and sciences by the traditional boundaries of prescribed disciplines with domain specific knowledge, skills, and dispositions. The reality of teacher education is that pedagogy is "trumped" by the liberal arts, more than half, if not two-thirds, of a K-12 teacher's collegiate experience is in course work other than Education. For secondary teachers (grades 7-12), the ratio between course work in liberal arts and sciences and Education increases dramatically. In New York State, a twenty-two credit program in "pedagogy," which includes ancillary course work in psychology (adolescent), philosophy/sociology (Education), and literacy, is the State standard for receiving a teaching certificate.

In 2005, the Secondary Education and History faculty began to collaborate to assess and improve our program. There was a disconnect between pedagogy and content in our students. Many of our teacher candidates successfully completed history and education courses but when they were asked to synthesize what they learned in both, our students were not able to perform well. We noticed that our teacher candidates were able to provide information to their students but most lessons lacked essential questions that leads to what educator Grant Wiggins calls "enduring understanding." We learned that there needs to be a dynamic and fluid relationship between the education and history departments. We need to set common goals that incorporate pedagogical and content standards. We need a coherent program that is united in approach and is constantly reevaluating itself and changing accordingly. We both agree that the relationship between pedagogy standards and content areas needs to be consensual, bidirectional, and collegial. We have learned that it is possible to have such a relationship.

Objectives:
This presentation will invite participants to discuss how to begin a dialogue between Education and content area faculty. Some members of departments will resist this relationship as we experienced. Some of our colleagues thought that this project was about one department

dictating to another. Participants need to reassure faculty that the project is just to open a dialogue between two departments to investigate how to improve both departments so teacher candidates developed dispositions that are better suited for teaching.

Audience:
This presentation should attract faculty of Secondary Education and Liberal Arts and Science faculty linked to teacher education programs.

Activities:
We will provide helpful hints to faculty who are interested in developing a collaborative relationship with the fields of Secondary Education and history. We have some suggested examples of how to create a student-centered model for history courses in college so teacher candidates have experience with pedagogy in more than just education courses. Also, we have suggestions of how to bring content into methods courses by using texts that emphasize historiography. There will be a series of rubrics available that were developed as a result of this experiment. In addition, we will suggest a few books that we found helpful. We will also provide examples of how our collaborative experiment worked and some problems we face.

Description:
Given the reality that secondary-education teacher candidates receive most of their coursework from liberal arts and science departments, is imperative that liberal arts and science faculty collaborate, (a) to meet State teacher education standards and regulations, and (b) to align course content to construct a unified framework that coherently and cohesively delivers and assesses the knowledge, skills, and dispositions needed to be an effective teacher, grades 7-12. To this end, teacher-education accreditation organizations, including NYS, in its accreditation function, require all education programs seeking accreditation to demonstrate and document their collaborative activity with faculty from the liberal arts and sciences. For example, the National Council for the Accreditation of Teacher Education (NCATE) maintains the following collaboration standard:

Acceptable
Most professional education faculty & collaborate with the professional world of practice in P-12 schools and with faculty in other college or university units to improve teaching, candidate learning, and the preparation of educators&.

Target
All professional education faculty are actively engaged in dialogues about the design and delivery of instructional programs in both professional education and P-12 schools. They collaborate regularly and systematically with P-12 practitioners and with faculty in other college or university units. They are actively engaged in a community of learners.
In turn, New York State maintains the following standards:

Collaboration
Ongoing formal, as well as informal, mechanisms & for faculty in education and faculty in arts and sciences, special subjects, or other areas as appropriate to the institution's education programs to meet regularly, confer, and revise curricular content and delivery so that prospective

teachers receive academic preparation of high quality, equivalent to that of students in other fields, and are prepared to teach to the State Learning Standards in the appropriate subject areas.

In sum, teacher education is required to move beyond its traditional domain; and in so doing, construct a collaborative model, with joint responsibility, for identifying and aligning the knowledge, skills, and dispositions needed by teacher candidates, and for constructing a continuous (systemic) evaluation of the effects of that collaboration on their teacher-candidates in both pre-service and in-service school settings. This presentation is designed to explain the collaborative relationship developed to co-teach a seminar class and supervise the field experiences of a cohort of student teachers. That experience generated collegial dialogue about (a) capstone performances in Departments of History and Secondary Education, and the rubrics needed to effectively assess those performances. The experience led to improved supervision of social studies student teaching, the introduction of rubrics into the History Department, including one for the capstone performance. Rubrics developed and improved through collaboration will be shared and discussed with participants. In turn, the presenters are seeking information about the collaborative efforts of the participants.

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Excellence in Teaching and Learning: Obtaining the Students' Perspective

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Objectives:
1) Describe the meaning and characteristics of excellence in teaching and learning from the faculty perspective for the Johns Hopkins University School of Nursing (JHU SON).
2) Apply findings to the development of a conceptual model for excellence in teaching and learning as a basis for evaluation of faculty and student outcomes.

Audience: Any faculty member who teaches undergraduate or graduate students, or any faculty member who teaches in a professional educational program, students

Activities: presentation, group discussion

Description:
Providing excellent programs to prepare graduates for professional practice is a critical component of nursing education. Excellence constitutes a vision shared by many schools, including The Johns Hopkins University School of Nursing (JHU SON). However, excellence in teaching and learning (ETAL) has yet to be explored in detail as a foundation upon which to develop and implement valid assessment tools as well as evidence-based interventions and to appropriately evaluate faculty and student outcomes. In this study, excellence in teaching and learning is reviewed as described by faculty, students, and staff at the JHU SON. A community-based participatory research approach was used for this study. Focus groups and interviews were conducted with students to obtain their view on excellence in teaching and learning. Subsequent classroom observations will be carried out based on findings from the focus groups and interviews; a survey is also planned to obtain a global assessment of excellence in teaching and learning.

A series of focus groups were conducted with student representatives of all nursing programs, i.e., Bachelor in Nursing, Master in Nursing Science, PhD in Nursing and DNP, as well as with recent graduates. Student participants were asked to respond to questions regarding excellence in general, excellence in teaching at the JHU SON, excellence in learning, and barriers and facilitators to excellence in teaching and learning. Preliminary analysis exposed seven themes: bad experiences, barriers to teaching excellence, experiences of excellence, facilitators to teaching excellence, teaching characteristics and excellence.

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Teaching Self Management in the Business School Curriculum

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In this session, participants will have the opportunity to examine, practice and apply a model of self management designed to develop their level of emotional intelligence. The intention for this session is to demonstrate to participants how this model can be integrated into a business school's curriculum enabling students to learn the critical personal and interpersonal skills that are needed in the world of work.

Activities employed during this session are designed around the self management's model of core development areas, namely, verbal, non-verbal imagery, physical, movement, graphics, meditative, and energy work. Participants will have the opportunity to experience many of these areas during the session.

The session is designed for all academic areas, although the presenter has the business school student as his back-home focus.

References (partial listing)

1. Corey and Corey, " I Never Knew I Had A Choice"

2. McGregor, "The Human Side of Enterprise".

3. Mix, "A Monumental Legacy: The Unique and Unheralded Contribution of John & Joyce Weir in the Human Development Field".

4. Weinstein & Hardin, "Education of the Self".

5. Whyte, "The Heart Aroused".

New Faculty Orientation: FFYBE-Faculty First-Year Blended Experience

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Recently, Chadron State College implemented an 18 month experience designed to mentor new faculty; introducing them to institutional expectations and culture, and providing just in time information, information that they need when they need it. Many times an institution and faculty membersexpectations do not align. Institutions expect faculty members to intuitively comprehend the college expectations and culture. New faculty assume the institutional expectations to be evident and colleagues to be engaging and collegial. To bridge these two assumptions, CSC has developed a new faculty orientation process. This presentation will demonstrate how these issues are addressed and encourage audience participation.

Objectives:

1) To share how Chadron State College has developed a "macro" educational program that assists the new faculty with institutional concepts, ideas, and processes.

2) To present and discuss how "FFYBE" as a new faculty orientation program/process assists in establishing a collegial environment, and in turn helps promotes faculty retention. Information presented will be based upon both Chadron State College and national trends.

The authors feel that this presentation will of interest to faculty, staff, and administrators.

Presentation Activities:

1. Introduction (5 min.) Who, what, how, and why FFYBE? The evolution and development of FFYBE will be explained.

2. First-Year Survival Mode (10 min.) The online FFYBE format will be shown and explained. Audience will be invited to participate in the FFYBE first day survey. Presenters will encourage the audience to reflect and share their own experiences.

3. Teaching Methodology (10 min.) Investing in faculty to help them reach their potential.

4. Closing the Loop- Assessment (5 min.) Presenters will discuss results of first day survey, exit survey and focus group data administered to FFYBE participants. They will share how these results have caused for self-reflection by the FFYBE participants, facilitators, and administration in their quest to build a stronger and more cohesive teaching institution.

5. Discussion (15 min.)

6. Summary (5 min.)

Audience Activities:
1.   First day survey
2.   Discussion questions

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This is Your Course: Encouraging Students
to Take Responsibility for Their Learning

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Objectives:
At the end of the session, participants will be able to:
1.   discuss implications of who takes responsibility (faculty or students) for student learning
2.   facilitate students to take responsibility for learning on six different components
3.   use a multi-step system to incrementally plan for changes in how they teach

Audience:
Faculty who want to teach so that their students will learn how to take responsibility for their own learning. They can come from all disciplines and can teach at all levels from developmental pre-college through graduate and professional courses.

Activities:
Together, we will discuss how faculty have responded to current student characteristics by taking more responsibility for student learning, their long term consequences and what we can do to change this situation. In small groups participants will discuss six ways faculty can teach students to take responsibility for learning. Participants will select one component that they want to work on and form groups of people transforming their teaching on that component. Within these groups, participants will use a systematic process to plan incremental changes toward getting students to take responsibility for their learning. This process uses reflection questions and a planning for transformation form (Blumberg, 2009).

Description:
Today's college students often have less motivation and more constraints on their time than previously. Many are not autonomous, responsible learners. As a result, instructors take more responsibility for the students' learning. However, as a consequence of an instructor's assuming too much responsibility for student learning, the students remain passive and lack confidence in their abilities to learn on their own (Weimer, 2002). Today, because we do not explicitly teach college students the skills to become lifelong learners, such as determining a personal need to know more, many college graduates are not self-directed learners (Candy, 1991). Yet the ability to be a lifelong learner is an essential skill for success in ones career and personal life. While always true, it is becoming more essential in today's fast-changing, globally connected world.

Many students fail to develop the responsibility for learning skills on their own. When the responsibility for learning shifts from the instructor to the students, the instructor supports students in their taking responsibility for their own learning and helps them acquire skills they can use to learn in the future. These learning-to-learn skills include time management and how to read and critically evaluate literate. Students become proficient in independent learning and

self-assessment of their own abilities to learn and of their strengths and weaknesses only when they have numerous opportunities to practice these skills and consistently receive formative feedback to help them to improve.

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Improving Student Outcomes through Student Formative Self-Assessment

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Intended Audience:
College instructors at the undergraduate level, teaching small to moderately sized classes.

Introduction:
The poster will describe an instructional model linking student formative self-assessment to student practices and subsequent learning outcomes. Undergraduate college students conducted frequent and ongoing self-evaluation employing both qualitative and quantitative data collection techniques, and then used these formative data to make adjustments in their reading, studying, participation, or attendance in order to directly experience the functional and iterative relationship of data-based decision-making and their own learning outcomes. First, the poster will illustrate the methods and materials used in formative self-assessment for the course. Next, the poster will provide outcome data in the areas of treatment efficacy, treatment acceptability, treatment integrity, and social and ethnic validity for the model. Lastly the poster will discuss outcomes and benefits of student formative self-assessment in student-teacher collaboration and in matching instruction to student need while maintaining fidelity to course scope, sequence, and learning objectives as described on the syllabus.

Objectives: Participants in this poster session will:
(a) learn methods of student formative self-assessment
(b) learn metrics for aggregating outcome data from student formative self-assessment in the domains of treatment fidelity, treatment acceptability, instructional efficacy, and social validity
(c) review and discuss outcomes and benefits of student formative self-assessment for students and instructions
(d) review and discuss potential applications of student formative self-assessment.

Poster Description:

Rationale:
Formative assessment has long been shown to be an effective way to improve student learning outcomes. Formative assessment refers to the practice of gathering brief, frequent and ongoing samples of student learning. Formative assessment is often characterized as ecological in that the samples of student learning collected are: (a) authentic (real student behavior and real student products); (b) contextual (evaluated against the template of the learning ecologies in which they were produced, rather than normative samples); and (c) economical (easy to create, administer and interpret). However, the defining feature of formative assessment is its application for instructional decision-making in real time. Whereas summative assessments can provide data to make decisions about future instructional practices, formative assessment allows instructors to track data trends in the rate and level of student growth, make changes in instruction, and then monitor the effects of their instructional changes to confirm or revise their decisions (Black & William, 2003; Tindal, Duesbury, & Kettering-Geller, 2006; York, 2003).
We believe that the defining feature and benefits of formative assessment - its application for instructional decision-making in real time - can be applied to student formative self-assessment practices (Cole & Bambara, 2000). Successful student outcomes are related in part to instructional decisions typically made by course instructors (e.g., instructional format, sequence, readings, assignments materials, and so forth). However, students who successfully attain learning outcomes engage in self-instructional behaviors that include making intentional decisions about attendance, participation and engagement, reading, assignment completion and so forth. Specifically, it is our contention that if students can track authentic data trends on their learning outcomes in real time and link those outcomes to their own self-instructional behaviors (e.g., reading assigned materials, studying, participation, or attendance) then they will be more likely to change the self-instructional behaviors that will improve their learning outcomes before it is too late for recovery.

Procedures:
Undergraduate students engaged in formative self-assessment of their own progress for the duration of the semester during a course that met twice a week for 80 minutes each session. Class sessions consisted of didactic instruction, small group activities, and individual self assessment activities. Permanent products used by the students included (a) SAFMEDS (Say-All-Fast-Every-Day-Shuffled) study cards (Graf, 1994; Lindsley, 2001); (b) study plan templates; (c) implementation fidelity checklist; (d) self-monitor time series graph; (e) class participation worksheet; (f) written reflections; (g) acceptability rating scale; (h) course evaluations. At the beginning of the course, students were provided with a template and instructed to write a study plan for the semester in order to learn concepts covered in the course. They also identified a grade goal for themselves in the course (e.g., A, A-, B and so forth).

Student Self Assessment I: At the beginning of each class students participated with a partner in a two minute fluency assessment on course concepts as identified on the syllabus, following the SAFMEDS (Say All Fast a Minute Every Day) protocol identified by Graf (1994). Immediately following the fluency assessment, Students graphed their raw score data on an AB time series graph. They were instructed during class to assess the trend and level of their graphed data and make a decision about whether or not their study plan was working toward goal attainment. If

trend or level of the graphed data was not moving in the desired direction, they made changes in their study plan (e.g., self instructional behaviors) and monitored the effects of the change via the graphed data from the fluency drills. Three times during the semester, Students completed an implementation fidelity checklist measuring the degree to which they followed their study plans as written, and reflected on the relationship between their adherence to their study plan and their learning outcomes.

Student Self Assessment II: At the end of each class, Students completed a class participation self-assessment checklist. Specifically, they were asked to identify the types of verbal participation, non-verbal participation, and non- participation behaviors they engaged in regarding that days class. Additionally, they were asked to note if they had read the assigned readings for the day. They were also provided a prompt for questions, comments, or concerns. The course instructor responded to each student by writing on the class participation sheet and returning the sheets at the next class session. Students analyzed the type and quality of their participation, attendance, readings and so forth (e.g., self instructional behaviors) as related to their overall learning outcomes over the duration of the course in written self reflections.

Results:
Effect sizes for attaining course objectives as measured by percentage of non-overlapping data points (Scruggs & Mastropieri, 1998) on progress monitoring graphs emerged as strong. PND scores ranged from 64 to 100, with a mean of 77%, and a mode of 100%. Effect size results were supported by visual inspection of changes in trend, level, and variability in graphed data. Review of comments on class participation worksheets and written reflections showed that most students experienced the functional relationship between their decision-making regarding study plans, participation and attendance and their ability to learn course material. Implementation fidelity for SAFMEDS procedures emerged within the moderate range. Treatment acceptability for formative self assessment as assessed by Likert-type scale showed that 40% of students had ratings of "very strong" regarding their agreement with course value, while 51% rated this as "strong." On course evaluations, 74% of the students wrote unsolicited positive comments about the use of formative self-assessment, 4% made negative comments, and 22% did not use the "comments section" of the evaluation. Social validity was established through template matching, whereby students analyzed the formative-self-assessment practices learned in the course against likelihood of using formative self-assessment practices for decision-making in other coursework or future professional practice. Eighty-eight percent of students indicated that they would likely continue this practice in some forma as students or professionals.

Conclusions and Implications for Practice:
Teaching formative self-assessment practices to undergraduate college students improves learning outcomes for students. We believe that collecting and using formative self assessment data is a learned skill that can be taught. When such practices are made overt, students are more likely to see the link between the decisions they make regarding their own self-instructional behaviors such as attendance, participation, reading, studying and so forth and subsequent learning outcomes. In addition, we believe the practice of students collecting and using formative self-assessment data, rather simply receiving formative assessment feedback from instructors strengthens the acceptability and social validity of the practice. Student formative self-assessment offers potential benefits to instructors as well, including increased student-instructor

collaboration, provision of a data source that can supplement and enrich typical summative course evaluations by demonstrating growth over time, and evidence of teaching strategies that support life-long learning while maintaining fidelity to syllabi content, objectives, scope and sequence.

Activities:
Permanent products used in student formative self-assessment will be available for review and discussion with presenters.

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Personalizing Teaching for Improved Learner Outcomes

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The linguistics of "personalised," "learner-centred" and "customer-focused" are being applied to describe the current education reform agenda in the United Kingdom. This article sets out to define what personalisation might mean in the Learning and Skills sector. This sector has been charged with re-vitalising the economy, delivering vocational skills. The research sets out to identify existing good practice and to research, using the learner voice, the impact of a programme of CPD designed to transform teaching and learning for those employed in the sector. The aim was to evaluate the impact on pedagogy of a national training programme designed to improve the quality of the learner experience. The research leads to the conclusion that personalisation and the reforms associated with it are impacting on pedagogic practice. Personalisation is seen to describe a philosophy designed to impact on all elements of education. In using the new language of reform we are articulating a major shift in educational practice upon which depends New Labour vision for social coherence and economic stability. Data collected from this research project indicate that learner expectations of a personalised experience are high. There is also the danger that personalised approaches represent a step too far for learners who have not previously developed positive learning dispositions

Research:
At the time of the research between 2005 and 6, the then DfES were funding a major programme of reform for staff working in the Learning and Skills sector. This programme of Continuous Professional Development (CPD) namely the National Teaching and Learning Transformation Programme (NTLTP) provided a tool for this investigation. The overarching aim was to explore whether the programme was creating an environment in which personalisation could thrive. The research question was as follows:

Does the National Teaching and Learning Transformation Programme promote learner autonomy and aspiration, effective teaching and learning, staff professionalism, positive learner environments and partnering?

As the researcher was working on the design of the NTLCP it was possible to integrate into the programme structure an evaluative tool for programme participants to use with their learners. The intention was to encourage course participants to evaluate with learners the perceived impact of the training programme on their teaching practice and then reflect on lesson learned as an outcome of this activity. Such an approach is congruent with the philosophy of personalised learning and is applauded in the DfES consultation paper on Personalising Further Education:

Systematic collection of the views of learners is a rich source of valuable feedback, and when acted on effectively it can influence the shape and availability of services to ensure maximum benefit to the learner (DfES e-consultation web site accessed 1-5-2004)).

And finds support in the work of Joyce and Showers:

The student as learner is key. The closer an innovation is to the interactive process that helps the learner to manage learning better, the greater the effects will be (1995:47).

and

Working in partnership with the learner - to tailor their learning experience and pathways, according to their needs and personal objectives in a way which delivers success (DfES, 2004) Personalising the FE system.

Personalisation then is more than listening to the learner voice it is learning that is co-constructed and co- managed by the learner and the pedagogy (Humphies:2006).

Further support for using the NTLCP is to be found in the espoused themes that underpin the programme design namely:

- That learning should start with the learner and foster effective social relationships
- Learning should be active and foster a questioning, analytical approach to problems and challenges
- Learning should be motivating and foster rich communities of understanding
- Learning should aim to be challenging, fostering continuity, growth and development (QIA:www.subjectlearningcoaches.com).

Methods:

Participants completing the NTLTP were encouraged to take part in the research as part of an accredited module of study requiring in-depth reflection on practice. Following the accredited route leading to a Certificate qualification at Master Level was optional and not always a popular choice. This is no surprising given the high levels of casualisation in a sector where the concept of teacher professionalism is highly contested (Guile et al 1999). The data used in this research represent the work of 32 participants who willingly shared their findings. The total number of learners involved in the research was 702.

The research drew on three strands of data all focused on the same group of learners. The strands were;

i) that produced by the learners in response to the classroom climate tool and analysed by the researcher,

ii) a summary record of the focus group data (completed by a colleague who observed the teacher led focus groups)

and

iii) the teacher's evaluation of the mini-investigation including reflective commentary on the perceived impact of their CPD on the learners and themselves.

The first of these, the climate tool, consisted of a questionnaire designed to measure programme impact at the point of the learner. Thirty questions were formulated around specific areas of interest mapped to the pre-defined categorisation of what personalisation meant in the FE system. Questions were designed to discover whether the in-training pedagogue had discussed the training programme with the learners, had used any of the resources from the programme and was designing learning opportunities to meet individual learning needs. The classroom climate itself was measured by questions about respect for learner opinions, opportunities to ask questions, planning, delivery, and student perceptions of their achievements. Additional

questions raised issues of feedback, motivation and teacher expectation. Issues concerning the partnering category of our definition (see above) were explored in a separate research approach which asked course participants to identify impact in and across the organisational spectrum.

In using a classroom climate tool the approach mirrored that carried out by Freiberg (1999) to investigate student perspectives on school improvement. The researcher adopted the same 5 scale response coding with 1 representing a "never" response and 5 "always." In the case of the research reported here more ownership was given to the pedagogue to distribute the research tool, to carry out a focus group analysis with the learners in partnership with another colleague and to reflect on the findings than in the research carried out by Freiberg (1999).

In terms of objectivity, with individual staff researching the impact of their teaching on their own classes, the research could be seen as flawed. To counter act this allegation a research assistant joined the investigative process as an observer in 15 cases where the research was carried out. The sample data from the investigations were correlated against the results from the unobserved groups. No identifiable differences were found.

In terms of mirroring the philosophy of personalisation in the ownership it gave to teachers and learners to work collaboratively to produce an outcome, the research design was innovative and provided support for the course aim which was to transform:
i) every day reflection on practice into professional reflection, engagement and development
ii) understanding of teaching strategies into an understanding of pedagogy: the underlying principles of learning
iii) independent and isolated practice into professional and collaborative conversation (www.subjectlearningcoaches.com)

To overcome some of the criticisms levelled at personalisation namely that raised in the TLRP pamphlet Personalised Learning: A commentary by the Teaching and Learning Research Programme which asks: "Is this initiative really about learning? Or is it, despite the title, still primarily about teaching and curriculum delivery?" (2006:24).

The research was designed to explore components of learning. It was also essentially about empowerment. In listening to the voice of the learner the research stimulated learner reflection on the skills they needed to move from dependence to independence encouraged by a process that encourage them to evaluate the learning process in partnership with their teachers.

Participation in this research was voluntary and produced 125 teacher responses from 2960 learners. As an overall sample of participants involved in the NTLTP the sample willing to share their investigation was small (19% of all participants). No incentives were available to encourage participation. As a result it is also feasible that the responses reflect a positive bias towards outcomes teachers were willing to share. Negative data could feasibly have been excluded. The data was evaluated using a themed approach linked to the 4 assessed elements of the personalisation agenda. These are taken below as readings to discuss the data.

Learner aspiration and autonomy

The collective response to questions designed to test improved learner aspiration and autonomy produced the following responses: 7% agreed this was always the case, 39% said this happened almost always and 45% agreed this happened sometimes, leaving 9% of respondents offering a hardly ever or never response.

The focus group data identified some concerns among learners about experiencing too much autonomy too quickly. Levels of previous experience and maturity were discussed. Personal confidence to become an independent learner was an issue, as was the view that in some ways "old" methods of teaching with learners as docile recipients of knowledge, were easier for some. These comments resonate with the concerns expressed and recorded here by Reynolds (2005) who asks what happens to learners who cannot manage to learn independently.

Teachers' journal entries raised issues around re-thinking their approach to teaching, the use of different types of planning tools and the need for broad ranging assessment practice to accommodate different products and outcomes.

Effective teaching and learning:
It might be useful to define what is meant here by the terminology.

Tools to measure effective teaching and learning are in common place use among inspectorate bodies and in internal quality audit systems. Finding a clear definition to succinctly define the terms is difficult. The definitions below offer some useful guidance:

Effective teaching encourages explicit reflection on learning and seeks to make learners more aware of the learning processes they are using (DfES:2004).:

Factors such as motivation or self-esteem, and their impact on behaviour and consequently on learning, are important (DfES:2004)

Rogers (1983:18) provided a useful definition:
"Not the lifeless, sterile, futile, quickly forgotten stuff that is crammed into the mind of the poor helpless individual led into his seat by ironclad bonds of conformity. I am talking about learning, the insatiable curiosity that drives the individual to absorb everything he can see hear and read and apply to a real life situation."

In answer to the research questions which attempted to measure impact on learners of different approaches to learning 6% agreed teaching and learning was always effective, 41% said this happened almost always and 37% agreed this happened sometimes, leaving 6% of respondents offering a hardly ever or never response. Ideally one would hope for a higher percentage of positive responses with effective teaching and learning occurring in all cases for all learners at all times.

The focus group data revealed that some learners were unaware of any changes in the way their teachers had been working. Some seemed oblivious to the different approaches that had been taken. For the more aware this oblivion caused frustration as they reminded their peers of previous sessions that had included interactive teaching approaches. Teachers journal entries

recorded the benefits of time spent preparing quality resources realised in the increased commitment from the learners, improved behaviour patterns and greater eagerness to attend the session. A number of journal entries recorded increased attendance rates and improved retention compared with previous years.

Professionalism:
The term professional and professionalism is a contested concept in the Learning and Skills Sector. For the purpose of the research we have adopted the dual professionalism approach advocated in the Institute for Learning (IfL) Professionalism we see as being characterised by an understanding of teaching theory alongside a thorough and developed knowledge of the subject being taught. This was tested through questions which asked the learners about their teachers understanding of their subject, their willingness to answer questions and the confidence displayed in their practice.

In this area of subject knowledge and the related dimensions, the scores were distinctively in support of the teachers recording them always or almost always to be knowledgeable, proficient and effective in meeting their learners needs and encouraging an enthusiasm for learning.

Located within the questionnaire under the category of professionalism were questions about how teachers used and encourage learners to engage with new technologies. The Becta Review of Technology (2006) reports on the proficiency of our learners (the natives) in the use of technology compared with many teachers (identified as immigrants) in the technologically propelled world. From the data presented above it would appear that the learners involved in the research felt confident in the abilities of their teachers to use technology in a way which support their engagement with learning.

Focus group data revealed interesting insights into how learners expected their teachers to behave. In one case, where a contract of engagement had been jointly established, the learners were very clear about the professional behaviours they expected from the teacher. The learning relationship was one of mutual respect and mutual expectation. In this case a Learner's Charter had greater the conditions for what Humphries (2006 Futurelab) refers to as invitational learning.

Staff journal entries showed increasing teacher reflection on what teaching meant to them. Some entries contained personal detail on how life experiences had brought them into teaching. Others explored the importance of teaching as a profession. One journal contained a detailed discussion about professional values. Personal ethical dilemmas were shared in other cases. The teachers involved in the research were re-examining their ideas about pedagogy and in some cases trying to establish roles and boundaries in an newly framed learning environment. One journal entry commented particularly on the shifting power base in the classroom and the changing nature of the teacher/learner relationship as one of mutual learning, co-construction and co-production, learning together as opposed to the model where one is the giver, the other the receiver of knowledge. In another case the teacher expressed concerns about the loss of control and respect as the knowledge provider and predicted future problems with discipline and classroom control is personalised approaches were allowed to dominate the classroom environment.

There is another element of Professionalism that cannot go by here unmentioned. Goodham et al (2004) argue that true professionalisation can only be achieved when practitioners engage in research into their own person practice. As a result it could be claimed that engaging FE practitioners in this small-scale research project could be seen as supporting the reform agenda.

Positive Learner Environments:
To define a positive learner environment the research design adopted some important insights from constructivist and social constructivist research as identified in the TLRP (2004) namely that:

- Learning requires the active engagement of the learner, underpinned by positive learning dispositions
- Learning involves the development of understanding and the transformation of information into new knowledge through application
- Learning proceeds successfully if environmental factors, which are often shared by groups of learners, are elicited and taken into account
- Learning is a process with both individual and social dimensions and outcomes (p24)

Data from questions which explored learner environment, social classroom interactions and teacher encouragement were collected together to produce the following outcomes.

The data show the 63% almost always satisfied with the classroom environment as a place to learn with 5% always pleased with the appropriateness of the environment for their learning needs. Only 1 % reported never finding it conducive to learning.

Focus groups data provided positive acknowledgement for individual contributions, group working, team activities and the application of knowledge to practical tasks. Groups welcomed the chance to take responsibility got their learning, to make conscious decisions about their learning needs and to be active agents in their learning journeys.

The research also revealed how much external factors impact on the internal environment. In a number of cases learners reported how easily their personal concerns and issues spilled over into their behaviour, their ability to learn and the general classroom climate. A number of reports highlighted the importance of acknowledging these issues rather than trying to ignore them. Many conceded however that a well-planned activity packed session was probably the most effective tool for dealing with their needs in such cases.

In the journal entries teachers appeared to be acutely aware of the impact of a number of external issues on the internal classroom. Things such a local conflict, community tensions, extreme weather conditions, even the time of day or timing in the term, were all recorded as impacting significantly on learner receptiveness and achievement.

Conclusions:
This paper has provided brief summary to a research project that attempted to explore the impact of a national training programme for teachers in the learning and skills sector. To explore impact five dimensions of investigation were identified and aligned to our understanding of the

government reform agenda for personalised education. Personalisation it has been argued is the new philosophical approach to curriculum design and practice and in the Learning and Skills sector can best be characterised as:

- Learner aspiration and autonomy
- Effective teaching and learning
- Professionalism
- Positive Learner Environments
- Partnering to enhance learner choice.

This research focused on the first 4 of the above and identified a range of positive data to represent the state of the sector. It is apparent from the data that learning is a social process having affective as well as cognitive dimensions. The programme under study would appear to be supporting improvement in teaching and learning by encouraging enhanced awareness of the situated nature of learning experiences. Programme activities have promoted learning as a social activity. Teachers, encouraged to draw on different approaches to teaching and learning, have experimented with different resources and approaches to good effect.

Analysis of primary data, in the form of government policy statements, led to the identification of clearly discernable parallels in government thinking between personalisation, economic prosperity and social justice aims. This research has explored identified elements of the personalisation agenda and researched progress towards their achievement from the voice of the learner. The data provided evidence of good progress towards the ambitions of the personalisation agenda particularly in areas of teacher professionalism including the use of technologies to enhance learning and providing a learning environment conducive to effective teaching and learning.

However, the positive messages reported above needs a cautionary note. The research has reported data received from staff who were engaged in the training programme, willing to test out new approaches and committed to the personalised learning agenda. They were confident in giving greater autonomy to their learners. Here personalisation has worked and worked well. What now needs to be investigated is whether personalisation, as an approach appreciated by learners, can work when teachers still maintain traditional teaching approaches. The pedagogue is key to the success of the reform. Without their buy in and that of their colleagues it is feasible that learners will receive mixed messages and a mixed economy of learning approaches. This needs to be corrected. There a serious consequences is personalised approaches fail to deliver. Learner autonomy could lead to greater learner disengagement and this would be herald a disaster in terms of government social justice and economic ambitions. Whether personalisation can really gather momentum and full impact remains to be seen. In the words of Alexander (2004:7):

Personalised Learning is not a matter of tailoring curriculum, teaching and assessment to fitthe individual, but is a question of developing social practices that enable people to become all that they are capable of becoming.

There are serious consequences ahead if this agenda fails.   Educationalists need to realise how significant the personalisation agenda is for the future of our young people today.

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Quality Improvement Agency website:www.subjectlearningcoaches.com-referenced 21.08.08

No More Death by PowerPoint! OR Creating Engaging and Effective Presentations!

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Objectives:
- To inspire participants to think about presentations in a whole new way
- To share the ideas of Garr Reynolds (author of Presentation Zen)
- To review the six aptitudes for the "Conceptual Age" according to Daniel Pink (author of A Whole New Mind)
- To teach the concepts of restraint, simplicity, and naturalness
- To demonstrate alternatives to bullet points
- To share several examples of effective slides
- To explain the connection between Brain Rules (Dr. John Medina) and effective presentations

Audience:
All educators should learn how to create effective and engaging presentations. This skill is important for educators in any discipline, and is especially relevant to those in marketing, business, communication, and education.

Activities:
The session will open with some sharing regarding suffering through really bad PowerPoint presentations. I'll review why they are "really bad." Then I will share my research on creating better presentations. I will rely heavily upon the concepts in Presentation Zen, A Whole New Mind, Brain Rules, and Beyond Bullet Points. Presentation Zen challenges the conventional wisdom of making "slide presentations" in today's world and encourages you to think differently and more creatively about the preparation, design, and delivery of your presentations. Throughout the session I will model the concepts I share. The overarching goal of this session is to teach participants how using storytelling and images will help them to connect with their audiences. Viewing this new style of presentation will be stimulating and inspiring to teachers. We will wrap up the session with a brief review and some sharing of how participants believe they can integrate this new kind of presentation into their classes.

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Using Instructional Approaches that Develop Critical Thinking and Problem Solving Skills in Working Adult Students

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Common accepted adult learning theory says that the key to successfully teaching to adult students is to:
- Teach as a facilitator not as a lecturer.
- Let students influence course coverage.
- Build on students' experience.
- Foster collaboration where students can learn from the collective experience of all students.
- Support theory with real-life examples.
- Challenge students.

The challenge is that faculty with limited experience teaching to adult students can have the propensity to teach in the traditional methods of lecture and then testing to assess learning. The recommendation of this presentation is a different approach of engaging working adult students driven by an analysis of current event articles, weekly reflective learning journals, and problem solving skill developing scenarios that allow students to be more engaged and connected to learning through the application of book theory to current events and self reflection. This methodology provides an avenue for learning growth and the development of critical thinking skills through collaboration in an intellectual endeavor that is creative in nature by sharing knowledge, learning and building consensus. The results of this process are classroom experiences were students develop:
- An ability to question deeply one's own framework of thought,
- An ability to reconstruct sympathetically and imaginatively the strongest versions of points of view and frameworks of thought opposed to one's own, and
- An ability to reason dialectically and develop real world problem solving skills.

The learning result is transformative learning which involves an enhanced level of awareness of the context of one's beliefs and feelings, a critique of their assumptions and particularly premises, an assessment of alternative perspectives, a decision to negate an old perspective in favor of a new one or to make a synthesis of old and new, an ability to take action based upon the new perspective, and a desire to fit the new perspective into the broader context of a student's life.

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Best Practices that Empower Virtual Collaboration (VC) Groups
and Minimize Social Loafing

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Objectives:
This presentation will educate faculty on the important differences between co-located groups and VC groups and the pedagogical implications that follow. It will also promote faculty interest in and ability to convert their traditional co-located or face to face (F2F) group assignments to the Web environment and reduce faculty anxiety about assessment of group projects.

Audience:
Faculty that desire to use more group collaboration in their online courses will find this poster presentation interesting and beneficial.

Presentation Activities/Description:
Many faculty have made the leap to the online course format however, incorporating group assignments and feeling comfortable doing so in the Web environment remains limited. Reasons for this include that faculty perceive that students dislike or are unprepared for group work, the technology to support group work is unavailable or difficult to use and that grading is more complicated. In actuality, the proliferation of social networking sites like MySpace and Facebook have primed students to be active virtual collaborators because it satisfies the human need for trust, support and sharing (Lai & Turban, 2008). Saliency of these needs in the virtual learning environment is particularly high making it rife with potential. Internet-based course administration systems, such as WebCT Vista and Blackboard, are ubiquitous throughout higher education and offer easy to use group communication and group management functions. The application of peer evaluations and other instructor-designed controls increases student accountability and provides documentation for assessment. The benefits of using virtual collaboration (VC) groups include that it promotes peer-to-peer learning, students can tackle more complex projects collectively, and students practice professional-level communication, interpersonal relations and performance evaluation necessary in the workplace (Rutkowski, Vogel, van Genuchten, & Saunders, 2008).

Understanding the uniqueness of virtual teams and their needs at each stage is key to designing successful group assignments in an online course. As opposed to co-located teams, virtual teams require that different components of trust (integrity, ability, and benevolence) be engendered at

specific points in order to minimize the negative outcomes perceived by students, such as loss of time, psychological expenditure, and likelihood of a poor grade (Greenberg, Greenberg and Antonucci, 2007). Trust is especially important in VC groups, where social dimensions of working together are absent, because it reduces concerns about free riding and helps members move forward with the team's task. Initially high levels of swift trust, predicated on professional courtesy, can develop in virtual groups however, unlike traditional trust, is fragile and easily dissipates if not managed appropriately (Blaskovich, 2008). Deliberate efforts by the instructor to establish trust may also increase members' desire to appear competent, resulting in higher productivity, known as the Kohler motivation effect (Lount, Park, Kerr, Messe &Seok, 2008; Kerr, Messe, Seok, Sambolec, 2007). Specific actions regarding the groups reward system and structure will also moderate these two serious inhibitors of sustainable collaboration (LaBrosse, 2008).

The virtual team life cycle and accompanying trust components will be illustrated. Actionable course design efforts targeting the development of trust at each of the five stages will be prescribed for attendees' use including: instructor endorsements, project scaffolding, virtual group formation techniques, team-building exercises, assignment positioning, netiquette, group skills training and more. Attendees will be given samples of a VC group assignment rubric, peer evaluation form with instructions and group contract as takeaways.

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Identifying the Necessary Elements
for the Development of a STEM K-12 Outreach Initiative

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The objects of this presentation are:
(a) to share the essential elements for coordinating STEM education outreach efforts at a university level.
(b) to share the essential elements for collaborating STEM education outreach efforts with partners outside the university.
(c) to share the essential elements to effectively sustain existing outreach efforts and create new outreach programs and products in response to the needs of the university and K-12 audiences.
(d) to share the essential elements to evaluate the impact and effectiveness of programs.

Audience:
This presentation is most appropriate for faculty and instructors interested in bridging the gap between research and practice by implementing K-12 STEM outreach programs from the university level.

The literature that supports this presentation states:

Universities hold the key to knowledge. In order to form effective outreach programs between universities and the community, an action and commitment must be made to do so. There is an institutional responsibility to share this knowledge with humanity. The difficult part after making this commitment of service is the framework to support it. The action of the outreach program is only as good as the participants' involvement. Epstein (1995) recognized six elements necessary for partnerships; parenting, communicating, volunteering, learning at home, decision-making, and collaborating with the community (pp.108-154).   At Virginia Tech the VT-STEM (Science, Technology, Engineering, and Mathematics) K-12 Outreach Initiative participants' mission is for Virginia Tech to become a leader and national model in STEM Education. VT STEM K-12 Outreach believes that bridging the gap between the K-12 Community and the university can be accomplished. The vision also includes forming partnerships between K-12 and the university, which will in turn feed the pipeline for future university students interested in studying STEM.

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Varying Student Perceptions of Clicker Value in Multiple Course Settings

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Presentation Objectives:
Upon leaving this session attendees will be able to:
- Experience using clickers singly and in groups and assess their own attitudes about participation in workshops;
- Realize the importance of formative and summative feedback in their courses;
- Discuss realistic goals for using technology to enhance learning and engagement.

Presentation Activities:
In this session, attendees will be asked to use clickers to:
- Complete a survey about their level of engagement in a typical class(e.g. an ISETL workshop);
- Answer "ungraded" questions individually;
- Answer "graded" questions individually;
- Answer "graded" questions in groups of 2-3;
- Complete a second survey about their actual level of engagement;
- Discuss differences in question format, type of assessment and group dynamics on level of engagement.

The session will conclude with a discussion of how clickers might be applied to individual courses.

Presentation Audience:
This presentation is most appropriate for faculty who employ various forms of technology as tools for improving student learning and engagement in either large or small classes, and for administrators concerned with increasing student performance within budgetary constraints.

Presentation Summary:
Svinicki (2004) states that today's students need to decrease their focus on memorization, increase their self-regulation strategies, increase and focus their own motivation, and recognize the need to transfer learning from the classroom to the real world.   There are many proven active learning techniques that can help students become more successful in all four areas (for example, McKeachie (1965), Angelo and Cross (1993), Myers & Jones (1993) and Cross & Steadman (1996)). Remote response systems (clickers) represent a fairly recent technological teaching tool that can increase student learning, motivation and participation. They can be used by individuals or in group problem solving sessions, and can provide formative and/or summative assessment of progress. Importantly, a recent study by Smith et al. (2009) found that peer discussion following individual clicker responses enhances understanding, even if none of the group members initially answered correctly. Thus, the specific design of classroom activities using clickers is critical.

The prior experience of students in using clickers, self-assessment of their math and chemistry skills, and typical level of class participation was surveyed during the first week in three courses: upper level biology, freshman chemistry, and science for non-science majors. Clickers were then used for different purposes throughout the semester. At the end of the semester, all students were asked to report the value of clickers to their learning and their level of participation. Large differences were seen in the reported level of engagement, with students in the biology course scoring much lower (45%) than students in the chemistry and non-science majors courses (77-86%). Biology students also reported less often that they were "more comfortable answering questions," and that their "answer was as important as everyone else's" using the clickers. Differences in the question format, type of assessment and technology likely contributed to the large inter-class differences.

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Student and Faculty/Staff Values for Developing an Intellectual Community

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Presentation Objectives:
Upon leaving this session attendees will be able to:
- Recognize what they believe to be the characteristics of the ideal intellectual community at their own university;
- List several concrete steps that could be taken to realize these goals/characteristics; and
- Realize the importance of student, staff and faculty participation in obtaining this type of community.

Presentation Audience:
This presentation is appropriate for faculty and administrators from all disciplines and areas, administrators, as well as instructional technologists. A diverse audience will serve to deepen the conversation.

Presentation Activities:
In this session, attendees will be asked to:
- List the values and characteristics of an ideal intellectual community at their university;
- List two examples or steps that could be taken to reach these goals;
- Work in a group to prioritize these characteristics;
- Discuss differences in values of participants, and of staff, faculty and students at the presenters' and participants' institutions.

Presentation Summary:
As a university grows larger, so do the challenges of maintaining the spirit of community with a more diverse group of students, faculty and staff across larger distances. Quinnipiac University will soon move the professional and graduate components of its health sciences programs to a new campus, and new student dorms will open in a third location. Thus, the challenges facing our university in maintaining and growing our intellectual community are many. Many universities have made revitalizing the intellectual community a priority when faced with these types of challenges. This does not mean simply creating a "feel-good atmosphere"; instead, the teaching and learning, university planning and activities work together to foster an environment that reduces isolation and stimulates reflection (Feinberg, 2008).

The five year study on The Importance of Intellectual Community by Walker et al. (2007) has been widely cited. Some of the qualities found to be critical for making an intellectual community "vibrant, enriching, stimulating, welcoming, and suited to the formation of scholars and the building of knowledge" included a shared purpose, a shared intellectual space, and the continued access to a wide range of viewpoints. First and foremost, this Carnegie Foundation-funded study found that universities must have a shared purpose: a commitment to student learning. The creation of a community intellectual space encouraged the kind of informal interactions that are not necessarily planned or assessed. Examples of these types of interactions are Civil Discourse (University of Texas (2005), Loyola University (2008)), Difficult Dialogues (Clark University (2009)) or the Socrates Café (Phillips (2004)). Finally, Walker et al. (2007) emphasized that the fresh ideas that vitalized the community not only needed to come from scholars of diverse backgrounds and disciplines, but also from the more junior colleagues: the students.

The Faculty Collaborative for Excellence in Learning and Teaching at Quinnipiac University has been charged with making recommendations for the important steps toward the creation of a Quinnipiac-specific intellectual community. As succinctly stated by Wellesley College President Kim Bottomly in her 2008 Convocation address, "Intellectual communities don't just happen by putting bright, hardworking, scholarly people together. They are dependent on planning and structure, and collaboration" (Bottomly, 2008). Facilitated discussions with faculty, staff, alumni and students generated the most important values and a wealth of ideas to help move toward a more intellectual community. A survey distributed across the university and also carried out in classroom discussions highlighted differences as well as similarities between the participating constituencies. The survey and discussions were critical first steps in helping administration set priorities for the coming years.

In this session, participants will work in groups to brainstorm values and priorities for advancing an intellectual community at their own campuses. As a session, participants will then discuss differences in their values, and of those of the staff, faculty and students at the presentersand their own institutions.

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Cross-Disciplinary Methods in the Humanities and the Sciences: "Purity," Water Pipes, and Primary Source Analysis in the Classroom

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Presentation Objectives:
Upon leaving this session attendees will be able to:
- Engage in the focused evaluation of primary source texts.
- Develop fact-based, analytic, and abstract questions valuable for primary source comprehension
- Appraise the shifts in scientific understanding over time
- Make connections between the sciences and the humanities by considering the impact of scientific thinking upon culture and culture upon scientific thinking.
- Improve abilities and skills with regards to employing scientific sources to the teaching of the humanities.
- Apply the skills learned to other disciplines

Presentation Audience:
This presentation is most appropriate for faculty who wish to increase the engagement of students in classroom discussion. It will be useful for instructors in the sciences and the humanities, and will emphasize the use of primary sources in the understanding of changes in scientific thinking over time, as well the influence of culture on scientific thinking. However, the techniques will be appropriate for any instructor who uses classroom discussion.

Presentation Activities:
In this session, attendees will be asked to:
- Read a short primary source about the uses of lead pipes for drinking water
- Respond to a series of questions designed to further historical and scientific understanding

- Working in pairs, develop an understanding of past and present views of lead piping.
- Compare their reactions and response to the primary sources to those of others in the session
- Construct a list of questions that work well for reading a primary source
- Collaborate to formulate a set of working principles for bringing together science and the humanities.
- Discuss how this technique might be applied to individual courses.

Description:

Cooke, Federn ,and Osborn will apply the methods of the humanities, in particular the close reading of texts, to further understanding of scientific thinking past and present. We also will use science to understand the humanities. In the activity we analyze primary sources, in particular newspaper articles about lead water pipes from the early 1900s, along with current standards for lead contamination and information on diseases due to overexposure to lead.

This teaching session meets the mission of ISETL. It illustrates "practical, effective methods of teaching and learning" and furthers "the application, development, and evaluation" of these methods. The topic is interdisciplinary, applicable to biology, chemistry, philosophy, social science, and history. We advocate the use primary sources in the science classroom, applying methods usually found in the humanities to the sciences: for example, using a New York Times article from 1920 in a chemistry class. However, the method also applies in the opposite direction: science is part of culture and should be included in the humanities.

The innovation in teaching is content-based and methodological. As part of the innovation in teaching, the session will model the use of humanities methodologies in relationship to scientific topics. Instructors in the sciences and humanities often miss fantastic opportunities to further learning through consideration of the history of science and scientific thinking. By illustrating teaching techniques along with practical material, this session will offer new perspectives on teaching in the sciences, humanities, and social sciences. For content, it offers the topic of "purity" as an effective topic for crossing the boundaries among disciplines.

The first two-thirds of the session will be devoted to illustrating the use of historical sources to understand science past and present. In the last third of the session the group will discuss ways to apply these techniques to other materials. Specifically the presenters will offer examples of ways to find historical sources, sample historical questions that can apply to multiple sources, and alternative assignments that will further student understanding. The discussion and interactive elements of the session will help further understanding in this and other areas. Much of the session will be devoted to discussing the method, enhancements and adjustments, and additional resources for source material, discussion questions, and improved methodology.

This approach will further student critical thinking skills both within and outside the classroom, furthering dialogue about how skills practiced in the classroom are relevant beyond the educational environment. The interaction of discussion, active learning of engaging texts, and reaching beyond memorization and lecture will serve to enhance learning experiences as well.

Motivation and transfer of learning in particular will be enhanced. We will rely in part on Svinicki, 2004; Angelo and Cross,1993; Bean, 2001; and Richlin, 2006, as well the scholarly expertise on lead pipes from Troesken, 2006. Cooke, Federn, and Osborn have extensive experience with the use of primary sources in historical research and writing. Cooke is currently completing related research under the auspices of a Scholars Grant from the National Science Foundation.

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Constructivist Strategies for the "Deep Learning" Experience

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As the works of Jean Piaget, Lev Vigotsky, and subsequent researchers illustrate, learning is not a passive activity; it is active and constructed by the learner. "Knowledge is not something that bombards our consciousness and is absorbed; rather, it is something we construct to make the world meaningful. Learning involves a search for knowledge – or 'new territory' – that is strongly related to the activities of play, discovery, and problem solving" (Weigel, p. 3). Though the groundbreaking research proving this is much older, growing numbers of college and university professors and administrators have (some grudgingly) recognized this through the 2000's as the syntax in higher education has shifted from "teaching and learning" to "learning and teaching" (Maier & Warren, p. 7). In the subsequent and exponential studies of learner-centered pedagogies, one concept that has been put forth is the distinction between "deep learning" and "surface learning," terms first postulated by Marton and Säljö (1976) and supported with empirical evidence.   Drawing on Atherton (2005), this session seeks to delineate the differences between "deep" and "surface learning"; illustrate "deep learning" strategies, including those employing technology; and discuss the usefulness of these strategies in courses across the curriculum.

Audience:
The audience should include faculty members interested in constructivist strategies.

Objectives:
The session seeks to:
- Enhance understanding of the role of deep learning in knowledge retention;
- Illustrate means of employing strategies to engage deep learning;
- Emphasize deep learning strategies in other courses across the curriculum.

Activities

Session participants will:
- Participate in an initial interpretive activity intended to introduce relevant knowledge and understanding;
- Discuss how the activity affected their capacity to understand the work they read;
- Discuss ways in which they might employ similar methods in their own courses.

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Online Learning: Innovative Approaches to Build Connections

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Objectives:
1. List available resources that support building and sustaining connections in the online learning environment.
2. Discuss strategies to support building and sustaining connections between students and faculty.

Summary:
Online education offers considerable flexibility and opportunities for creative approaches to build strong learning communities and deep connections between students and faculty. These connections often extend beyond the classroom and develop into long-term mentoring relationships. Engaging DL students and developing long term mentoring relationships between faculty and students has been a challenge. This session will present an overview of a variety of strategies used to develop a learning community and to actively engage graduate and undergraduate students in an array collaborative and hands-on learning activities using blogs, wikis, podcasting, WIMBA voice tools and live classroom that build strong relationships that extend beyond the classroom. In addition, application of these tools to promote mentoring relationships will also be presented. These relationships are essential in increasing students feeling 'connected' to an institution and supports retention.

This session will present an overview of a variety of strategies used to develop a learning community. Discussion and demonstration will include outcomes from a faculty and student perspective as well as examples for use for mentoring and networking purposes. Participants will receive handouts will include list, links, and brief descriptions of resources utilized which accompany case study scenarios that exemplify application of these techniques.

Capturing Student Performance Data in Real-Time
to Facilitate Feedback and Support Learning

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Objectives:
1. Discuss benefits and limitations associated with the use of a standardized electronic grading rubric in assessing clinical competencies.
2. Identify applications of this technology in other educational settings.

Summary:
At various points in all levels of nursing education, students are required to demonstrate skill competencies and their faculty must not only document these demonstrations but also provide timely and meaningful feedback to the students. When multiple faculty across multiple courses are involved, this becomes an arduous tasknot only to manage all the records but also to facilitate tracking of student performance over time and provide prompt, learner-specific remediation. At X University, students are required to demonstrate critical skills in order to advance and are allowed several attempts to do so. Faculty observing the first attempt may not be the faculty observing subsequent attempts and therefore uniform access to student records is essential. In addition, faculty conducting remediation, also need access to these records in order to provide appropriate remediation. Given the volume of students involved in this process, managing hard copy documentation and ensuring this documentation is available to the individuals who need it, is problematic. Faculty at X University solved this dilemma with a creative adaptation of Waypoint, a Blackboard Building Block. This presentation will highlight the benefits and

outcomes resulting capturing student performance data in real-time using standardized electronic rubrics, creating centralized documentation/feedback which is accessible to all faculty as well as the individual student using this innovative approach. This will be an interactive session during which attendees will participate in a demonstration of real-time evaluation and provision of feedback.

ISETL 2008 Distinguished Fellows Presentation Award Winner

**Adults Just Want to Have Fun: Implementing Humor as an Effective Strategy
for the Reduction of Stress and Enhancement of Communication in Learning**

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Presentation Objectives:
At the end of this session, participants will be able to:
1. Recognize common sources of student stress and its impact on learning.
2. Identify multiple strategies for integrating appropriate humor into lecture, group, and applied/practical formats of instructional delivery.
3. Understand the value of integrating humor into the classroom experience in all disciplines.

Presentation Audience:
This presentation is appropriate for all academic disciplines, with an emphasis on the adult learner, including the non-traditional student.

Presentation Activities:
A brief lecture will be presented utilizing PowerPoint, highlighting common student stressors and the effects of stress on students' physical health, mental health, and ultimately, the ability to learn optimally. The PowerPoint will incorporate elements of humor to demonstrate simple and easy examples of integration of humor within a lecture delivery format. Then willing participants will be broken into groups; each group will be asked to draw slips from two categories, resulting in a random pairing from each category. One slip will contain a content topic or goal, and the other category slip will suggest a "humor modality" to be employed to assist in conveying their content or achieving their learning goal. Each group will brainstorm to develop a creative way of pairing their content with a delivery system that employs humor in some way. Each group will report and/or briefly demonstrate to the rest of the attendees the ideas that they generated for using humor to help produce particular learning outcomes. After the group activities, a very brief lecture summary and group discussion will be conducted, highlighting the ideas and key points discovered from the groups" brainstorming sessions.

Presentation Summary:
Optimal learning is ultimately about effective and empowered communication between instructors and their students. Presentation participants will be presented with a list of some common stressors experienced by the adult learner, as well as common detrimental effects of stress, particularly on educational success (Chan, 2001; Rautopuro & Vaisanen, 2001; Kirby, Biever, Martinez, & Gomez, 2004). Participants will also be introduced to the growing pool of evidence regarding the value of humor in coping with stress (Kess, 2001; Moran & Hughes, 2006; Berk & Nanda, 2006; Booth-Butterfield & Wanzer, 2007).

Data specifically supporting the value of humor in education will be presented to deepen understanding of the helpfulness of humor in the following areas: enhancing effective communication (Dziegielewski, Jacinto, Laudoadjo, and Legg-Rodriguez, 2003), improving learning outcomes (Kher, Molstad, & Donahue, 1999), improving retention and recall (Garner, 2006), and boosting classroom morale in order to facilitate attentiveness and understanding (Torok, McMorris, & Lin, 2004).

The group activity session will enable the participants to creatively develop practical ideas for utilizing humor in conveying educational content, as well as conceptually anchor the value of making efforts to integrate humor in adult education.

<div align="center">References</div>

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Doing Assessment, Not Just Talking about It

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Objectives:
1. Participants will become more knowledgeable about the process of student outcomes assessment.
2. Participants will develop a draft of the outcomes guiding their own curriculum.
3. Participants will discuss potential ways to measure those outcomes that lead to curricular change and continuous improvement.

Audience:
Though the presentation will focus on examples from colleges and universities, educators and administrators at all levels will find the information useful.

Activities:
After a brief power point presentation on the basics of outcome assessment and discussion of one program's process example, participants will work individually and as a group to define student learning outcomes at the program level in their areas. Discussion will then focus on how individual courses fit into this program outcome framework and can provide embedded measures for program as well as course outcomes.

Description:
Institutions of higher education face tougher accreditation standards that focus on student learning outcomes. Specifying what students learn in our curricula, measuring that learning, and then using those findings to improve teaching and learning is what our stakeholders wish to see. However, there is confusion about what assessment means (Harlen, 2007) and how university faculty, most not trained as teachers, can implement good practices to enhance student learning in their programs (Banta, 2007).

Despite these issues, assessment of student learning provides systematically derived feedback that can enhance our ability to critique and improve teaching and learning (Astin, 1993). It can also make more transparent how courses in a curriculum relate to each other and how student learning is measured in courses and in a curriculum. Though assessment is not a panacea, it does provide a framework for discussing what we do, what we think is important, and how we measure it (Walvoord, 2006).

This presentation provides the beginning building blocks for conducting a complex process and will help participants examine some of the concerns regarding assessment, such as "we are already giving our students grades," "what about academic freedom in our classrooms," "what about student privacy," "and you can't really measure what I give my students."

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Using ill-structured problems to develop metacognitive strategies

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Objectives:
Use ill-structured problems in interdisciplinary, team-based projects to help students develop meta-cognitive strategies

Summary:
One of the major challenges faced by post-secondary educators is transitioning students from acquiring knowledge to developing the problem-solving skills required for use in the real world. Students need critical thinking skills to face the challenges they will likely encounter after graduation. Ill-structured problems offer opportunities for students to learn to construct and defend reasonable solutions [1]. Furthermore, collaborative tasks promote active learning and higher order thinking [2].

An ill-structured problem is one which is incompletely defined and not easily resolved with any degree of certainty. Furthermore, it has multiple solutions with none clearly superior. Cognitive psychology suggests three types of knowledge interact during critical thinking when addressing ill-structured problems: (1) declarative knowledge; (2) procedural knowledge; and (3) metacognition [3].

By contrast, a well-structured problem is one which can be solved with a high degree of certainty by following a logical step-by-step procedure. Although well-structured problems are more convenient for managing curricula objectives and assessment of learning, such problems are typically ineffective for teaching the critical thinking skills necessary to face the challenges students will likely encounter after graduation [1].

Most problem-solving models involve processes appropriate for solving well-structured problems. Solving ill-structured problems, though, demands high-level reasoning skills [4] [5]. Therefore, solving ill-structured problems can be difficult for novices [3], especially those who present critical thinking weaknesses in problem solving [6].

The nature of unguided collaborative processes may also inhibit problem solver success, particularly when intra-group dynamics involve negative social-emotional peer interactions. Inequity in participation levels, conflict avoidance, and negative evaluations often reduce creativity and minimize benefits [7] [8].

To successfully engage students in solving ill-structured problems, teachers must consider problem definition and structure [9], presentation of objectives [10], motivation strategies [11] [12]. They must also provide adequate support structures [13] and cognitive tools [14]. Finally, they must help students to develop social structures that promote collaborative participation [15] [16] and

serve as metacognitive guide [17] providing dynamic and timely situational support [18] as students work through the problem-solving process.

This interactive session examines how ill-structured problems may help students learn to apply metacognitive strategies in the classroom. It also examines the benefits and challenges of teaching appropriate critical thinking and reasoning skills.

Activities:
Small teams are tasked to construct and defend reasonable solutions to an ill-structured problem.

Description:
In this situation, teams must use critical thinking and reasoning skills to identify and assess assumptions, to solve multiple problems, and to effectively arrange and present information.

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Writer-Friendly Rubrics and Peer Review:
Helping Students Meet Writing Expectations

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Objectives:
Participants will learn how to: 1) construct meaningful rubrics for writing courses and courses that require writing assignments; 2) engage students in interactive peer review; 3) use the student peer review process and rubric to reduce the instructor's heavy load of reading and grading writing assignments; 4) gauge the effectiveness of student peer review and student writing improvement; and 5) identify the benefits and limitations of rubrics and the student peer review.

Activities: 1) Interactive discussion and handouts about the function of rubrics and the student peer review experience; 2) Participants will role play student peer reviewers

Audience:
Those teaching writing and courses that require writing.

Summary:
Research shows rubrics can help instructors communicate assignment expectations and provide feedback, and can help students check their work, earn a better grade, feel less anxious about an assignment, improve writing and help them as they reflect on instructor and peer feedback (Andrade & Du, 2005). A well-designed writer-friendly rubric is key to a successful student peer review experience. The presenter will also share how the student peer review and rubrics help students identify strengths and weaknesses in their peers' writing, as well as their own, improve their writing and help instructors with their grading load.

The session will be divided in 5 parts: 1) an overview of writing challenges students, including first year students and other students, face; 2) guidelines for helping students understand the importance of writing, the writing rubric and student peer review; 3) helpful tips to create purposeful and meaningful rubrics designed for specific writing tasks/assignments; 4) tips for engaging and encouraging students to take charge of their writing development and learning through student peer review via purposeful and meaningful rubrics; 6) sharing of the presenters' students' view of rubrics and student peer review; 5) participants' simulated peer review of sample essays and research papers.

During part 5 of the session, participants will assume the role of student peer reviewers, will engage in the peer reviews of sample essays/research papers, and will provide their peer written and oral feedback using a rubric. Participants will also share their view of the benefits and limitations of rubrics and student peer review.

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Democratic Dialogue: Engaging Students in Purposeful, Equitable Discussion

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Objectives:
* Participate in two models of democratic dialogue.
* Increase knowledge and understanding of dialogue and discussion as a successful teaching tool.
* Improve intergroup relational skills and develop practical approaches to facilitating discussion.

Audience:
This teaching session will be meaningful for faculty and administrators interested in exploring dialogue and discussion as a means of promoting inclusive, broad participation and diverse perspectives in classes and meetings.

Activities:
The session will open with a brief overview of the broader movement to educate for a more inclusive and deliberative democracy. Participants will then participate in two models of democratic dialogue: Study circles and Deliberation. Engagement in the Study Cirlces model will highlight rationales and perspectives on purposeful, equitable discussion. The Deliberation model will encourage exploration of the implementation of dialogue and discussion, with an emphasis on "hot topics."

Description:
Democratic dialogue is part of a broader movement to improve intergroup relations, develop stronger communities, sustain more reasoned public policy decisions, and promote a healthier democracy. College and university classrooms are ideal contexts in which to support these ideals. Furthermore, dicussion-based classrooms support students' abilities to "ask the inconvenient questions." Discussion teaching supports the art of managing spontaneity while simultaneously promoting retention and application of concepts, encouraging higher order thinking and problem-solving, offering prompt feedback, and motivating students to learn more.

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Multimedia Learning: Effects of Narrator's Accent and Student's Cultural Intelligence on Learning

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What effects does an instructor's accent or a student's cultural intelligence have on learning?

Important distinctions have been made among three different constructs related to speaker's voice: accentedness, comprehensibility, and intelligibility. Accentedness can be defined as degree of foreign accent (Munro & Derwing, 1995, p.289). In turn, comprehensibility can be defined as "native speaker's perception of intelligibility [i.e.,] judgments on a rating scale of how difficult or easy an utterance is to understand" (Derwing & Munro, 1997), while intelligibility refers to "the extent to which a speaker's message is actually understood by the listener" (Munro & Derwing, 1999, p.289).

In their study, Munro and Derwing (1999) examined how foreign accent and intelligibility were correlated. In this study, Canadian participants listened to 36 utterances spoken by 10 native speakers of Mandarin and two native speakers of Canadian English. The Mandarin speakers' pronunciation ranged from moderately to heavily accented. Participants were asked to transcribe utterances (intelligibility), rate the speakers on a 1 to 9 point scale ranging from extremely easy to understand to impossible to understand (comprehensibility), and rate the speakers in terms of their accent on a 1 to 9 point scale ranging from no foreign accent to very strong foreign accent (accentedness). Munro and Derwing (1999) found that "accent scores were much poorer reflection of the listeners' actual comprehension [&] than were the perceived comprehensibility scores" (p.303). They also found that "intelligibility scores were the most direct test of what the

listeners actually understood [and that] foreign accent scores did not predict intelligibility very well" (Munro & Derwing, 1999, p.303). They concluded that what can ultimately affect processing of an utterance is the degree to which the speaker is intelligible, regardless of accentedness or perceived comprehensibility.

Munro and Derwing's (1999) study focused on the effect of native and nonnative speech on native English listeners' intelligibility scores, as well as on the rating these listeners of the speakers' accentedness and comprehensibility. Other researchers also investigated the impact of speaker's voice on listening comprehension from the perspectives of the native listener (Derwing & Munro, 1997; Munro, 1998; Munro & Derwing, 1995, 1998, 2001; Derwing, Rossiter, G Munro, 2002; Munro, Derwing, & Morton, 2006; Major, Fitzmaurice, Bunta, & Balasubramanian, 2002, 2005; Clarke & Garrett, 2004; Bradlow & Bent, 2008; Schairer, 1992). In turn, other studies have investigated the impact of speakers voice on listening comprehension from the perspectives of the nonnative listener (Derwing & Munro, 2001; Munro, Derwing, & Morton, 2006; Munro, 1998; Munro & Derwing, 2001; Major, Fitzmaurice, Bunta, & Balasubramanian, 2002, 2005).

Results of these studies suggest that there are various factors that can impact the degree of understanding of nonnative speech, and which can be organized into four areas: task conditions, language characteristics, speaker characteristics, and listener characteristics. Among the factors related to task conditions that can affect understanding of nonnative speech are noise (Munro, 1998) and length of time listeners spend listening to the speaker (Clarke & Garrett, 2004; Bradlow & Bent, 2008). Factors related to language characteristics are processing time (Munro & Derwing, 1995, 1999), speech properties (Munro, Derwing, & Morton, 2006), prosodic differences between the native languages of the listener and the speaker (Munro, 1998; Major et al. 2002), and speaker's dialectal variation (Major et al. 2005). Speaker-related factors that have been identified as having an impact are speaker's talking rate (Munro & Derwing, 1998, 2001; Derwing & Munro, 2001) and intelligibility (Derwing & Munro, 1997; Munro & Derwing, 1995, 1999; Munro, Derwing, & Morton, 2006). Finally, regarding listener's characteristics that can have an impact on nonnative speech comprehension are familiarity with the language and amount of contact with native speakers of it (Derwing & Munro, 1997), possibilities of interaction with the interlocutor in real contexts (Rajadurai, 2007), attitude towards the speaker's accented speech (Major et al. 2002), and listener's cross-cultural awareness (Derwing, Rossiter, & Munro, 2002).

Research shows that although there are "moderate to high correlations [between] intelligibility scores and comprehensibility and accentedness training" (Munro, Derwing, & Morton, 2006), accent alone is not a good predictor of intelligibility (Munro & Derwing, 1999). In this sense, Munro & Derwing (1999) found that "even heavily accented speech is sometimes perfectly intelligible" (p.285). In addition, research also shows that although cross-cultural training did not affect intelligibility scores it can positively affect comprehensibility and attitude towards nonnative speech (Derwing, Rossiter, & Munro, 2002).

Given that listeners" cross-cultural awareness has been shown to have a positive effect on the way they rate nonnative speakers' comprehensibility and accentedness, it becomes relevant to

evaluate the listeners prior to administering the treatment in order to ascertain their cross-cultural awareness level.

Participants

The participants were 267 undergraduate students (140 men and 127 women) with a median age of 20 years. Participants included 35 freshmen, 101 sophomores, 55 juniors and 76 seniors, and were predominantly Caucasian (216), but also included African American (14), Asian (18), Hispanic (4), and Multiracial (7) students (8 students selected "other"). All students received course credit for participation. Students were randomly assigned to one of four narrator accent (speaker voice) groups: American English [AmEng] (n = 68), Spanish English [SpEng] (n = 69), Chinese English [ChEng] (n = 56) or Australian English [AuEng] (n = 74).

Materials and Apparatus

Rainbow tutorial. The four rainbow tutorials consisted of the same animation and narrated text, differing only in the accent of the voice of the narrator. The animation was created using Adobe's Flash, was 125 seconds in length, depicted 14 steps in the formation of a rainbow (see Appendix A), and was accompanied by a 318-word narration of the individual steps (see Appendix B). All four narrators were women; were raised in American, Argentina, Australia or China with English, Spanish, English, and Chinese as their native languages, respectively; and spoke with distinctive American, Spanish, Australian and Chinese accents, respectively.

Cultural intelligence questionnaire and scoring. The cultural intelligence questionnaire (Ang, Van Dyne, Koh, & Ng, 2004; Ang et al., 2007) consisted of 20 items with a response scale from Strongly Disagree (1) to Strongly Agree (7). The 20 items addressed four sub-scales, metacognitive, cognitive, motivational and behavioral cultural intelligences, with reliability alphas ranging from .72 to .86 across the sub-scales (Ang, Van Dyje, & Koh, 2006; Ang et al., 2007).

Speech evaluation questionnaire and scoring. The speech evaluation questionnaire was based on the Speech Evaluation Instrument (SEI) developed by Zahn and Hopper (1985; see also Ray & Zahn, 1999). The current instrument included 15 of Zahn and Hopper's (1985) original 30 semantic differential pairs: illiterate-literate, unkind-kind, passive-active, unintelligent-intelligent, cold-warm, shy-talkative, uneducated-educated, unfriendly-friendly, unaggressive-aggressive, not fluent-fluent, unpleasant-pleasant, unsure-confident, inexperienced-experienced, unlikeable-likeable, and lazy-energetic. Participants were presented with each of the adjective pairs separated by the numbers 1 to 7 and asked, "Please consider the narrator of the previous tutorial and rate the narrator along the following dimensions."

Recall test and scoring. Participants' recall of the steps involved in the formation of rainbows was assess using a single open-ended question: "Please describe/explain, in detail, how rainbows are formed." Two trained scorers, unaware of the participant's treatment condition, evaluated each participant's response (inter-rater reliability, r = .94) for the presence of 10 idea units, regardless of exact wording.

Transfer test and scoring. The transfer test consisted of four questions: "Suppose it is raining and you do not see a rainbow in the sky. Why might that be?"; "If you were flying in a plane, would

it be possible to see a rainbow? Why or why not?"; "If you walk toward a rainbow, can you ever catch up to it? Why or why not?"; and "Is it possible to create a rainbow indoors? If so, how?" Questions were presented simultaneously on the computer screen, and participants completed each question by typing their responses into a text box located just beneath each question. Two trained scorers, unaware of the participants treatment condition, evaluated each participants response (inter-rater reliability, $r = .82$) for the presence of correct responses, regardless of exact wording.

Results

Results indicated that students' ability to select, encode and integrate the content available within the multimedia tutorial was not adversely affected by the presence of accent, in general; however, low culturally intelligent students had lower recall and transfer scores than high culturally intelligent students when the narrator's voice was that of a non-native speaker of English.

**Raising the Bar: Making Meaning of Classroom-Level Assessment
for Programmatic Improvement of Teaching and Learning**

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Objectives:
By the end of the session, participants will be able to:

1. Articulate several strategies for using classroom-level data on student learning to make meaning/draw meaningful conclusions about teaching and learning at the programmatic level for purposes of articulating best practices and identifying areas in need of improvement

2. Identify available resources – both those local to their campuses as well as those available from the larger higher education community – to assist in "raising" classroom-level assessment up to the program-level

3. Connect with at least one other participant facing similar assessment issues on his/her campus for purposes of networking/brainstorming/ sharing/etc.

Audience:
This session is toward any faculty interested in assessment at the classroom or programmatic level, including assessment of student learning at both the undergraduate and graduate levels.

Summary:
Unsure how to initiate new assessment efforts in your program or college? Does your department feel way-too-small or overwhelming large to tackle assessment effectively and efficiently? Are you wondering how your liberal arts, sciences, or pre-professional peers assess core competencies like critical thinking? Interested in identifying interdisciplinary partners for an assessment project? Such questions – and arguably countless others – perplex professors as they are directed to engage in meaningful assessment of student learning to meet the myriad demands of higher education's constituencies. This interactive session will help faculty "raise the bar" of assessment on their home campuses by re-focusing faculty on what they know best--student learning in their classrooms--and help them to employ that expertise in a new way by developing strategies for expanding upon classroom-level evaluation of teaching and learning to achieve programmatic-level improvements. We will explore the results of one study into departmental use of assessment data and mini-case studies as well as the collective expertise of the session's

participants to identify and articulate effective ways to shift our "unit of analysis" from the individual classroom to the program/department when considering student work products as evidence of teaching and learning. It is the hope and expectation that participants will develop a preliminary "toolkit" of strategies for program-level student learning outcomes assessment to take home to their individual campuses, as well as a network of teaching and learning colleagues interested in and motivated to make programmatic assessment a meaningful component of teaching and learning.

Activities
This session has been designed to be as interactive as possible, and will include the following activities:

1. Warm-up "scavenger hunt" – participants will be asked to complete a "scavenger hunt" using a worksheet with several assessment issues/concerns/priorities listed. Participants will be required to find individuals who share the same issues/concerns/priorities. The purpose of the activity is two-fold: to introduce participants to one another while simultaneously demonstrating that the assessment concerns of faculty are quite similar across disciplines and institutional types.

2. Mini-case studies – participants will be asked to consider one of several mini-case studies to identify helpful and less-helpful approaches to programmatic assessment, report back to the larger group, and offer appropriate "work-arounds" as strategies meant to counter roadblocks to the effective use of student learning assessment data at the programmatic level.

3. Exploration of AAC&U VALUE Metarubrics – participants will be provided with access to the AAC&U Metarubrics that have been develop to aid in program-level assessment of the fourteen "Essential Learning Outcomes," and will have the opportunity to brainstorm around possible uses of the Metarubrics on their home campuses.

4. Toolkit Creation – As a closing activity, participants will create a draft "toolkit" for making meaning of classroom-level assessment of student learning to improve teaching and learning at the program level.

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This session will draw upon assessment strategies derived from the collective wisdom presented in the following sources:

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**Learning into Feeling: Using a simulation exercise to change
attributions, attitudes, and feelings about poverty.**

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Summary:
Students often have difficulty taking the static material, such as from a text, and engaging with it sufficiently to be able to use the material, transfer their knowledge, or be meaningfully impacted by it. In particular, students can find it difficult to break from their own lens upon the world without some kind of direct experience. This ability to assume a new perspective is important to those who plan a career in a helping profession. They should be sensitized to the ways in which their own personal experiences are different from those of the people they help. For example, learning about the effects of socioeconomic status from discussion in a text or class is limited. Our research tested the effects of participating in an active exercise, in this case a poverty simulation, on changing students' perceptions and enlarging their perspective. We used the Community Action Poverty Simulation developed by the Missouri Association for Community Action. Readers should note that this is the same simulation that was conducted by Wilson & Kelley at the 2008 ISETL conference as an interactive teaching session. The simulation has been

used previously by the Iowa Extension Office to sensitize community agency members to the conditions of poverty (Greder & Warning, 2005). We are offering data on its use among college students.

Two-hundred fifty-three undergraduate students from 5 classes in psychology, sociology, and gerontology took part in the simulation. Each student was assigned a role in one of several family constellations, such as an unmarried mother of two young children, a married father of four, or an elderly man living alone. Participants were responsible for completing tasks such as going to a job if they had one, qualifying for aid, taking children to school, and buying groceries, throughout four simulated 15-minute "weeks". As part of the simulation, cards were also distributed at random which indicated an unexpected good or bad event had occurred for a person or family, such as a sick child, a loss of job, or a theft of a vehicle.

Participants submitted a reflection paper based upon the Lewinian Experiential Learning Model Lewin, 1951; Kolb, 1984) as a part of their coursework. The simulation constituted the concrete experience of the model, then participants were asked to describe their observations and reflections about the experience, the generalizations they could make to broader issues (abstract conceptualization), and to determine what comes next in their learning or actions (intention to test new learning in a novel context). The participants also completed a questionnaire before and after the simulation assessing their feelings about people in poverty, attributions for the causes of poverty, attitudes, knowledge, and intentions to act to help those in poverty (c.f.Cozarelli, Wilkinson, & Tagler, 2001,) . A control group also completed the questionnaire, but did not participate in the simulation. We will briefly review the quantitative data analyses, which were previously presented at the Eastern Sociological Society conference in March, 2009, and then give a more detailed analysis of the qualitative data.

The quantitative analyses included within-subjects analyses comparing responses for simulation participants before and after the simulation. Between-subjects analyses compared responses for simulation participants to control group members, all controlling for social desirability and participants current socioeconomic status. These analyses all indicated that participants became more positive in their feelings, more external in their attributions for poverty, more knowledgeable, more likely to believe people in poverty should be helped, and more likely to intend to act to help in some way. Qualitative analyses of the reaction papers further added support to these findings. Students reported that the experience was "eye-opening" and changed their whole understanding of what it must be like to live in poverty.

We will also report a more grounded analysis of qualitative reflection paper data. In addition to our examination of the ways in which student reflections support quantitative findings about attributions, attitudes and feelings, the qualitative analysis has revealed numerous other key themes common across many of the students' reflections. Finally, this paper examines the importance of some disconfirming data among students for whom the simulation had little effect, as well as for those students exhibiting more stereotypic attributions and/or more negative attitudes and feelings following the simulation.

The Use of Clickers in an Introductory Physics Class:
Fostering Student Interaction as a Method of Formative Assessment

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Abstract:
The present study investigated the impact of clickers on student attitudes and achievement in a large, introductory physics class. The design was quasi-experimental with data from a fall semester of the course, in which clickers were not used, compared to data from a spring semester where clickers were used. The results indicated that students in the clicker section performed at a significantly higher level on the final exam compared to students in the non-clicker section. The results for attitudes were mixed with the students in the clicker class demonstrating both positive and negative gains. The implications of these results for teaching introductory science classes are discussed.

Introduction and Literature Review

The use of personal response systems (primarily known as "clickers") has become a widely recognized mechanism to increase student interaction in large lecture classes. These clickers allow the students to respond to various forms of instructor provided questions, usually in a multiple-choice format, and provide instantaneous feedback to the students and the instructor concerning the extent to which the students in the class have mastered the material. In effect, the use of clickers is a means by which instructors and students in large lecture classes can obtain the same kind of interaction that is available in small, seminar classes. As Duncan 2005) says: "... students press a button on a hand-held remote control device corresponding to their answer to a multiple choice question that is being projected on a screen, see the correct answer along with the class distribution of answers, and hear a description of the thinking that leads to the correct answer" (p. 3).

Mayer et al. (2009) situate the use of clickers in a theoretical context involving deep or generative learning. Specifically, they indicate that clickers facilitate students' use of self-questioning and foster what they term the "self-explanation effect." As they state: "The research on the self-explanation effect has shown that students perform better on a final test when they are encouraged to explain aloud to themselves as they read a textbook lesson rather than simply read the lesson without self-explanation" (p. 54). While this statement refers to reading a textbook, the same logic has been applied to the type of behavior required in a clicker-augmented lecture. On the other hand, Hatch et al. (2005) believe that the effectiveness of clickers resides in the fact that they require the students to pay attention to what is happening in class. As proof of their belief they report that the students who seem to most benefit from clickers are those who have mild to moderate degrees of attention deficits.

While there has been some research reported that investigated the effectiveness of clickers, most of this research has focused on the perceptions of how useful and enjoyable students found these devices (Draper & Brown, 2004; Duncan, 2005; Latessa & Mouw, 2005). In general, this research has reported that students find clickers helpful in their attainment of course content. As some writers have commented, however, there is a clear possibility that the effectiveness of clickers may be due to some extent to the Hawthorne effect. Outside of these student opinion studies, however, there has been very little research investigating whether clickers have an impact on student achievement and attitudes. The present study attempts to fill that gap by providing data from an introductory physics class in which clickers were used as one form of formative assessment.

Method and Subjects

The present study was conducted at a large, public, urban university in the northeastern section of the country. The class in question was introductory physics, a course that meets the university=s requirement for a core science class as part of the general education requirements. The course is offered in both the fall and spring semesters, with approximately 150 students in each section. As part of a National Science Foundation Grant, the instructor agreed to offer the fall section of the course using the typical course format (large lecture with minimal class

participation) and the spring semester using clickers. In both classes a pretest was given which measured students= attitudes toward and previous experience with science. The same questionnaire was administered at the end of the course. In addition, a common final was administered in both classes.

There were 177 students enrolled in the fall semester and 152 in the spring. In both classes, approximately 60% of the students were male. Both classes were approximately 50% Caucasian, 20% African American, 20% Asian, and 10% other. A majority of the students in both classes were in their sophomore or junior year in school.

Results

A listing of some of the results that have been completed at this time is presented below:

- Final Exam: The two classes differed significantly on the final exam score with the clicker class outperforming the non-clicker class ($t = 4.21$, $p = .000$). The effect size was moderate to large ($d = .571$).
- Attitudes: The students in the clicker class obtained significantly higher post-test means on a number of attitude items, mostly focusing on content. Examples are "I'm sure I can understand complex material" and "I'm certain I can understand the most difficult material presented in science class." In general, the effect sizes for these analyses were small to medium, averaging about .3 using Cohen=s d statistic.
- Opinions: Conversely, the students in the non-clicker class obtained more positive scores on items that would be considered "constructivist" in nature. Specifically, the students in the non-clicker class scored lower on items such as "There is only one correct way to solve a science problem" and "Learning science is mostly memorizing facts."

Discussion and Implications

Since the use of clickers is becoming more common, it is important that the impact of these devises be systematically studied. The results from this study offer support for clickers, but also indicate some areas of concern. It is obviously important that students in the clicker class obtained higher scores on the final exam as compared to students in the non-clicker class. The result presented above is actually an under-estimation of the difference, since the non-clicker class had somewhat higher scores on a variety of academic indices (such as SAT scores and prior science grades). When these variables were entered as covariates, the difference between the two classes increased. It is also important that the clicker class seemed more confident in their ability to solve difficult problems. To some extent, however, these advantages seem to have been obtained at the cost of an over-emphasis on discrete and clearly demarcated outcomes. That is, the clicker class seemed intent on providing answers to the questions asked, and seemed less open to exploring and investigating physics. This was demonstrated by their answers to the questions listed above, as well as by the finding that they are more concerned with obtaining a good grade in the class. Overall, however, the results suggest that the use of clickers can facilitate performance in science, at least to the extent that this is measured by performance on a final exam.

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Get it Done: The Case For The Trifecta
of Advanced Organizers, Peer Editing, and Homework

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Summary:
Anecdotal evidence and formal studies indicate that students spend less time on coursework than in the past (National Survey of Student Engagement, 2008) and many students come unprepared to class. Also, there never seems to be enough time to teach all that is necessary in the classroom. Many educators struggle to help students learn without sacrificing time for the content they are supposed to teach (Bean 2001).

Additionally, students are often placed in groups with the assumption that the group will develop into and function as a team with only minor direction. Groups by definition are two or more people who interact with each other in such a fashion as one influences and is influenced by the other (Griffin & Moorhead, 2007). A team is further defined as a group who is committed to a common purpose, common performance goals, and an approach for which they hold themselves mutually accountable (Katzenbach & Smith 1993). Effective student groups should also possess the qualities of collaboration and common purpose. Leadership is also seen as a collective effort and not just something one person (such as an instructor) does (Astin 2003). How often is group, team, or leadership influence monitored and are student work teams really functioning as groups or teams at all?

The use of advanced organizers has been demonstrated to be a successful tool (Ausubel, Novak, & Hanesian, 1978). Advance organizers have also been found to aid in the application of learned information into new situations (Mayer, 1987). Structured Peer editing has also proven to be an effective tool to engage students and enhance performance (Robinson, 2008).

What would happen if these interventions were combined?

I have addressed the above issues by combining a number of proven interventions including advanced organizers, peer editing, and student accountability.

During my hands on interactive presentation, I will guide attendees through the process of developing one type of effective advanced organizer that has been combined with a form of peer editing to ensure student accountability to the assignment as well as their work group. I will also share qualitative data that I have collected in my current study.

Activities:
1. Presentation and discussion about designing successful advanced organizers and using a form of peer editing to ensure students come to class prepared.
2. Whole group discussion about advanced organizer and peer editing uses and needs.

3. Small group brainstorming on specific course requirements.
4. Individual and small group designing of using group dynamics and peer review to increase student accountability.

Description:
I have addressed the challenge of not having enough time to cover material in class as well as students coming to class not prepared by combining advanced organizers with peer editing. This activity has allowed classroom discussions to advance to much higher levels on Blooms Taxonomy. Building upon earlier success in structured peer editing (Robinson, 2008), the use of the advanced organizer is taken to the next level where all students are engaged on a regular ongoing basis. Feedback is given more rapidly than in traditional formats while group influence is used to enhance performance.

During the hands on interactive activity, I will guide attendees through the process of dividing lesson plans into manageable portions that can be given to students in advance of class session for students to research and digest, how to use the information in class, how to hold students accountable and avoid social loafing (Griffin & Moorhead, 2007) and how to spend class sessions in deeper learning activities.

I will provide field tested examples and handouts that can be adapted for attendees. I will also share both qualitative and quantitative data from my current study on the effectiveness of the combination of advanced organizers and peer editing.

Experiential Learning: Service Learning
across the Communication Studies Curriculum

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Service Learning helps students recognize the importance of the principles, ideas, and assumptions they encounter in the classroom. Students are given the opportunity to apply the theories, concepts, and constructs they learn in the classroom to their interactions with the community. Students often utilize simple methods of engagement in order to accomplish their objectives. Thus the amount of academic and practical learning is generally high (Isaacson, Dorries, & Brown, 2001). The benefits of service learning can be far-reaching (Isaacson & Saperstein, 2005). This panel will discuss strategies for engaging students in experiential learning initiatives across the communication curriculum

Objectives:
- Session participants will have a working definition of service learning
- Session participants will discuss the benefits of service learning to the various stakeholders
- Participants will examine the many opportunities to utilize service learning across the communication curriculum

Audience:
This session is most appropriate for faculty who want to utilize service learning initiatives within their program of study. Although the session will specifically discuss implementation within the communication curriculum, the concepts can be expanded to most disciplines.

Activities:
- Participants will engage in small group discussion to develop a definition of service learning
- Participants will examine specific projects that have been utilized across the communication curriculum
- Participants will engage in small group discussion to determine service learning initiatives suitable for their disciplines
- Strategies for dealing with related logistical issues will be discussed

Summary:
Many institutions of higher education recognize the need to produce engaged students. Service learning is one way to provide enhanced learning opportunities while involving students in their communities. Service learning provides students with the opportunity to put theory into practice. Involvement in service to the community can provide many benefits to students as well as other stakeholders.

The goal of this session is to discuss strategies for engaging students in experiential learning initiatives across the communication curriculum. Discussion will provide participants with the opportunity to examine service learning from a holistic perspective.

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Tech this out!: An Exploration of Online Tools for Teaching

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Presentation objectives:
1. Participants will engage in Turning Point clicker technology to interact with presenters and presentation.
2. Participants will have a better understanding of online tools for teaching (wiki, blog, document sharing, texting, youtube.com, teachertube.com) and be able to implement lesson ideas immediately.

Audience:
Anyone teaching adult learners. Our personal experience is with students in the department of education.

Activities:
Introduction through Internet/PowerPoint and group interaction with the following:
- Turning Point Clickers
- How to build a blog
- How to build a wiki
- How to effectively use/search youtube.com and teachertube.com
- How to use google docs
- How to incorporate Short Messaging Service (SMS); i.e. IM, text messaging, chat

Summary:
As educators, it is imperative for us to present lessons which are relevant, engaging, and offer opportunities for personal meaning. The new technologies provide many occasions through clickers, online document sharing, blogging, wiki's, and social networking to extend the curriculum beyond the brick and mortar of the school building. Join us for a fun and interactive session which highlights how we incorporate technology into our classes to assist us in preparing future educators.

Citations:
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From Flatline to Redline Thinking: A Constructivist-Based Protocol for Deep Critical Thinking and Discourse

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Objectives:
1)Participants will engage in a discussion of constructivist pedagogy which promotes active learning by having students use writing to learn strategies, discourse, and student self-reflection in order to promote critical thinking and to enhance student learning.
2) Participants will practice using a protocol for critical thinking that will enable their students to be better able and more motivated to discuss what they know and will enable a more critical understanding of what they are learning.
3) Participants will discuss a rubric designed for students to reflect on their classroom discourse and their writing.

Audience:
College professors, high school teachers

Summary:
Based on the insights of theorists such as Piaget, Vygotsky, and Freire learning occurs when students are actively engaged in the process of discussing and interpreting meaning and constructing knowledge based on what they bring to the new learning. To acknowledge this process of active engagement is to practice a pedagogy that enables students to become involved in the learning and in the translating of new knowledge to knowledge that is understood in critical and thoughtful ways (Bean, 1996). Regardless of the content area, students should know what it means to be critical thinkers in that discipline (Bok, 2008).

Activities:
Participants will discuss the current research on constructivism which promotes active learning and student engagement as essential to critical thinking and student learning. In this session, participants will work collaboratively to apply the protocol for critical thinking which is based on a writing to learn strategy that will enable students to think more critically and more thoughtfully about what they are learning. A discussion will follow that will address how the protocol for thinking can be used to enhance and energize student engagement and motivate higher levels of classroom discourse. Because of this active engagement with the learning, students will be demonstrating "redline thinking" that is, thinking at its highest levels. Participants will discuss their experience with the protocol and think about ways to apply it to their own disciplines. The session will end with an example of a rubric that is designed for students to self-reflect on their own their writing and on their classroom discourse.

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The Impact of Service-Learning on Pre-service ESOL Teachers

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Objectives:
1. To present a service-learning project implemented in a TESL reading classroom.
2. To highlight the positive role of service-learning in college classrooms especially in the area of teacher-education.
3. To provide useful strategies to educators to incorporate service-learning in their teacher-training programs.

Audience:
Teacher Education Faculty, Teacher Professional Development Directors and ESL teachers.

Activities:
Visitors to our session will engage in discussions to evaluate the project presented and brainstorm practical ways to incorporate service-learning into college classrooms.
Research questions:
1. How does service-learning influence pre-service teachers' perspectives on pedagogy?
2. How does service-learning influence pre-service teachers' perceptions on their future students?

Summary:
This paper reports on a service-learning project in a college-level TESOL classroom focused on reading. Pre-service teachers enrolled in the class work with local elementary and secondary schools to help ESL learners with their reading. The project involves the design, evaluation and revision of lesson plans, the implementation of the lesson plans with the ESL learners and reflections in the forms of journals and reflection papers. The project is evaluated with the qualitative data obtained from the journals, reflections and teacher-student conferences.

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Applying PERC Generic Model to Design and Assessment
of Effective Experiential Projects

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Educators and researchers in the field of pedagogy tend to agree that incorporating experiential learning strategies into the curriculum gains increasingly greater significance for better preparing students to effectively function in real-world encounters and to professionally apply conceptual knowledge to new experiences in the global environment. Literature suggests that engaging students in experiential activities induces emotionally charged learning. When conceptual knowledge is combined with first-hand experience of the phenomenon being studied, learning is more effective. Experiential learning enforces a stronger impact on understanding, memory retention, and critical thinking (Andresen, Boud and Cohen, 2000; Cantor, 2003; O'Sullivan, 1993, Mayo, 2004; Hubbs & Brand, 2005). Experiential learning is broadly defined as learning in which the experience of the learner occupies a central place; the learner analyzes his/her experience by reflecting, evaluating, and reconstructing it in order to draw meaning from it and to further apply the gained knowledge.   Depending on the adopted definition and institutional/course objectives experiential learning may include various programs such as internships, fieldwork and clinical experience, service learning, study abroad and cultural immersion, but also activities that can be incorporated into various coursework assignments and projects (Grand, 2005; Cantor, 2003; Andresen, Boud and Cohen, 2000; DeCourcy, 1998; Forrest, 2005).

The most criticism, however, that various forms of experiential learning receive is whether and when, it can truly be considered "academic learning," how it fosters a deeper level of knowledge, and how it can be rigorously assessed.   Critics of Experiential Learning caution that in reality experiential learning may potentially dilute the academic rigor (Lewandoski, 2007). Obviously, effectiveness of experiential learning would depend on many factors, such as the types and design/structure of assignments, on the instructor's ability to effectively administer these projects in the classroom, on the design of rigorous assessment rubrics, etc.   In an effort to address these concerns, the author has developed a theoretical model, PERC generic template for assignment construction and assessment of experiential learning. Theoretically derived from the Kolb's model of experiential learning and Bloom's revised taxonomy, the generic model (PERC) is utilized as a key to elevating the academic rigor of experiential learning.

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**Integration of Notebook Computers into a Course Management System
in a Laboratory Class**

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Objectives:
Participants who view this poster presentation will have the opportunity to:
- understand the technique for utilizing instructor notebook computers and how to integrate them into a course management system
- observe use of computerized proficiency assessment scales
- determine the applicability of notebook computer use to other disciplines
- experience the use of notebook computers through simulated course materials
- develop an awareness of the value students place on individualized grading comments

Audience:
The poster presentation will be of interest to graduate students and faculty who are interested in using technology to improve teaching effectiveness, decreasing administrative tasks and allowing more time for student interaction.

Activities:
Attendees will have the opportunity to experience the use of notebook computers with a simulated course. Presenters will share lessons learned and discuss ways to apply notebook computer usage to attendees' disciplines. Integrating notebook computers into a course management system may be most useful in classes:
- where instructors need access to updated materials when working directly with students
- which utilize a variety of assessment tools
- which require extensive documentation of student activities
- where students are evaluated frequently
- which provide opportunity for student feedback

Background:
The management of paper course materials and grading sheets can become complicated when dealing with multiple classes of forty students in a pharmacy practice laboratory. There are administrative costs and faculty time involved in documenting grades and developing up to date course materials for the students.

Methods:
Eight notebook computers were purchased and integrated into the Fall pharmacy practice laboratory. Once fully integrated, one section of the Spring laboratory (18% of class) was selected to participate in a comparison of the old paper teaching and grading system to the new integrated computer system. Students (N=40) and instructors (N=8) were surveyed to gain their perspectives on the newly integrated computer system. Cost data was also compared between both systems.

Results:
The students' survey data demonstrated they valued both the timeliness of their grades (85%) and access to instructor comments (88%) with the computer system. Instructor data demonstrated that the new system resulted in a time savings along with the ability to teach their students more effectively (75%). In addition, cost comparison data revealed that the savings in administrative costs offset the investment in the computers in less than two years.

Discussion:
The notebook computers are ideal for use in the described course which utilized multiple instructors working in small group settings. Teaching materials were frequently updated and a variety of detailed assessment tools were used in student grading. Students in the study valued the timeliness of their grades and their quick access to instructor comments. Timely access to instructors' comments was useful in preparing for future classes and observing a student's progress. This paperless system conserved university resources and allowed for real time updates to teaching materials and assessment scales.

Summary:
Instructor notebook computers integrated with a course management system can enhance the educational experience for both students and instructors while reducing overhead cost and faculty time.

Participation in service-learning: What did students learn about public policy from work at a community agency?

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This poster session will summarize a qualitative study on students' comprehension of public policy concepts. The study focused on the ways in which students made linkages among (a) service-learning activities that they conducted at a community agency, (b) observations of the clients' experiences and (c) public policy concepts discussed. Thus, the study examined the extent to which students made accurate connections between policy and practice issues. Although the specific service-learning project was conducted in a social science program, the general principles of service-learning and SoTL are generalizable. Thus, the study design could be easily adapted to other fields.

Service-learning is a teaching tool that allows students to gain exposure to problems, challenges and solutions (Mintz & Hesser, 1996; Wong, 2007). The service-learning also allows students to see the impact of broad societal factors on individuals (Eby, 2001; Swanson, King & Wolbert, 1997). In this way, service-learning can help make concepts real for students.

Service-learning was utilized in an undergraduate public policy course. The course focuses on broad policy issues (e.g., health care, education, employment) that impact the majority of Americans. For students, the explanation of policy/legislative issues is often abstract. So, a service-learning component was integrated into the course to help students see the impact of policy on daily life (e.g., Hamon & Way, 2001). The students completed 15-hours of service-learning work at a local Ronald McDonald House (RMH). This agency was chosen because RMH family clients often face multiple policy issues simultaneously (e.g., health care for sick children, employment leave for parents, education adjustments for siblings).

In addition to the service-learning work, students completed 5 brief papers over the course of the semester. The papers were consistent with emphasis on reflection in service-learning (e.g., Chesler, Ford, Galura, & Charbeneau, 2006). The papers required students to demonstrate conceptual connections between specific policy issues and service-learning/client issues (e.g., Which social policies hinder RMH familiesability to function? Which social policies foster RMH families ability to function?). The papers required that the students not simply report how they felt about the experience. Rather, the papers required that the students demonstrate comprehension/application of concepts (e.g., Eckerman Pitton, 2008).

At the conclusion of the semester, an IRB approved qualitative study was conducted to identify salient themes within the student papers. The analysis identified the common types of policy issues that students recognized, the accuracy of policy comprehension and the degree of linkage between client experiences and public policy.

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Developing a Multicultural Action Plan for Institutional Effectiveness

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Summary:
According to the College Board's recent Higher Education Landscape statistics, within the next 10 years nearly 50% of students enrolling in higher education will be underrepresented students or students of diverse ethnic backgrounds. With such an influx of mixed cultures, how do higher educational institutions prepare to meet the diverse academic and social needs reflected by the incoming student body?

In addressing this question, the purpose of our presentation is to advocate for and facilitate comprehension and development of an institutionalized multicultural action plan. Citing the College Boards ongoing Demographics Project, an institutionalized multicultural action plan facilitates recruitment and retention of ethnically diverse students, staff, and faculty because the plan includes essential components that ensure institutional and student success. Summarily, some of these components include: data collection - interviewing diverse students; establishment and implementation of a coordinating committee- to obtain a clear institutional commitment, develop and execute the plan; assessment- to inventory internal and external resources, campus academic and student affairs programs, activities, and resources; initiation of a pilot program, and evaluation of the entire project. Through a PowerPoint presentation, case study analysis, and supporting handouts, group participants will engage in discussion and development of an initial action plan that they can take back to their respective campuses and develop more fully for total implementation. Educators at all levels will benefit from this presentation provided by four presenters- one professor and three deans with graduate and terminal degrees. Each presenter has over 30 years higher education experience in teaching, developing, implementing, and serving multicultural students, programs, and services as well as extensive presentation experience.

Using Experiential Learning to Enhance Student Learning

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Objectives:
The participants will:
1. Define experiential learning as it applies to their personal subject matter.
2. Describe at least three ways to incorporate experiential learning in their classes.
3. Evaluate opportunities wherein experiential learning may be applied.

Audience: This presentation/workshop is suitable for educators from all disciplines and all levels.

Summary:
Professionals in the Education field have often spoken of the importance of getting their students involved in the learning environment. A key part to implementing this is being a teacher who demonstrates a style of instruction that facilitates learning by creating and supporting a learning environment which promotes students feeling comfortable to participate. Another vital component is to have a bank of activities that tie into the goals and objectives of the class. With so many activities, it is first important to focus on what you what to accomplish. From there, the sky is the limit!

Activities:
Through sharing of knowledge, experience, and discussion, the interactive session promotes participants to discover avenues for applying experiential learning. Activities conducted in a classroom should have a purpose. They should tie into the goals and objectives of the curriculum and should be used to complement the informational component of a lesson. Experiential learning activities are pro-active and participatory in nature. All students should be encouraged to participate since experiential learning is pro-social and interactive. All activities should be sequenced and build upon the previous experiences.

After an experiential learning activity the facilitator or teacher should discuss what students saw including observations, how students felt, and what they experienced. The goal of an experiential learning activity is for students to take a learning experience and be able to apply information or create an understanding to further the instruction of the teacher. As a teacher, the

real skill is the ability to plan an activity that actively engages the students or group, and following the experience, encourages students to reflect and personalize the results into a life lesson.

The workshop will explore techniques and applications. Activities will be demonstrated that can be applied throughout the curriculum. The procedures of processing the activity will be demonstrated and discussed.

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Collaborative learning and student behavior in group settings: are they compatible?

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Summary:
Collaborative learning plays a significant role in education across disciplines and educational levels. As a result, students are frequently asked to participate in group-based learning activities (Gillespie, Rosamond, & Thomas, 2006). In addition to the content-specific knowledge, those activities offer the potential for experiential learning related to group dynamics and contribute to related behaviors (Colbeck, Campbell, & Bjorklund, 2000). The benefits of those learning activities, however, are partially dependent upon the student's ability to work together effectively (Oakley, Felder, Brent, & Elhajj, 2004). As Johnson, Johnson, and Smith (1998) note, "Simply assigning students to groups and telling them to work together does not in and of itself result in cooperative efforts. There are many ways in which group efforts may go wrong" (What is cooperative learning, ¶ 5).

Evidence suggests that group-based learning activities present challenges for students, with many students expressing negative attitudes (Colbeck, Campbell, & Bjorklund, 2000; Gillespie, Rosamond, & Thomas, 2006). Those attitudes have a number of potential implications given that experiences with group based academic activities have the potential to not only influence subsequent learning, but also behavior in future employment settings (Forrest & Miller, 2003) which are frequently organized using group-based structures (Shen & Chen, 2007).

The purpose of the present research is to extend our understanding of the context within which we implement cooperative learning activities by describing students' behavior during group-based activities.

Method:

Participants
A sample of 308 students from a mid-size, moderately selective Midwestern university in the United States participated in the research. The sample included 98 individuals identifying as freshmen, 65 sophomores, 62 juniors, and 83 seniors. Participants represented a wide range of majors across the University's three colleges.

Materials and Procedure
Participants completed an internet-based survey distributed via QuestionPro.com. The survey included 22 items adapted from the Comprehensive Assessment of Team Member Effectiveness (CATME; Loughry, Ohland, & Moore, 2007). Questions referred to behaviors in four domains: contributing to the group's task, interacting with other group members, keeping the group on task, and expecting quality work. Participants were instructed to consider their behavior in group

settings when responding to the questions. The response scale included five options ranging from strongly disagree to strongly agree.

Results and Discussion

Participants most strongly agreed with items indicating they expected high quality work in group settings and with those indicating that they contributed to the group's work. They were less likely to agree with items related to collaborating and communicating with group members. Lowest levels of agreement were for items related to their contributions to the groups task focus and direction. The differences between the behavior they reported in the four domains was statistically significant.

The findings suggest that students expect high quality work in group settings and feel that they contribute to the groups work, but may be less likely to collaborate and communicate with other group members and may not contribute to the group's direction. Each of these findings has implications for the outcomes of collaborative learning activities. The proposed session will incorporate audience discussion about the significance of those implications and ways in which instructors can address any potentially detrimental effects.

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Oral History, Cultural Journalism and the Community

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Over-view
Long before histories were the domain of documentaries and books, long before the first words were even put down on paper, oral traditions – epic poems, laws, folk tales, and community histories – were conveyed from generation to generation through storytelling. Stories are powerful transmitters of knowledge, wisdom and even beauty. Oral history – the collection, preservation and distribution of life history interviews – has become an important tool for university teachers to engage students with communities of all kinds, providing access to communities traditionally underserved by the academy.

As a regular part of the curriculum in the Urban Community and Environment concentration in the BA program at Antioch University Los Angeles, "Talking to the City: An Introduction to Oral History Methodology" invites students to plan, design and implement an oral history project by working closely with community organizations located throughout the city of Los Angeles. Apart from serving as a model for university-community collaboration, this oral history class is an important vehicle for drawing upon the experiences of our non-traditional student population. Foxfire practices used at both Antioch University Los Angeles and Piedmont College education programs support and reiterate the connection of students to their community. These processes provide a powerful connection for students working with K-12 students to learn about and from the neighborhoods in which their students live utilizing a form of oral history best associated with Foxfire called Cultural Journalism.

Objectives
Using the practices and procedures of the Oral History/Cultural Journalism field, this presentation will offer an interactive demonstration of how these skills can enhance our students commitment and understanding of the communities in which they will work and provide service.

Audience

Any faculty member who is interested in providing additional opportunities for their students to experience safe and encouraging processes to learn about "the other," whether that is a student they may work with, a colleague who is "different from them," or a neighbor. These practices work well in the fields of history, education, anthropology, sociology, American studies and other disciplines.

Activities

We will demonstrate the basic process of conducting interviews (the set up, the guidelines, how to ask questions) and demonstrate the process with our audience. We will also introduce our audience to some of the materials that will be useful in getting them started with this process with their own students.

Description

Interviewing takes practice and an understanding of the key elements that make interviewing successful. But the collection of the oral history does not end there. What happens to all of that information? What are the next steps and what gets included and what does not? In addition, what happens to this information? Does it get stored in some dark drawer or are there ways to attach this process and information to larger efforts to archive a community or an event for example. These questions will all be explored briefly to set the stage for our audience's success when they embark on this process themselves.

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Team Teaching as Professional Development

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Aristotle observed that friendship is a virtue. Building on his insights, we suggest that educational friendships between people who admire each other's professional excellence can help each strive for improvement in classroom performance. Through their shared commitment to pedagogical effectiveness, they see instructional virtue in each other and thereby both promote and develop good teaching habits in and for one another. Each person enlarges the other's educational experience, bringing new insights and opening up points of view other than their own. Educational friends are a mirror to each other, helping each to see themselves more clearly. Given that as instructors we tend to be individualistic, independent and self-sufficient, team teaching offers the benefits of a more communal, cooperative, interdependent experience. Educational companions develop us in four ways: they help us learn (by providing a model to imitate and a mentor to guide), they bring self-knowledge (by correcting us and revealing our blind spots), they hold us accountable (by promoting self-disclosure and honest confession) and they encourage and support us (by helping us build on our strengths and work on our weaknesses).

As instructors we desire continuous improvement in our classroom teaching. Colleges and universities provide standard professional development opportunities and teaching effectiveness measures. Team teaching with a colleague, however, provides a mentor, a sounding-board and a critic for every aspect of instruction.

In this interactive workshop we facilitate discussion of how team teaching fosters professional development on a number of fronts: course planning, curriculum design, grading and teaching effectiveness (for example). The facilitators draw on almost ten years of team teaching together and with other professors in learning community formats.

Objectives
The objectives of the workshop are to:
1. draw participants into discussion about the effectiveness of team teaching as a professional development activity
2. provide several examples of how team teaching fosters professional development (curriculum, pedagogy, evaluation, personal matters)

3. give participants a chance to
a) share their own experiences of teaching with other faculty
b) ask questions, make observations and draw conclusions about the effectiveness of collaborative teaching
c) consider how these benefits might be fostered outside of team teaching experiences (in general professional development offerings).

In addition the workshop will demonstrate a particular teaching strategy that begins with individual reflection, moves to small group discussion, and then on to the large group.

Format

The workshop will include both facilitator presentation and participant interaction.

1. The workshop will be structured around several reflection and discussion questions (how has your teaching been impacted by other faculty? what aspect of your teaching are you most uncomfortable revealing to another faculty member? what is the greatest strength you think you could offer to another instructor? etc.)
2. The facilitators will provide examples from their own experience of how course planning, curriculum design and grading are enhanced through working together.
3. Participants will hear, via video, testimonials from other faculty at our college who have taught collaboratively.
4. Participants will discuss and share ways in which they have benefited from team teaching and of how these benefits can be fostered apart from team teaching.

Using An Online Photo-Sharing Tool (Flickr)
for Classroom Multimedia Projects and Cross-Campus Collaborations

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Web-sharing photo tools can be effectively integrated into classroom assignments and activities. In addition to uploading photos, tools such as Flickr can provide an opportunity for students to learn about copyright and creative commons licenses. Activities can also be developed to connect students across a distance for photo sharing and a themed discussion. This presentation will showcase several uses of Flickr across class years and disciplines and provide student feedback on using Flickr for academic purposes versus social networking. The audience will view sites and projects completed in Flickr and discuss strategies for implementation.

Objectives:
The overarching goals of this Interactive Teaching Session include:

- Demonstrating how a web-sharing photo tool (such as Flickr) can be utilized with classroom projects.
- Showcasing how web-sharing photo tools provide an opportunity for students to learn about copyright violations and creative commons licenses in other words, who owns images and the content in the images?
- Demonstrating how groups can be created online to share photos and engage in discussion while in separate locations.
- From feedback provided by students, learning how students value and adapt to using a Web 2.0 tool for an academic purpose versus social networking and how those lines can be blurred.

The audience is open to any teacher in any grade level for any discipline. Examples will be given from courses at the introductory-level to upper division.

The session will begin with an overview of online photography management tools and how Flickr contains additional components that allow for more community development. Example Flickr groups that are academic and non-academic will be highlighted. This part of the presentation will be in a s"how and tell" format.

The session will then transition into using Flickr to educate students about ensuring there are no violations of copyright when they take and post photos. This part of the presentation will be interactive, as a series of photos will be shown to the group. The audience will vote on if they feel there are any violations of copyright or not. We will then move into a discussion of the creative commons license, and why/how students must be careful even when incorporating these images into their projects.

Next, the session will talk about the development of assignments that use images, something that is common for students creating enhanced podcasts and photos embedded in videos in iMovie. We will share strategies for what content should be included in the assignment. The audience will be encouraged to share their experiences with having students create multimedia projects for their classes and state their successes and challenges.

Finally, the presentation will showcase how Flickr can be used to create an online community of learners for students that will never meet face-to-face. In Spring 2009, we created the Penn State EVOLVE project, a cross-campus photo discussion for honors students enrolled in all the honors programs across Penn State's twenty undergraduate-serving campuses. The theme EVOLVE was selected to represent historic tributes and events in early 2009. Students were encouraged to consider what the term EVOLVE means to them and how to represent that through a photo, title and description that was then uploaded into a Flickr group. The key was not just taking and viewing photos but that students exchanged responses to the work of others. Flickr allowed students to see the theme through the lenses of peers while broadening their definition and interpretation of the theme.

We will share student feedback with the audience on all aspects of using Flickr, from using Flickr to obtain images for projects to posting their own photos. We also have student comments on the quantity and quality of postings and discussions by their own peers.

A Framework for designing, implementing and Evaluating Internet-centric Adult Instruction

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Introduction

Current research in the field of education reveals an accelerated shift and convergence towards adaptive, boundary-less and pervasive learning (Kearsley, 2000). At the same time, the literature on technology-based education offers that the use of the Internet as an instructional delivery medium can lead to increased learning experimentation and the creation of online learning communities (Driscoll and Carliner, 2005). As a result of an orientation to reach learners who are widely dispersed geographically, online or Internet-based instruction has become more widespread. It is also anticipated that online instruction of adult and professionals will become more common in the not too distant future (Guilbaud, 2007). However, it is unclear how current practitioners are adjusting their approaches to keep pace in a sustained fashion with the impending realignment in educational delivery focused on adult professionals. Further, reliable approaches to assist in the design of Internet-based courses in general and reorient existing instructional modus operandi in particular, are hard to find (Driscoll and Carliner, 2005).

Challenges in the Development of Online Programs

There are many challenges to overcome in the development of high quality online programs for any type of learning context.

According to Zemsky and Massy (2004), the major ones are:

1) Lack of pedagogical/andragogical adaptation;
2) Inattention to the need for scaffolding or individualized learning guidance;
3) Lack of technical support and;
4) Overdevelopment and inappropriate use of services and products based on an orientation of using a tool for the sake of itself.

Adult Education Concepts

The general learning theories have made it a point to de-emphasize personal maturity/growth or human development as a significant aspect of the learning process given the complex mix of biological and social issues involved. Cross (1976), however presents that the works of Jean Piaget, Lev Vygotsky, and Thorndike made diligent attempts to gain greater understanding of adult learning and education. As a result of the efforts of these early pioneers, gradually a perspective began to develop in which it is understood that the general learning theories, which put a major emphasis on youth learning in the form of teacher-pupil relationships, were insufficient for educational activities focusing primarily on adults.

The Notion of Being an Adult

There are many aspects and orientations in defining the notion of being an adult. In the United States or Canada, for instance, focus tends to be placed on the legal definition of the term. The

year markers of 18, 19, and 21 are often used for adult consideration in a legal sense. In many other societies, cultural traditions are used in determining adulthood (Knowles, 1990). For the purpose of the IcAIF framework, the term adult is meant to focus on instruction-related activities including job training, skills enhancement, and leisure geared towards learners who are typically over the age of 25.

Self-directedness and Motivation
A major differentiating aspect for adults is that they possess an advanced understanding of self-concept. Unlike youth or adolescents who see themselves primarily in relation to others, such as their parents, adult family members, teachers, and government authorities etc., adults think and behave as totally independent human beings (Brookefield, 1986). Many efforts have been put forth to explain the reasons why adults choose to participate or refrain from participating in learning activities. The consensus is that adults tend to display a much wider range of interests, attitudes, motivations, and skills than youths. These interests are more oriented towards resolving immediate problems (Brookfield, 1986; Hiemstra, 1985).

Andragogy or Pedagogy
Andragogy as presented by Knowles (1990) is an adult instructional approach which is based on certain key assumptions that are quite different from those that define the pedagogical model. Andragogy, says Knowles, is based on the fundamental tenet that adult learners are different from children and adolescent learners. The andragogical approach to instruction has been getting closer scrutiny as both the term and the instructional model have gained increased acceptance. While andragogy has helped in focusing on the unique aspects of teaching self-directed learners who for the most part tend to be adults, some theorists have argued that the term andragogy should not be elevated to the status of an instructional model (Cross, 1981).

Adult Instruction: A Compromise
Even though the term andragogy itself still remains hotly contested by researchers and theorists, adult instruction seems to bring a different set of issues than youth-oriented teaching. As a result, there is movement towards convergence in the field. Moreover, the two major learning and instructional theories, particularly when appropriately used present very unique sets of challenges and opportunities. In effect, the prudent educator of adults or designer of instructions geared towards any learner will need to continue evaluating the approaches, methods, and tools which are most suitable for a particular learning context that is involved.

Internet-centric Adult Instruction Framework (IcAIF)
Leveraging both Pedagogy and Andragogy tenets, IcAIF uses the concepts of Education Sphere, Learning Orientation, and Knowledge Domain to accentuate a specific set of instructional approaches. The Education Sphere of the IcAIF is comprised of the triad of Learner, Facilitator, and System/Process. The Learning Orientation of the framework denotes 3 force fields of intrinsic-pull, extrinsic-push, and interaction-pull-push. Under each Knowledge Domain of IcAIF are 5 factors or components which act individually and collectively to influence instruction. IcAIF offers that the task of developing and implementing online training programs with an adult or professional development focus is a highly complex endeavor. Thus, the framework highlights instructional design strategies (IDS) for practitioners involved in Internet-centric training programs, courses, and curricula for that population.

IcAIF Details

The key components of the IcAIF are as follows:

A. Education Sphere: Learner; Learning Orientation: Intrinsic; Knowledge Domain: A1) Mental Model; A2) Relevance; A3) Socialization; A4) Self-Directedness and; A5) Reward, all of which suggest an outcome emphasis on: Goals and Motivation.

B. Education Sphere: Facilitator; Learning Orientation: Extrinsic; Knowledge Domain: B1) Educational Standards/ Strategic Orientation; B2) Entry Behaviors; B3) Design Approach; B4) Assessment and; B5) Lifelong Learning, all of which suggest an outcome emphasis on: Competence & Mastery

C. Education Sphere: System / Process; Learning Orientation: Interaction; Knowledge Domain: C1) Application, Tools & Media; C2) Accessibility; C3) Usability; C4) Virtual-Self; and C5), Mediation, all of which suggest an outcome emphasis on: Online Learning Community

Practical Guide to Using the IcAIF

Corresponding to the 15 enumerated Knowledge Domains (KDs), are specific instructional design strategies to handle impediments, barriers and issues, which are often involved in Internet-centric adult instruction. Below are the steps taken in designing (DE), implementing (IM), and evaluating (EV) IDS strategies through the use of IcAIF in a professional development and training project.

Background of Project

In the Spring of 2008, Virginia Tech was awarded a grant by Higher Education for Development (HED) through funding from USAID to assist L'École Supérieure d'Infotronique d'Haïti (ESIH) in Port-au-Prince, Haiti with capacity development in Computer Science. An important aspect of the grant involves training of a select group of faculty members from ESIH so they may participate in the rebuilding of academic institutions and creating job-related opportunities in their own country. . The ultimate aim of the project is to assist the participants in gain the know-how and thus avoid the often noted brain-drain[1].

Education Sphere: Learner

IDS: A1; Devise activities and visuals for unlearning of old beliefs and outdated concepts while providing ways to learn of new beliefs that will lead to the creation of new mental models.

IDS: A2; Create opportunities for learners to see linkages with professional, vocational, and/or personal interests.

IDS: A3; Devise activities to enable networking, building of personal rapport, and possibility for students to critique each other's work - Allow weaker participants to learn from stronger ones.

IDS: A4; Develop vertical and horizontal mentoring to allow co-construction/co-creation of new knowledge.

IDS: A5; Assist and support learning projects leading to desired skills/knowledge.

Summary of Steps Taken/Anticipated

DE: After project inception, personal statements and work attempted by the trainees were examined to develop learner skills and interests inventory. Examples of tools used to capture this information include: emails, face-to-face and Skype conversations, online chats, and research collaboration using wikis and blogs.

IM: Constructed a hybrid model utilizing face-to-face and online learning. Opportunities have been created and provided for online mentoring, collaboration, and reflection. Engaged graduate students from VT who match learners skills and interests to serve as coaches and peer-mentors; Developed virtual space for all learners and participants to discuss interests, reflections, and seek mentorship.

EV: Formative and summative evaluation are focused on any examining gaps between projected and achieved learning outcomes. Areas of focus will include investigation of ability and capacity of participants to continue the collaboration, mentorship, and reflection post the training phase the project and once implementation and maintenance responsibilities have been transferred to ESIH.

Education Sphere: Facilitator
IDS: B1; Connect summative assessment with educational standards and implement feedback loops to achieve goals.
IDS: B2; Determine baseline skills and have learned articulate expected entry behaviors.
IDS: B3; Develop flexible and adaptable instructional units tailored to the learning styles and context involved.
IDS: B4; Develop a summative assessment plan to impact of exposure to the instruction.
IDS: B5; Emphasize both subject/content and Meta understanding to allow learners to adapt thinking to future innovations and discoveries or recast of current understanding

Summary of Steps Taken/Anticipated
DE: Used e-mail, voice conference, and LMS forum, wiki, and blog communication to design implementation. Anchored activities around both program's and learners' goals; Utilized virtual spaces specifically Moodle and Linked-in to gain input and arrive at consensus.
IM: Introduced use of Blogs, Wikis, Forums through Moodle. Used graduate students as facilitators for online mentoring, and collaboration activities with VT faculty. Used forums to introduce learners to collaborative discussions and debates; and focused on ensuring ownership of and engagement during guided learning activities.
EV: Formative and summative evaluation are focused on how the Moodle site was used, including frequency of use, and duration of use. Special emphasis will be placed on techniques, consideration, and approaches employed in design new courses or refining existing ones.

Education Sphere: System Process
IDS: C1; Investigate different content presentations formats such as: Text, audio, video, multi-media, Virtual Reality and; leverage delivery methods such as Asynchronous, synchronous communications, broadband and narrow-band and select approaches best suited for learning environment and context involved
IDS: C2; Determine and arrange for alternative means for learners to connect online e.g., community centers, libraries, cyber-café, churches etc., as learning cannot take place with diminished or inconsistent online presence
IDS: C3; Determine gaps between desired level of use of the technology and actual use.
IDS: C4; Use and/or develop activities such as online forums, electronic field trips, simulation to allow learners to maintain a strong online presence

IDS: C5; Incorporate involvement in global communities, micro-worlds to allow learners to broaden their horizons and their thinking beyond class, course, and program

Summary of Steps Taken/Anticipated
DE: - Investigated suitable of different LMS applications (Moodle, Sakai and Blackboard); Determined appropriate communication technologies; and reviewed capacity of host country (broadband, internet accessibility, additional tool availability). Focused on open source solutions to facilitate ease of transitioning the tools and applications to learners.
IM: - Selected and Implemented Moodle as the LMS for project
-        Used both synchronous and asynchronous features of Moodle e.g., Chats, Forums, Wikis, and Blogs to provide opportunities to share ideas, collaborate, and network
-        Initiated use of iPod for asynchronous online activity e.g., downloading of instruction;
-        Trained participants to use of podcasts to find online learning/teaching scenarios applicable to instructional context at ESIH.
-        Used SKYPE for synchronous Audio Conference
-        Initiated Virtual Mentorship activities between VT and ESIH participants
-        Collaborated online to develop and submit research grant application
EV: Plan to use the Fluency in Technology to ensure retention and transfer of system/process concepts to which the participants have been exposed. With the spate of emergent education related technologies such as Virtual Realty, Mobile Learning, Ubiquitous Learning, etc., it was also important to instill a sense of ownership of the learning process to the participants, thereby ensure a strong orientation toward lifelong learning.

Conclusion
A key challenge in investigating the field of online instruction was the paucity of relevant instruction design approaches and tools for instructors to use. There was also no systematic guideline available, which could be used for the development of Internet-centric instruction targeted for adults.

Given current trends, the move towards greater utilization of the Internet for instructional purposes will continue to apply pressures on organizational systems, procedures and policies involved in distance education in general, and Internet-centric instruction in particular. Nonetheless, the instructional landscape appears to have been permanently altered by a global, open-sourced, inter-connected, and innovation-laden learning environment.
As a result, hard choices will need to be made concerning the best way to use limited funding streams as there are many needs and competing priorities at most educational institutions. These, for instance include: keeping a superior teaching faculty, supporting the staff, maintaining the schools infrastructure, funding research, and investing in support programs. Clearly then, the approach chosen concerning how to best allocate scarce educational resources will have a major impact on whether or not the possibility exists to move fully in the direction of Internet-centric adult instruction.

Notes
[1] The term "brain drain" refers to the movement of highly educated people, skilled workers, or trained professionals from their countries of origin to other countries to seek better economic opportunities.

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**Student Improvement and Feedback on Team-Based Learning versus Lecturing
in an Electrical Engineering Course**

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This poster presentation will present a study which investigated (1) whether students in junior-level electrical engineering courses showed greater improvement in problem-solving skills specific to the subject matter when taught with Team-based Learning (TBL) rather than traditional teaching methods, such as lecturing, and (2) what students thought about an electrical engineering course taught with TBL compared to one taught with more traditional teaching methods. Student performance and student evaluations in a two-course sequence were analyzed. The only major difference between the two courses was the teaching strategy used. Results indicate that while students' resistance increased when the course was taught with TBL, they did show greater improvement in problem-solving skills.

The teaching component is Team-based Learning. The study investigated (1) whether students in junior-level electrical engineering courses gain more content knowledge when taught with TBL than when taught with traditional teaching methods, such as lecturing, and (2) what students think about an electrical engineering course taught with team-based learning and an electrical engineering course taught with more traditional teaching methods. A Univariate Analysis of Variance was conducted where the dependant variable was students' scores on the final exams in Courses A and B and the fixed factor was time (first versus second course). Descriptive statistics of the responses to the Likert-scale items on the evaluation forms were analyzed. In addition to

this, two focus groups, conducted at the beginning and at the end of the Course B, which included TBL, were analyzed.

Managing the Data/Rich Information Poor (DRIP) Syndrome:
Critical Inquiry in College Classrooms

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Objectives:
The participants will be able to
(a), create inquiry based activities that avoid DRIP
 (b) analyze the use of text in inquiry based classrooms
 (c) identify common mistakes we make as professors in the classroom that leads to DRIP

Audience :
College Faculty

Summary:
In Critical Inquiry classrooms the students can utilize transactional skills needed to avoid information overload (DRIP syndrome). Students also use relevant information from various mediums to enhance their knowledge base. This presentation considers effective uses of inquiry based practices to enhance comprehension of textual information in college classrooms. Along with the reader and the text, the context is the key to effective instruction.

The Data Rich/Information Poor (DRIP) is a concept borrowed from Waterman (1987). The concept refers to "the problem of an abundance of data that does nothing to inform practice because it is not presented in context through the use of relevant comparisons" (Dufour, Dufour, Eaker & Many, 2006, p. 215). In an effort to extensively cover topics, instructors may present information that may be unnecessary, irrelevant, difficult to comprehend, and totally unrelated to students experiences and future careers. Throughout the educational experience students have been bombarded with information as a mode of instruction, but with the change in reforms in the 21st century focusing on global communication and learning, definitions of learning have changed in theory and practice in how the information should be included in instruction.
As early as 1938 Louise Rosenblatt espoused a theory of literature and meaning making that has influenced the move from data or text driven instruction to reader response and transactional learning. This theory has changed the way comprehension is being taught today. The text is no longer the focus but the focus has shifted to the relationship between what the reader brings to the text, the type of text and the context in which reading occurs. Rosenblatt (1934, 1968) led the move for literacy experts to embrace a transactional model of learning. In her theory on

reader-response she states how learners process information (comprehend) insisting that understanding is a process rather than a product. In Gladdys Westbrook Church's review of the significance of Rosenblatt's work, in her introduction she sums up Rosenblatt's work as a paradigm shift: Basically, reader response theories reject the New Criticism of the late 1930s through the 1950s which assumed that the texts themselves were central and that teachers were to teach the skills of close, concise, attentive analysis while discouraging expression of and attention to differences in students' own individual responses. Thus, in the 1960's and early 70's there occurred a paradigm shift in the teaching of literature away from viewing the text as authority to a view that focuses on the reader's relationship with text (Rosenblatt, 1938, 1964, 1968, 1978; Squire, 1964; Squire and Applebee, 1968; Purves, 1975; Purves and Beach, 1972; Bleich, 1975). pp. 71-77.

Comprehension (diagram) is based on the interactions between (a) the reader (what the reader brings to understanding, schema),   (b) the text, (information or the structure of the textual information; expository compared to narrative; quantity, quality) and (c) the context (the situation the material or information is presented). Later educators associated reader-response theory with a transactional model of learning. In 2006 Temple, and others equated the transactional model of learning to literacy and learning. Literacy is no longer limited to reading but rather a process of learning. Following this transactional model in instruction the DRIP concept can be diminished or avoided.

As advocated by Waterman Jr. (1993) and literacy research, the plethora of data from technology infusion does not necessarily mean that information or knowledge is readily understandable. Since the transaction of the reader or learner, the text or the data, and the context of the class interactions are vital aspects of effective and deep processing students should be "engaged" (active participants) in their learning. They should use discourse (Bahktin, 1981) practices that allow for exchange of ideas of how they learn, what they want to learn, what they learn and how to apply that learning. These settings allow students to digest (make meaning) information in their own language (Ulmer, 1999). This allows students to understand the information to the extent that they can apply it to new situations. In Critical Inquiry classrooms the students are utilizing these transactional skills needed to avoid the information overload.

Procedure and Activities
This presentation will describe the experiences of two groups (one from administrators enrolled in a graduate leadership course and the other from adult literacy educators enrolled in an adult literacy course). Both focus on generated discussions using concepts and methodology of critical inquiry. This presentation will also demonstrate how instructors of various types can diminish the DRIP concept by structuring the "context" of topics from data driven information using a transactional model of instruction (critical inquiry) emphasizing:
1. a short explanation of critical inquiry, transactional learning, and DRIP.
2. a small group discussion targeting specific questions with a text.
3. a whole group discussion of how to avoid DRIP and the value of critical inquiry and transactional learning.
 4. and a summary of the dialogues.

Conclusion

Our experiences show that when students use relevant information from various mediums to enhance their knowledge base they focus on the information that is relevant for learning at two levels, i.e., individual and shared learning. Students also screen information from the text and dialogue during the critical inquiry process needed for effective learning to take place. Relevant examples and lively discussions were generated and helped students understand the concept and terms associated with critical inquiry. The overload of information was diminished during the inquiry process because students were able to continually define and redefine terms, concepts and perspectives. The presenters will share outcomes of dialogues pertaining to (a). reader response interactions, (b) the DRIP syndrome and how it can be reduced or eliminated, (c) and the Transactional Theory of learning (reader, text, context connections), through inquiry based discussions.

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Professional Observation for Building Quality Teacher/Student Relationships

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Objectives:
- To identify the principle concepts of professional observation
- To consider new ways to empower motivation in the classroom
- To introduce the method of observation mapping for classroom behavioral data gathering
- To practice observation mapping within the session
- To give or receive descriptive feedback based upon observation maps: behavioral data

Audience
Faculty from all academic disciplines from liberal arts, science, and engineering to business are invited to attend.

Activities:
A Microsoft PowerPoint presentation will detail the elements of professional observation in the context of building developmental teacher/student relationships. The technique of observation mapping will be reviewed and representative maps presented to faculty participants. A small "inner task" team will be organized and an "outer process team" assigned as observers. The inner team conducts a brief task while the outer team observes using various observational maps. Student Team Consultants (STC) join the outer team to observe. The outer team faculty and STC provide descriptive feedback based upon the conceptual structures of their representative maps. A brief discussion concludes the session concerning the practicality and utilization of observation maps for back home classroom relationship applications.

Description:
WHY IS OBSERVATION SO IMPORTANT?
Observation is the process by which we gather the information we need to function. No matter how many skills we have developed, they are of little help if we do not have accurate

information by which to decide a course of action. Many problems, including relationship issues, are caused not by what we are unable to do, but because we do the wrong thing at the wrong time. We can overlook things, misinterpret the situation, or distort what we perceive. Many of these errors can be overcome by gaining more control over the process of observation.

The most important resource an organization has is valid information. [1]

An effective teacher needs to be highly involved with his student-clients and be sensitive to their concerns and aware of their performance. Classroom relationship dynamics often produce ambiguity and relationships on the fly. Teachers and students need to develop the data gathering skills to accurately perceive what's happening in a classroom's fast changing environment.

Problem Identification and Problem Solving
If a teacher or student makes poor observations or is unaware of what is going on, he/she will not recognize that a problem exists until it has had unintended consequences. In addition to early recognition of problems, it is necessary to understand the sources and causes of the problem. Ultimately, we hope to use the information from our observations to anticipate what might happen in the future. When dealing with problems, we need to be able to predict the likely outcomes of alternative solutions.

If one lacks well-developed observation skills, it will be difficult to take appropriate actions in the classroom setting because teachers or students may be basing their decisions on inaccurate or incomplete information. Also, they will find that the same problem keeps reappearing despite efforts to solve it, a common occurrence in the classroom.

Understanding and Influencing Others
One of the most critical and difficult roles of a teacher is to get people to work cooperatively and productively together. Relationships of engagement are crucial to learning. Sensitivity to students and understanding their concerns are extremely important (and students need similar sensitivity, of course). Interactions between people occur at two levels, verbal and nonverbal. Much of what is said is not meant, and much of what is meant is not said. It requires focused observation, determination and patience to understand others. The better we observe, the more we can be influential.

So, What's the Problem?
In our everyday observations in the classroom organization we are somewhat casual about what we observe. We need to focus our attention.

Observation is much neglected in our educational curricula and in professional training programs given only tangential attention. Most teachers (and students) are generally not well trained in observation and diagnosis or in applying conceptual knowledge to problems in their classroom organizations. A teacher and a student can increase his/her effectiveness by developing the observational skills essential to accurate problem identification and locating the appropriate behavioral concepts to help interpret observations and then take effective actions.

Recent scholarship is increasingly pointing to the importance of behavioral/interactional data and the skills of observation for individual, team and organizational problem identification and solving. [8] [2] [4] [3] [6] and many others emphasize the critical nature of observational data collection as the foundation for problem-solving and experiential learning within educational and other organizational environments.

THE PROCESS OF OBSERVATION

Our observations rest on the foundation of our perceptions. Perception is a natural and undisciplined process in which we are usually passive, i.e. noticing those things that attract our attention, rather than focusing and actively seeking information. Our emotional needs and deeply grooved habits and attitudes make us more receptive to, and aware of, certain events while ignoring others. The result is that our perceptions are not disciplined, but usually directed by forces below our awareness. Observation is the conscious process that we use to view and understand our world and the events around us. Professional observation is a skill that we can improve by the focused use of tools and skills to both see and understand – if we are willing to work at it.

Perception

Perception is not simply a matter of seeing and hearing what actually exists. It is an extremely subtle and complex process in which our own personalities, as well as numerous cultural and situational factors, cause us to see and hear a personalized version of "reality." To further complicate matters, even when we agree with others as to what we have seen, we will often give it a very different meaning. So students and teachers must use a great deal of care when dealing with problems and make no assumptions that others have the same perceptions of behaviors and events.

The assumption that what you see is what actually exists (reality) is a misperception. I saw it with my own eyes or I heard it myself are statements that we all use to suggest that something is true because we "saw" or "heard" it. What we perceive is not necessarily what happened. What claims our attention often says more about us than about the actual event.

Seeing is believing, but we also see what we believe.

The process of observation is basically a matter of asking questions about the world around us. Unfortunately our educational process teaches us to answer questions, not ask them. Gradually after many years of being taught we relate learning to what others teach us. Our own intrinsic curiosity withers on the vine. When we ask why, we ask others.

The curiosity we all start out with in life is too often dampened down by institutionalized learning. We become dependent on others to manage our "need to know." Numerous learning theorists have noted the unintended effects of pedagogy on our inborn curiosity. As Senge points out [8]:

"If the drive to learn is so strong, why is it so weak in our corporations? What happened to our 'intrinsic joy in learning,' as Dr. Deming puts it. The answer according to Deming, Hall, and

many educators lies, surprisingly, as much in the classroom as on the factory floor. "The forces of destruction begin with toddlers," says Deming, "a prize for the best Halloween costume, grades in school, gold starsand on up through the university."

"Performing versus learning: The young child in school quickly learns that the name of the game is not learning – it is performing. Mistakes are punished, correct answers rewarded. If you don't have the right answer, keep your mouth shut."

"If we had operated under that system as two-year olds, none of us would have ever learned to walk&If the conditioning toward performing for others rather than learning is so deeply established in schools, it may not be possible to reverse it on the job. If knowledge is always something somebody else has and I don't, then learning becomes embedded in deep instincts of self-protection not free experimentation."

"If the identification of boss with teacher, the authority figure who has the answers and is the arbiter of our performance is so firmly anchored, we may never be able to roll up our sleeves and all become learners together."

OBSERVATION: "PRACTICES and PRACTICALITIES"
Whether working in the classroom organization workplace or a business workplace, the skill set of observation can be utilized to gather behavioral data (a behavioral data base) to problem solve and learn. Here are a few sample guidelines for effectively practicing the skills of observation in the context of classrooms, teamwork and learning.

- CONCRETENESS: personal clarity and understanding of verbal and non-verbal behaviors
- DESCRIPTIVE: skill with perceiving, describing and recording non-judgmental observations (versus judgments and generalizations --- assigning "meaning" comes later)
- STRUCTURE in OBSERVATION: Observing can be an unstructured or structured activity. Unstructured observation starts with a blank sheet upon which you record random behavioral observations. Structured observation starts with a team issue, relevant theory and specific concepts you've decided to look for in a team. Observations are recorded within the various specific conceptual sections of the structured observation form (observation map).
- LOOKING FOR PATTERNS: Based upon theoretical constructs and specific conceptual categories try to group your behavioral observations into "patterns of" similarity. These patterns will begin to suggest the kinds of issues or problems that the team being studied faces: identifying issues, problems or opportunities for the team...
- CONCEPTUAL APPLICATIONS: Testing "fit" of concepts to behavioral patterns through repeated back and forth connections, linkings between specific concepts (specifics of relevant theory) and concrete observed data. Trying alternative concepts on for size and fit to the behavior and behavioral patterns observed.
- ANALYSIS OF DATA: Assigning multiple meanings to patterns, testing and reflecting on each meaning, back and forth review of concepts being used and considering the most accurate generalizations based upon the concrete data.
- EMERGING CONCLUSIONS: Reaching "tentative" conclusions about the team or individual members --- which need to be further "tested" in succeeding observations and future analyses

These basic guidelines and skill concepts provide an elementary process for practicing professional observation and developing our behavioral data base.

OBSERVATION MAPPING
In addition to the skill related knowledge, learning theory/concepts about verbal and non-verbal behavior, interpersonal relationships and teamwork will provide the "cognitive structures or maps" to observe and organize our perceptions in the interactive academic workplace. Topical observation maps focus our attention on key observation data that we require to grow quality teacher/student relationships within the classroom.

Observation is the beginning of a process by which we organize our perceptions and distill them into concepts, beliefs and values resulting in mental models that we use in responding to our experiences. Learning to effectively employ the skills of observation is fundamental to the development and growth of the relationships between teachers and students in higher education.

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Links for Learning: Strategies to Support Students' Activation of Prior Knowledge

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Objectives:
Reflect and share approaches for prior knowledge activation in individual content areas
Brainstorm strategies for prior knowledge activation
Engage in group activities illustrating prior knowledge activation strategies
Engage in critical thinking and problem-solving with colleagues
Apply concepts to own practices
Share reflections with colleagues

Audience:
Higher Education Faculty

Activities:
- Brainstorm and Think-Pair-Share about prior knowledge activation in own classrooms
- Engage prior knowledge activation activity
- Share thinking and learning processes with whole group
- Construct/identify a prior knowledge activation strategy that participants can use/have used successfully to support student learning

Description:
The Learner-Centered Psychological Principles: "Principle 3. Construction of Knowledge. The successful learner can link new information with existing knowledge in meaningful ways...Educators can assist learners in acquiring and integrating knowledge by a number of strategies... [constructing] "links between new information and experiences and their existing knowledge base...adding to, modifying, or reorganizing" (Learner-Centered Principles, http://www.apa.org/ed/lcp2/lcp14.html).

Students' prior knowledge can influence their learning in diverse ways. Prior knowledge includes perspectives, opinions, content, (e.g., Mayer, 2008) and affects both teachers (O'Donnell & Dansereau, 2000) and learners (e.g., Bransford, 1979; Murphy & Alexander, 2002; Winne & Jamieson-Noel, 2001). Furthermore, prior knowledge can affect learners' monitoring as well as their other self-regulating behaviors and is an essential factor in the learning process (Winne & Jamieson-Noel, 2001). Instructors should keep in mind that it is important for learners to construct "multiple representations of knowledge" (Spiro, Coulson, Feltovich, & Anderson, 1988, p. 378), especially in ill-structured domains where the learners' task is concept assembly, not rote memory.

Instructors should be reflective about their approaches to facilitate students' activation of prior knowledge: information students should learn, amount and quality of students' prior knowledge, learning goals, desired cognitive processes, transfer contexts, and instructional strategies (e.g., Murphy & Alexander, 2002; O'Donnell & Dansereau, 2000; Winne & Jamieson-Noel, 2001). Prior knowledge activation strategies include summarization (e.g., Mayer, 2000); knowledge/concept mapping; graphic organizers; text organization (e.g., Meyer, Young, & Bartlett, 1989); responding to critical thinking questions (e.g., Pressley et al., 1992); constructing topic questions; working individually or collaboratively. Essentially, effective strategies to encourage activation of students' prior knowledge should reflect the 21st Century shift from the ability "to remember and repeat information...[to being able] to find it and use it" (Bransford, Brown, & Cocking, 2000, p. 5).

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Using Rubrics to Provide Constructive Feedback in PBL

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Objective:
To develop a systematic, at the same time "fit for purpose" rubric that will enable tutors to provide constructive feedback while evaluating students' performance.

Method: The template/ basic grid was taken from web based rubrics, which are tools to help any teacher who wants to use and generate rubrics. Ideas from literature helped feeding inputs to the rubric. It was improved upon and developed by discussions and personal interviews with faculty experienced in PBL.

Result: A 4-level feedback rubric having 10 performance objects with descriptors, 5 each for the two sessions of PBL was developed. So the total points possible will be 4 x 10=40 points. Strengths and weaknesses of the student can be examined.

Discussion:
Helping learners gain the most from Problem-Based Learning and bringing out their very best , is the role of the tutor in a PBL. The tutor can accomplish this by giving practical, constructive feedback. Giving feedback is not an easy task. Although many tutors may intuitively possess these skills, many times tutors need guidelines on this. A rubric will simply list a set of criteria to be accomplished and can be used as a guide to improve performance. It can, not only be designed to formulate standards for levels of accomplishment, but can be used to make these standards clear and explicit to students.

1. The use of rubrics can be most important when the students are novices with respect to a particular task or type of expression (Bresciani et al., 2004), as in this case, they are new to the PBL process.
2. Rubrics seem to have the potential of promoting learning and/or improve instruction. The main reason for this potential lies in the fact that rubrics make expectations and criteria explicit, which also facilitates feedback and self-assessment (Jonsson & Svingby, 2007).
3. The rubric can be made more powerful when both tutors and students get involved in developing the rubric being used. By their very nature, rubrics encourage reflective practice on the part of both students and teachers (Allen and Tanner, 2006).

Conclusion:
The rubric enables tutors to give timely and constructive feedback and thus improve student learning with each session. The rubric also bridges communication gap between the tutor and learner. The rubric can be made more powerful when both tutors and students get involved in

developing the rubric being used. Rubrics help making learning goals and evaluation criteria explicit for both teachers and learners.

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The transformative potential of drama in higher education.

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Objectives:
Participants in my presentation will develop strategies for using educational drama that assist learning through drama while retaining the aesthetic integrity of the drama experience.

Audience:
This presentation describes the use of educational drama to transform student teachers' understanding of the role of the teacher and therefore would be of interest to faculty involved in teacher education. This presentation would also be suitable to those interested in using drama as a pedagogical approach in a tertiary setting and those interested in innovative strategies transformative learning.

Activities:
In this presentation I shall provide an explanation of how educational drama can be used to transform student teachers understanding of the role of the teacher. Participants will be given a practical experience in how to use range drama conventions to both assist learning through drama while maintaining the aesthetic value of the drama performance itself.

Description:
In reflecting on my experience of working in a teacher education institution using educational drama as a teaching tool I have been able to clarify my understanding of how the aesthetic quality of the drama work produced directly determines the quality of the learning process. Like Bolton (1984), who suggested that learning occurs when habits of perception and conception are broken, I also have been able to observe how the student teachers were able to challenge the common perception of the teacher as someone who transmits information to learners and instead came to countenance the dehumanizing effect such a view of the "teacher as communicator" can have on children. In transforming this perception of the teacher's role as a communicator, student teachers were better able to grasp Wells' (1986) appeal that in communicating with children it is the responsibility of teachers to "foster and enrich their meaning making" (p.49). However no such learning occurred in some classes as the lack of attention I paid to the aesthetic quality. While paying attention to the aesthetic quality of the work described above increased the transformational potential of the drama it was never my intention for the drama experience to lead student teachers to a definitive understanding of the role of the teacher. In expecting change to occur in participants' perception of the role of the teacher as communicator at no time did I have a fixed arrival point for new understandings in mind. Rather I saw the dramatic process as one that intended to produce change but not a predetermined change. Neelands (2004) has suggested that preconditions for transformation through drama is both a belief that drama will lead to change but an acceptance that this change is not predetermined but rather fluid, continuous and grounded in the notion of becoming rather than arrival.

Jonathon Neelands has challenged drama educators to cease waving the parochial flag of drama in education and avoid claims of drama being a natural conduit to transformative learning. Rather he has argued those interested in the transformative potential of drama need to make explicit the preconditions they have found necessary for transformative learning to become a distinct possibility. In this presentation I will attempt to provide some insights into how my use of drama as a teacher educator has resulted in transformational learning and in doing so made explicit preconditions required for such learning to occur.

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Complementing the lower-level with the higher-level:
Exploring with an integrative assessment model through a dialogic-based pedagogy

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A developing literature describes the effective use of student response systems ("clickers") in large lecture-based classrooms where student interaction is a challenge to enculturate. In this pilot-study, however, we integrate clickers into a small dynamic classroom (n = 12) where student-student interaction and regular writing processes are key pedagogical focuses. To gather evidence of information-based, lower-level thinking, multiple choice and true false items were presented with "clicker slides." In complement, students' higher-level thinking was assessed through inter-rater interpretations based on reading students' in-class critical essays. With other course writing activities and in-class discussions, formative and summative data were collected creating a balanced picture of students' learning. By using multiple forms of evidence, we better understand the struggles and successes of different learning paths.

Proposal:
This poster session will describe an exploratory assessment model that complements lower-level and higher-level thinking in one dialogic-based university course. Examples of clicker slides, writing activities (including assignments and student work), assessment processes (clickers, rubrics, "written dialogue") and discussion of different student's learning possibilities will be discussed throughout the session.

Raising Linguistic Proficiency through Creative Curriculum
for the Learner-Centered Classroom

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Objectives:
The poster session seeks to:
Introduce the lesson planning matrix to language educators;
Promote awareness of the key elements of curriculum design, Blooms Taxonomy, and Gardners Multiple Intelligence (MI) theory;
Present the principles of task design using the framework of the lesson planning matrix

Audience:
Language instructors in higher education

Activities:
The poster itself will display the Lesson Planning Matrix, the goals, the plan for a 4-week unit on current environmental issues, and an overview of the various learning activities that address different learner profiles. Audience will participate in an engaging discussion on the effectiveness and practicability of the application of the Matrix. Presenter and audience will share their own teaching and learning experiences in the attempt to expand the horizon of using the Lesson Planning Matrix.

Description:
The Lesson Planning Matrix, which incorporates the revised Bloom's Taxonomy and Gardner's Multiple Intelligence (MI) theory, assists teachers in planning lessons that not only appeal to different learning styles but also help students stretch their intellectual capacity (Armstrong, 1995; Christison, 1996). Bloom's taxonomy introduces different levels of cognitive thinking skills, with which different types of learning outcomes are produced. Lesson plans created based on the Matrix also help learners master grammatical features and broaden vocabulary through the completion of richly contextualized learning tasks (Ellis, 2003).

In addition, the detailed classification presented in Bloom's taxonomy helps teachers clearly identify their teaching objectives. With clear objectives in mind, teachers are encouraged to apply Gardner's MI theory in their daily teaching practice. As each student possesses several different types of MIs, learning activities designed to build on the strengths of individuals' mental functionality help learners build confidence and succeed in language learning.

Learning tasks designed based on the MI-Bloom Matrix help maximize the opportunities for learners to communicate in the form of collaborative dialogue and sustained negotiation (Musumeci, 1996; Pica, 1987). A high level of fluency and precision is promoted as learners perform intellectual-verbal exchange through well-structured arguments and elaborations.

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All Tests Are Not Created Equal:
Improving Exams and Tests through Universal Design

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Purpose:
The purpose of this session is to improve the format of tests and exams in order to remove barriers to students' performance on tests and more accurately measure student learning outcomes. Tests, exams, quizzes, and the like are intended to measure a student's knowledge of course material and his or her ability to apply it. Test results should also provide some measure of feedback to a professor about instructional quality and the degree to which learning objectives are being met.   Poor performance due to test format and other non-content related problems can negatively affect students' academic careers. Instructors may not be getting an accurate picture of what students actually learn.   Even professor ratings can be negatively impacted by administering poorly designed tests. Also, today's college student population is wonderfully diverse. This enriches the educational climate and enables more students to have access to the classroom. At the same time, increased diversity requires that instructors design curriculum, methods, and tools with regard to a wide range of learners. Created by a multi-disciplinary faculty study group, this interactive session originated as a workshop for faculty and teaching assistants at a large institution. The session has been presented multiple times, therefore the style material is known to be effective and can fit in a 50 minute format.   In the next two sections, please find the background and relevant literature, an outline of the interactive session format, and a list of references.

Background & Literature:
Tests and quizzes are the most frequently used means for assessing academic performance. Tests are "one of the most powerful methods teachers use to communicate with and about students" (Haladyna, 1999). As such, they represent high stakes, high anxiety events because small performance problems on a single exam can translate into major issues relative to the final grade for a course. Performance problems arise for any number of reasons unrelated to the

instructor, e.g., poor attendance, limited time spent studying, illness, etc., but they are also a function of something completely within the purview of faculty: test construction and test administration. Haladyna (1999) recommended that test construction pay strict attention to validity and reliability. Yet, many tests do not accomplish this; failing for lack of relevance, ambiguity, bias, confusing arrangement of tasks, unclear directions, and improper administration (Gronlund, 1998). A test can be as much about measuring a student's ability to negotiate the test as it is about assessing a student's mastery of the subject matter. The situation can be more difficult for nontraditional students and students with disabilities

Universal Design in Instruction (UDI) is defined as any preventative or pro-active measure that improves instruction for all learners, and reduces the need to provide specific accommodations for students with disabilities (Ketterlin-Geller & Johnstone, 2006; McGuire & Scott, 2006). Universal Design originated in the fields of architecture and communications. We are familiar with power doors, curb cuts, and closed captioning. The majority of people who benefit from these accommodations do not have disabilities. But because they are available, life becomes more accessible for most, and less effortful and less stigmatizing for people with disabilities. UDI is an extension of fundamental universal design principles into the educational arena.   UDI is organized around seven principles that address equitable use, flexible use, simple and intuitive design, perceptible information, tolerance for error, low physical effort, size and space appropriateness. Examinations are part of instructional methods and ideally, should be designed and constructed according to the principles of UDI.

Extended time and other accommodations related to testing are the most frequently requested and the most frequently granted of all accommodations. In addition, it came to our (the UDI faculty study group's) attention that many current tests that students were taking were poorly designed. Tests were difficult to read, navigate, and understand – which can result in error and incorrect answers. Our goal was to enhance the educational prospects for all students and, by doing so, to accommodate the needs of students of diverse learners by using the principles of universal design as a practical framework.

The Session:

This session's target audience is teaching faculty who write and/or administer assessments in the form of tests, quizzes, and exams. We will examines samples from sociology, engineering, urban affairs, and chemistry.   Test formants include multiple choice, short answer, work-out problems, matching, and essays.   Examples are real-life, high stakes tests. We will discuss disability issues such as low vision, dyslexia, and anxiety and the larger context of diverse learners including international students, minorities, and other non-traditional students. Instructors will weigh the "costs and benefits of adopting changes to their current assessment tools" (Haladyna, 1999). Therefore, the focus is on the benefit to all students in a class, as well as the impact on students' perceptions and ratings of professors.

Experiential learning is an effective and engaging instructional method: This session will follow a hands-on workshop format. It begins with a "pop quiz" that is designed to be confusing, confounding, and frustrating- even though the questions are easy. The purpose of the quiz is to enable participants to relate to situations that test takers face.   Attendees will be able to define basic universal design principles and identify examples such as power doors and closed

captioning. The session transitions to UDI principles and participants identify classroom applications. Four UDI principles are described in more detail: simple and intuitive design, perceptible information, tolerance for error, and low physical effort. Participants will critique poorly and well-designed tests by using the four principles. Depending on the size of the audience, this can be done as a whole, or the audience can be divided into small groups to discuss the tests, related UDI principles, and application to individual courses. Finally, the attendees will follow the link between learning objectives and assessment design. Handouts and references will be provided.

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**Technology or Technique: Changing Faculty Perceptions
about Technological Integration and Online Education**

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Summary:
The Center for Teaching and Learning at Cedarville University has been in existence since July 2006. This Center has a four-fold responsibility: 1) support the professional development of the schools 250+ full-time, part-time and adjunct faculty in areas related to educational technology and the scholarship of teaching and learning. 2) assist faculty in integrating educational technology into current or new courses and consult with faculty on innovative instructional design solutions. 3) plan, recruit professors for, design and develop all online and hybrid courses offered by the university. 4) develop and maintain the academic Assessment Plan for the university. Our stated mission is to "enhance the effectiveness and excellence of the teaching environment at Cedarville University by collaborating with faculty to build innovative, traditional and e-learning instructional solutions and by providing compelling, worthwhile faculty professional development opportunities." In the two and a half years of our existence, we have received astounding support from school administration and have witnessed outstanding participation from faculty in the services we offer.

Two of the areas we support have seen especially strong growth: integrating educational technology into existing or new traditional courses and designing/building both online and hybrid courses. Since 2006, faculty members from each of the 13 departments on campus have employed our services to help them integrate technology at a variety of levels from Chemistry to Music Ed to Intercultural Communication. Most of this work has come in as a result of one-on-one consulting opportunities, but we are also seeing encouraging involvement in our Extreme Course Makeover program. Since the middle of 2007, when the Center inherited overall responsibility for the university's online course offerings, we have seen an increase in the number of courses offered and number of hours sold. In fact, Spring Semester 2009 was the first time we sold more online hours during the school year than during the previous summer.

What is behind this steady growth of interest in educational technology and online education? Cedarville has always had a strong technological environment, but you could typically count on the same early, "often adopters" employing the technology over the years. Why the expansion into previously untouched portions of our academic landscape? Our initial investigation and reflection on this phenomenon revealed an interesting answer. More faculty are getting involved in our technological offerings because of our instructional design technique and consultative practice, not because the technology itself is so compelling. The faculty we work with on educational technology projects find three key advantages:
1. The process we use to design and develop successful, innovative technology solutions allows the faculty to focus on their expertise area instead of the technology.

2. Our instructional approach causes faculty to ask questions about their course that they have not asked before.
3. Our technological implementation consistently enhances student learning outcomes in their courses.

This presentation will discuss this notion of technique over technology and will reveal key insights into our process and projects.

Tools for Synchronous Collaboration
in a Problem-Based Learning Mathematics Specialist Program

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Objectives:
 At the conclusion of this session participants will be able to:
1. List common technologies used to communicate mathematical expressions on the Internet.
2. Describe how common technologies for communicating mathematical expressions on the Internet inhibit synchronous collaboration involving mathematical content.
3. Define Problem-Based Learning
4. Explain why Problem-Based Learning is appropriate for students in a math specialist program
5. Identify software and hardware tools that can be used to support synchronous problem-based learning activities, which involve specialized symbols (e.g. mathematical expressions).

Audience:
The session will be grounded in the context of a graduate-level course for math educators, which incorporates problem-based learning. Faculty members from institutions of higher education, instructional developers, and instructional designers should find the session useful. Additionally, anyone involved in situations where communicating and collaborating with specialized symbols is required will find the description of the tools used helpful.

Activities:
There are several options for authoring Internet content containing mathematical expressions (Hodges, 2008; Majewski, 1999; Siegrist, 2006; Zhi-Feng, Liu, Yuan, & Lo, 2004). Unfortunately, the most often used of these methods inhibits online collaboration and synchronous communication (Hodges, 2008). Common methods for communicating mathematical expressions on the Internet will be demonstrated. Examples of the shortcomings of these methods for real-time collaboration will be provided. A brief discussion of the methods, their shortcomings, and additional methods possibly offered by the attendees will be facilitated.

A recent example of how instructors and students have experienced the problems of communicating mathematical concepts first hand will be described. The example is a statewide, graduate-level math specialists program in the southeastern United States designed using problem-based learning.

Background:
Problem-based learning (PBL) is a fairly modern approach to instruction that helps students in developing both independent and collaborative thinking skills vital to problem solving while examining their metacognitive abilities. This approach was first developed, over 30 years ago, as a general model for instruction of students in the medical field, to replace traditional approaches, such as lecture (Savery, 2006; Savery & Duffy, 1995; Savin-Baden & Major, 2004; Torp & Sage, 1998). In such cases, students attend to a situation in which a real problem is presented and collaborate to "seek out a variety of resources, technological and otherwise, to help them arrive at possible solutions" (Driscoll, 2005, p. 405). After intense growth in medical education, other disciplines, such as schools of law, business, and education began adopting the model in their own approaches to learning (Savery, 2006; Savery & Duffy, 1995; Torp & Sage, 1998). As with any approach to learning, there are many perspectives and perceptions of the role of PBL in instruction and a concrete, standard definition is difficult to avow. In the next section, several of these perspectives are presented and synthesized to establish a definition within the context of this presentation.

Defining problem-based learning:
Barrows (2002) more conclusively defines PBL as a "distinct educational method aimed at giving the learner effective skills in problem solving, self-directed learning as a life-time habit and team work, all while acquiring an integrated body of knowledge from many different subject areas or disciplines" (p. 119).

Savery (2006) offers a brief synthesis of several researchers' uses and methods of PBL. Through this synthesis, he outlines these key components to creating a true PBL environment:
1. instruction must be learner-centered; learners take on responsibility for their own learning,
2. problems must be messy and ill-structured; this models problems in the real-world that are often hard to define and the goal is often unknown,
3. a tutor/mentor must be present to facilitate learning; generally the teacher fills this role and is available to help with metacognitive components, questioning strategies, etc. and not to provide information or resources, and
4. the experience should end with a debriefing and evaluation of the problem, learners and solutions; this helps learners process the experience and come to understand what they have learned.

Thus, the problem-based instructional design of courses in the math specialist program requires a high degree of interaction and collaboration among students and faculty, where the emphasis of discussion is on problem solving and the processes involved. Until recently, students in this program who were participating via television video conferencing facilities, had difficulty identifying specific elements of discussions on which to focus questions. Frustration was a common result. Technology tools and Internet access have now reached a point in functionality and affordability where these frustrations can be alleviated. The tools used, digital tablet input devices and shared online whiteboards, will be demonstrated.

It is expected that this session will be conducted as a discussion where the problem-based learning design of the course as well as the hardware and software tools will be the focus.

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Formative assessment: Improved achievement in large lectures of general chemistry

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Objectives:

Our work has applied formative assessment as a pedagogical strategy in general chemistry to achieve the following:

- To advance the knowledge base in chemistry, and retention in field
- To determine the instructional and assessment practices that improve learning
- To help define risk factors for students in general chemistry so that appropriate interventions can be applied

Theoretical Framework:
Assessment is used by most instructors to validate that learning has, or has not, occurred, and serves as the basis for the assignment of grades. This type of assessment is summative as it occurs at the end point of the teaching-learning sequence. Assessment is formative when the evidence is used as an on-going process within the class to adapt the teaching to meet student needs (Black & William, 1998). Therefore, formative assessment informs not only the instructor but also the student. Students learn to self-assess their abilities and weaknesses and can guide their study habits. Formative assessment is completely consistent with a constructivist-learning model, since both teacher and student are involved in co-constructing not only knowledge, but also the assessment of this knowledge.

There is a body of evidence indicating that formative assessment is an essential component of classroom work and that its development can raise standards of achievement (Peat & Franklin, 2002). In contrast to the more traditional, institutionalized, teacher-centered form of classroom discourse (teacher questioning/students responding/teacher evaluating), "the main theoretical analysis quoted by those writing about formative work is that of Sadler who argued that formative assessment should equip learners with the essential tools for managing their own learning. Students who participate in formative assessment have a clear view of their learning goals and an understanding of their present state of learning so that they can understand the nature and extent of the gap that has to be crossed" (Black, 2000).

The research base on formative assessment and the efforts to demonstrate its effectiveness in improving teaching and learning have focused primarily on K-12 classrooms, and the professional development of in-service teachers. For example, qualitative studies (Ash & Levitt, 2002; Athanases & Achenstein, 2003) found that mentors were able to help the in-service teachers and pre-service teachers implement formative assessment practices during their practicum courses. However, very few efforts have been directed toward researching the impact of formative assessment in the university classroom.

Yorke (2003) suggests that formative assessment that should be adapted to the STEM content classes, and reinforced in pedagogy assessment classes. In this model:

- The assessor/instructor constructs a formal assessment task based on the learners current state of readiness and prior learning.
- The learner responds to the assessment task according to his or her level of knowledge and perception of the learning situation.
- The learners performance is assessed or interpreted by the assessor against the specified criteria, and feedback is given.
- Dialogue between the learner and the assessor begins.
- Depending on the dialogue, the assessor/instructor adjusts teaching or proceeds to the next learning objective.

- Depending on dialogue with instructor, the learner adjusts learning style or proceeds with current style.

According to Yorke, how the student interprets the assessment, together with his or her level of engagement and interest, are key influences on learning (Yorke, 2003). Formative measures, with their very individualistic emphases, provide the needed course corrections in both teaching and learning. Wiliam and Black (2003) argue that formative assessment is the only way for which such a strong prima facie case can be made for raising the standards. This is particularly important since research has demonstrated that low achieving students make significant gains when formative assessment techniques were used (Athanases & Achenstein, 2003; Fuchs, Fuchs, Hamlett, Katzaroff, & Dutka, 1997).

Methods:
General chemistry in large universities is generally taught in lecture sizes exceeding 200 students. In our project a single instructor was assigned to two such sections. One section was designated as the formative assessment section, FA, the other section was designated as the control, non-FA. The course was organized with the BLACKBOARD facility. All lecture materials, assignments, quizzes, and review materials were equally accessible to both classes. Independent classroom observations affirmed that the coverage of the material was identical in each section. Each section had three identical in-class tests given on the same day and a common final.

However, for the FA section, the content was divided into three sections for each testing unit. A confidence assessment was given for each subsection. This assessment asked students to grade their level of confidence on each major topic of the section. Following the confidence assessment each student in the FA section was given a 15-20 item pre-test on the same material. This allowed the instructor and the students to see how well their confidence level correlated to their performance. Students in the FA section were given weekly quizzes repeating some of the questions from the pre-test. The quizzes were always given on the last lecture day of the week and immediately review by the instructor. The quizzes included 5-8 multiple choice items and one problem based free response question. The first day of the following week, the instructor went over commonly missed items and discussed the points of confusion with the students collectively. In the non-FA section, no such assessments were given. The exact same content was covered. Three tests were given. The time devoted to the varied assessments in the FA section was "compiled" and used as additional review time for the examinations in the non-FA section. To avoid contamination of instructional practice in the two sections, the non-FA section was always one full lecture ahead of the FA section.

Data:
The data collected included the scores on the various assessments in the classes. In addition, university records provided the academic profiles of students for the new freshman students in each of the general chemistry sections. Classroom observations were made to evaluate consistency in the lecture material delivery. The FA section and non-FA had 161 students and 151 students enrolled in their respective cohorts. Student attitudes toward the course were collected with a university teaching/course evaluation instrument.

Results:

Students in the FA section outperformed their non-FA cohort. A comparison of the academic profiles of the FA and non-FA groups and their final course grade displayed a small effect size for the final grade, ~0.02 due to the large overlap in the population data. However, 50% of the students in the FA section earned a grade of A or B, while 39% of students in the non-FA section earned A or B grades. 34% of students in the non-FA section failed with 28% of students in the FA section failed.

According to the inferential analyses for the components of comparison between FA and non-FA cohorts, the only significant difference between the two populations is the final grade performance of the students in the FA section. Differences in the Math SAT are not statistically different.

In spite of poorer performance on the mathematics component of the SAT and correspondingly the SAT total, no significant difference is observed in the course grade, between genders. The correlation between admission data and course grade suggests that the most significant predictors are the SAT Math, SAT Total and the high school GPA. The predictors are stronger for the FA section compared with the non-FA section.

A full scale multiple regression was performed to control for all variations in the academic profiles of the student populations. The results for the total group suggest that the SAT Math and High School GPA are the strongest predictors for performance in the total group, but are much stronger predictors in the FA section compared with the non-FA section. However the SAT Math is a stronger predictor for males while High School GPA is the strongest predictor for females.

Students in the classes reported different attitudes toward and benefits from the course instruction formats. Students in the FA section responded more positively to the course material and continued learning in chemistry than students in the non-FA section.

Educational Importance of Study:

The results from this study suggest that using FA as a pedagogy at the university level encourages students to perform closer to their academic potential. In addition, analysis of the predictor data is supplying information for risk assessment. Institutional change has already occurred in response to the mathematics indicator. Students with significant math risk evidenced by their SAT score in mathematics and a math placement test are now encouraged to enroll in a preparatory chemistry class. A fully, validated risk predictor is being developed using the data provided from the FA section. Once the risks are identified, university services will be offered to students to encourage higher performance. Data will be collected to determine how successful the interventions are in encouraging students to out-perform their risk.

Making a large-classroom learner-centered though the adaptation of existing case studies

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Presentation Objectives:
1. Provide briefly our personal justifications for constructing a learner-centered classroom, regardless of the class size or classroom layout.
2. Engage attendees in a brief case-study example that exemplifies how specific content-driven learning objectives can be accomplished in a large classroom using adapted case studies that are freely available to instructors.
3. Respond to questions from attendees about the how toaspects of utilizing case studies in a large classroom, from delivery through assessment.

Audience:
University, College, and High-School Instructors and Professors in all disciplines

Description of Activities:

Many instructors are unclear about how to actually incorporate case-studies and active-learning into a large class setting which typically takes place in a traditional lecture-hall style classroom. One of the presenters, Karpanty, has been successful in incorporating case studies into such a class, titled "Principles of Fisheries and Wildlife Management," which typically has >150 students/semester from not only the Virginia Tech College of Natural Resources, but also university-wide as it fulfills a liberal studies requirement in global perspectives. The other presenters, Murphy and Villamagna, have successfully incorporated case-studies and inquiry-based teaching into their upper-level fisheries and wildlife sciences courses (Fisheries Management, 25 students/semester and Conservation Biology, 50 students/semester, respectively).

In this practice session, each presenter will briefly share 1) the greatest fear that they overcame when switching from a lecture-style to an active-learning classroom, and 2) their best example of why the switch has been successful and worthwhile (10 minutes). Karpanty will then engage attendees in an example which will include the learning objective, in-class activity, and in-class assessment of a piece of a typical case study that she incorporates into her course at Virginia Tech (25 minutes). Finally, all three presenters will field questions from the attendees about the "how to's" of case-based teaching and active-learning (15 minutes).

Our goal is to introduce attendees to the rationale behind active-learning strategies and specific ways that the switch from teacher-centered to learner-centered classrooms can be made, regardless of their size. In true active-learning style, we hope that by engaging attendees in a real example of case study material, from learning objective through assessment, that they will see how such a transition can be made in large and small science classes.

Literature Review

Students entering college have predominately been trained to be passive learners as their high school curriculum is prescribed according to the standards of learning and is rarely flexible. In many cases, students do not encounter a shift away from this passive-learning style in the classroom; an examination of current natural resources and other science curricula at Virginia Tech and other large universities reveals a heavy reliance on instructor-centered teaching wherein students absorb content-driven material from lectures and are assessed as to their ability to memorize that material on multiple choice exams. However, there is strong evidence now available that instructor-centered teaching actually stifles true learning and development of critical thinking skills (AACU 2002, Barr & Tagg 1995, Bieron & Dinan 2002, NRC 1999). Moving away from this traditional instructor-centered learning environment and towards a student-centered, active-learning classroom has been demonstrated to stimulate students while simultaneously demanding that they function at higher levels of Blooms Taxonomy such as analysis, evaluation, and creation (Bloom 1956, Krathwohl 2002); these higher levels of learning are rarely accomplished in traditional lecture-style classes (Grossman 1994, Klebba 2007).

Active-learning, defined as the process by which students discover, process, and apply information (McKinney 2008), is based on two underlying assumptions: 1) true learning is a social process (Springer et al. 1999) and 2) people learn differently. In the classroom, active learning may involve some or all of the following: listening, talking with others, reading, writing, and reflecting (Meyers & Jones 1993). Why should an instructor be motivated to create a more active-learning environment in their classroom? First, research has found greater learning gains among students engaged in active learning than in traditional lecture courses (Springer et al. 1999). Second, graduates from traditional instructor-centered programs appear to be unable or unwilling to apply what they have learned to solve problems (Blumberg 2009).

How might an instructor make the transition to an active-learning environment, acknowledging that the transition becomes more difficult as the class size increases? There are several methods that can be employed in a learner-centered classroom to create an active-learning environment: case studies, student-driven courses, and inquiry-based learning. In this practice session, we will focus on case-studies; however the presenters have experience in all three formats and can

answer questions about them in the discussion section of this practice session. Case studies are problem-based stories that have an underlying educational goal. Case studies require students to use prior knowledge (gained either inside or outside of the classroom), constructive thinking, problem-solving and decision-making skills to solve the presented problem (Wilson 1987, Herreid 1997).

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Putting the "Ped" in Pedagogy: Talking Teaching While You Walk

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Presentation objective:
To introduce audience members to "Putting the 'Ped' in Pedagogy," a novel, no-cost program that I developed for my university and that other colleges might want to replicate as a means of encouraging faculty to engage in discussions about teaching and learning.

Audience: The proposed program would be most appropriate for directors of university teaching and learning centers, as well as other faculty developers.

Summary:
At many universities, teaching workshops are conducted over lunch, with sedentary participants. The program, "Putting the 'Ped' in Pedagogy," seeks to break free of that model by offering a healthier and more active alternative. The program asks, instead of trading teaching tips over lunch, why not talk teaching while you walk? The idea is to pair interested faculty members who commit to walking once a week while discussing teaching topics provided by their university's Center for Teaching and Learning. An interactive session will brainstorm ways to promote such a program on your campus in addition to developing discussion- starter topics that can be supplied to walkers.

Activities for session attendees:
1. Brainstorm ways that session attendees can promote such a program on their campuses and motivate participation among their faculty. Ideas could include publicity efforts, incentives, etc.
2. Brainstorm two- to three-sentence "teaching topics"/"discussion starters" that faculty developers can supply to walkers.
3. Debate the merits of different ways of pairing walkers (Should you pair faculty of similar or disparate disciplines? Should you pair experienced faculty with new hires in a mentoring relationship, or use the program as a way for new hires -- with similar "rookie" experiences -- to bond, etc.?)
Other description/details about the session:
In the course of brainstorming the ideas mentioned above, I would also share with attendees some of the promotional and motivational tactics that I have used on my own campus, as well as the 20-plus "teaching topics" that I have identified for use as discussion starters.
Also, I would emphasize the flexibility of the program: participants choose when to walk and where to walk (indoor track, around campus, around town). Participants also choose the frequency, length, and pace of walks, making this a program in which virtually anyone can participate. Also, faculty could walk in groups of three or four, if they prefer.
References: Because I have created this program on my own, it does not directly model itself on any literature with which I'm familiar. However, the idea of collaborative faculty development has certainly been articulated in a myriad of ways, by various scholars. To that extent, my

impetus for having faculty share their perspectives and experiences with each other is influenced by pedagogical literature on topics such as faculty peer mentoring (e.g., Gaye Luna and Deborah Cullen); faculty learning communities (e.g., Milton Cox and Laurie Richlin); and faculty collaboration (e.g., Ann Austin and Roger Baldwin). As for the teaching topics/tips that walkers could use as discussion starters, that material can draw on the entire catalog of pedagogical scholarship; thus, listing references for a multitude of teaching topics would be impractical in this proposal -- though indeed possible/appropriate as part of the actual conference presentation.

What College Teachers Say about Good Faculty Development Programs:
Insights from a Technology Training Initiative

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Background:
The e-Teaching and e-Learning Initiative (ETLI) at West Chester University (WCU) of Pennsylvania was developed in 2002 to help faculty across the five colleges within the university increase their use of technology in their courses to improve student learning. This was accomplished at a week-long training between the Fall and Spring semesters in 2003 called the Academy during which faculty participated in knowledge and skill building activities. These activities were led by experts from within and outside the university and focused on leading edge technologies as well as concept building and best teaching strategies and practices. Participants received a laptop computer and a $300 stipend as incentives for participating in the training. They also received one-on-one assistance with incorporating technology into a course they would be teaching the following semester. Academy training was supplemented over ensuing semesters with mentoring, turn-key training, and ongoing technical support. Fifty-five faculty members from the five colleges applied and twenty-three were selected to participate in the project.

Literature Foundation:
The ETLI was designed to incorporate many factors found to be important for effective faculty professional development:
- The training was founded on an understanding of adult learning theory which emphasizes the importance of allowing participants to make choices from a rich and varied menu of learning experiences and possibilities and to take personal responsibility for planning, acting, and growing (Kirkpatrick, date not available).   Lawler and King (cited in Brancato, 2003) stress the importance of treating faculty as adult learners and employing adult learning strategies to foster their development.

- Educators need to engage in professional development activities that will not only promote their professional and personal growth, but also improve their teaching and their students' learning (Brancato, 2003). Traditionally in technology education, the knowledge of technology was separated conceptually from content and pedagogy (Mishra and Koehler, 2006). Mishra and Koehler direct attention to the importance of showing faculty the connections among pedagogy, content, and technology. Content and pedagogy should drive technology and not vice versa. Otero, Peressini, Meymaris, Ford, Garvin, Harlow, Reidel, Waite and Mears (2005) also highlight the importance of university faculty being not only proficient at technology use, but also they "must come to understand content-specific, pedagogical uses of technology in their own instruction." The ETLI was based on helping faculty incorporate technology into their content and teaching methods to improve student learning. The links between the technology and best teaching practices were emphasized during the Academy training. Faculty learned how to use technology to meet the learning objectives for their selected course. To increase the scope of the training and to make the training more customized and responsive to the content and pedagogical needs of specific disciplines, five faculty members, one from each of the colleges, were assigned as mentors and conducted a minimum of three workshops within their college to train other interested faculty.
- The research on effective technology training stresses the need for sufficient time to learn and opportunities to practice newly acquired technology skills in a risk-free atmosphere that promotes the sharing of ideas and the allowance of mistakes (Brown, Benson, and Uhde, 2004). The importance of establishing learning cultures with "just-in-time" support directed at individual need and providing incentives that recognize participants' effort and the value of technology learning in improving teaching and student performance are also essential components for effective faculty technology development (McKenzie, 1998; Rhodes & Govela, 2002). Lisowski, Lisowski and Nicolia (2006) found that a "what-we-need, when-we-need-it" training component was the most successful aspect of their faculty development project. The ETLI participants received a $300 stipend and a new laptop computer as an incentive to participate in the training. They were given the time to develop their skills during the Academy and at workshops provided during subsequent semesters. Faculty used technology in at least one course during the semester following the initial training. During the Academy they were given time and assistance to develop a course action plan. While they implemented technology in their course, they could share their experiences freely with mentors and through the online interactive website. A graduate assistant trained in technology was assigned to each college to provide as-needed, ongoing, technical support throughout the semester.
- According to Brancato (2003), the ultimate goal of any faculty development program is to keep faculty "vital, productive, and working together as a community of learners." MacDonald (2001) reported that the teaching community approach has resulted in remarkable changes in university faculty teaching skills, motivation, and enthusiasm. The ETLI developed a campus-wide community of learners through collaborative activities during the initial training and through turn-key workshops, mentoring, and the ETLI website that were made available as faculty used their skills within their courses. This community of learners has expanded beyond the WCU campus through faculty presentations and publications.

- A community of learners and a train-the-trainers approach to sharing technology skills are not only important for developing technology proficiency and usage, but are also essential in sustaining this technology learning and application (Zieger & Pulichino, 2004). Other important elements for sustaining the impact of technology training programs over time include infrastructure, ongoing funding and allocation of resources, incentives, and a shared vision within the school in relation to the purpose and importance of faculty technology education (Lindemann, 2004; Schrum, Skeele, & Grant, 2002; Otero et. al., 2005). Many of these components were also part of ETLI. The COE's Faculty Technology Center continued to provide technology workshops, technical support, and opportunities for collaboration in the years following the initial Academy training and course implementation.

Research Purpose and Method: T
The ETLI project coordinators were interested in discovering how the training influenced the ability of faculty to acquire and use technology to enhance their teaching and their students' learning and to sustain this use. The insights gained from this research study could be used to develop future education programs that would have a lasting impact on faculty pedagogical professional development.

Both ongoing and cumulative evaluations were used to measure the ETLI's impact on faculty technology knowledge, skills, and practice. At the micro-level, faculty participants were encouraged to conduct their own action research, collecting and providing feedback to the project coordinators about the effectiveness of the training on their own professional development and on their students learning. An interactive website was created for faculty to share their experiences and to provide a blueprint for future use.

At the larger project level, outside evaluators collected both qualitative and quantitative data from faculty participants through pre and post online surveys at the very beginning and at the conclusion of the project to measure the effectiveness of the training and the impact of the ETLI on faculty technology skills and usage and student learning. Each of the turn-key workshops were also evaluated. Students enrolled in the spring courses selected by faculty for technology usage were asked to provide information on the effects of technology on their learning and on the quality of the course.

In order to measure these continuing effects of the training project, faculty participants provided anecdotal narratives describing their use of technology 18 months after the conclusion of the program. A five-year follow-up online survey was conducted and individual interviews were administered to measure ongoing successes and challenges to technology usage, how technology was affecting student learning, and faculty needs for further training and support. The evaluation discovered several significant elements for designing and sustaining the positive gains from faculty development programs which can be used not only in technology education but in other types of professional training. These insights are reported in the following section.

Results:
The results of the ETLI evaluation and follow-up supported many of the previous research on effective faculty development programs.

- Before the Academy, faculty voiced their objectives for participating in the training. The major reasons were to increase their knowledge, skills, and conceptual understanding related to information technology; stay up-to-date in current and new emerging technologies; make their classrooms more student-centered, interactive and participatory; make instruction more varied, visual and stimulating; and increase their students' productivity, creativity, and performance. More than half of the participants believed that their use of technology in the classroom would not only facilitate the development of students' higher order thinking skills and help address the diverse learning styles of their students, but also help prepare their students for the technology-based workplace. Project coordinators used this information to design the Academy training to accommodate the needs and goals of the participants. The faculty participants felt that their needs and goals were effectively met by the training.
- An important part of the training initiative was the series of workshops provided within each college to mentor other interested faculty. Approximately 58 faculty attended a total of 17 workshops during the spring 2003 semester conducted by the five faculty mentors from each college. Feedback from these participants was positive. Faculty indicated that the content of the workshops was very appropriate for relating technology to their teaching and several faculty members commented that the workshops were among the most relevant training sessions that they had attended while at the university.
- The best parts of the ETLI were the opportunity to meet like-minded peers from across the university, working within a "safe" and accepting community of learners, the ongoing technical support, the provision of mentors and turn-key workshops that related technology to content and pedagogy, the opportunity to practice the skills learned and to stay in contact and share experiences, insights, and challenges with others through tools such as the ETLI website.
- After the course implementation phase at the end of the Spring 2003 semester, 484 students who attended the courses selected by Academy participants for technology implementation filled out an online survey about technology usage in the course. The majority of students felt that their instructor was comfortable with using technology in the class. Student feedback showed that faculty were using technology in their course and that it increased the students' efficiency in doing their coursework, improved the quality of their coursework, added to the value of their academic experiences, and made them more likely to be successful in their careers.
- In the Fall of 2004, approximately eighteen months after the training, eight faculty members from several departments provided a brief email update describing how they were continuing to use the technology that they learned at the Academy. The faculty reported continued use of many of the technology tools they learned about during the training. Faculty also continued to interact with other faculty members across the university through workshops, mentoring, and the website, as well as widespread sharing of personal experiences and knowledge through professional conferences, and journal articles.
- For the five-year follow-up in the Fall 2007 and Spring 2008, eleven faculty volunteered to fill out an online survey and participate in a telephone interview. These faculty respondents were from four out of the five colleges at the university and from eight different departments. Ten out of eleven (91%) respondents use technology 15 or more times per semester and assign their students to produce work or participate in projects

requiring technology at least six or more times per semester.   All faculty agreed that the ETLI was influential in their continued use of technology as an instructional tool with the majority (64%) indicating that the training initiative was very influential.

- Most faculty respondents (82%) continue to provide turn-key training and mentoring to other faculty in their college. Faculty also reported that they continue to share their experiences in using technology with other faculty through conference presentations and articles. They emphasize the continued value of meeting other faculty from across the university that the initial training provided. This community of learners that was established during the training has had a lasting impact on many of the faculty participants.
- Key elements that kept faculty using the knowledge and skills that they learned in the initial training was the improvement in their teaching and subsequent student success in their courses. Faculty felt that technology keeps them better organized and efficient. It enables them to vary their instructional methods, making their teaching more diverse, interactive, and engaging. Technology makes it easier to contact students and provide them with important course information such as expectations, assignments, and grades thus making faculty more receptive and responsive to their students. These factors enable faculty to provide a course that will lead to student success. They faculty directly see the benefits of the training to their own professional development. This makes them eager to continue to share their expertise through workshops, mentoring, presentations, and publications.
- Training, equipment, and support were other important factors for maintaining the use of the skills they acquired during the Academy. The community of learners established during the ETLI had a strong impact in sustaining the positive gains from the training. Faculty felt incentives such as more time to increase their knowledge and skills, to provide mentoring and support, and to develop courses that utilize technology would be important to incorporate in a faculty development program. Providing incentives such as stipends, laptops and software programs and increased recognition for using technology would be other effective motivators.

Discussion and Blueprint for Faculty Training:

What faculty had to say about the effective elements of the ETLI are not limited to technology education. They can be used as a guide for developing successful training programs in many different areas, disciplines and educational levels. Programs that will have lasting impact on both faculty and students need the following elements:

- Faculty training must incorporate adult learning strategies which include choice, personal responsibility, and hands-on, collaborative activities which connect the training content to practice.
- Faculty must have the opportunity to apply and implement or practice the skills and knowledge acquired during the training with support and coaching.
- Faculty must see the direct benefits of the training in terms of their own professional development and student success. Faculty must clearly see how the training improves their teaching and enhances student learning. Participants must see the returnsfor the time invested such as making their teaching easier, less time-consuming and more effective. This along with improvement in their students' learning will motivate faculty to use and to continue to develop the skills they learned.

- The training needs to fit an instructor's teaching style and course content. Providing more "customized, discipline-specific" instruction and assistance will increase initial and continued implementation. Faculty must see the connections between the training and their professional development goals. Selecting mentors to provide assistance and turn-key training to other faculty in their discipline will help ensure that faculty continue to use the skills gained during training.
- The training must provide faculty with ongoing opportunities to meet like-minded peers from across the university and to learn in a "safe" and accepting environment. Faculty must not be "left alone to fend for themselves" after the training. Support must be provided not only during initial implementation of the new skill, but must also be available on an ongoing basis. Sharing of knowledge, skills and best practices through workshops, mentoring, conferences, and publications is important. Providing a dedicated web-based e-learning resource site where faculty can discuss their successes and challenges is a way to keep avenues of communication open. The establishment of this learning communityis essential for establishing, improving, and maintaining the skills learned.
- Incentives are important motivators. They are "the hook" that initially pulls faculty into the training. Having the time to develop professionally and to incorporate new knowledge and skills into their teaching is also an attractive incentive for faculty who have numerous responsibilities. Making professional development "a priority" and recognizing and rewarding the time and effort put into implementing new instructional techniques are also important incentives for faculty training programs.
- Training should include opportunities for faculty to be reflective practitioners, examining and modifying their instructional delivery to take advantage of effective instructional methods that will enhance student learning.

The parties responsible for faculty education will hopefully find the results of this study helpful in developing training programs that meet the professional development needs of adult learners. These insights provide a blueprint for designing faculty training programs that will result in positive changes in teaching practices.

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Faculty Training Resources for Classroom Clicker Usage:
Phenomenal, Phun, Phantastic

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Objectives:
At the end of this session, participants will be able to:

- Access resources for faculty training on using clickers in the classroom
- Effectively structure group-work clicker activities
- Advocate persuasively for clicker usage among faculty at your institution
- Add a Generation M-friendly, proven interactive pedagogy to your own teaching

Audience:
- Faculty developers
- Faculty
- SoTL Researchers

Activities:

Clickers distributed immediately and a "clicker quiz" given right away to demonstrate question polling with clickers. Results for this and all clicker activities displayed within PPT slides. All questions and topics used for clicker demonstrations/audience participation relate to college teaching and learning so that, in addition to learning about clicker usage, participants learn interesting information helpful for successful teaching/learning. Participants will help simulate an Eric Mazur-type clicker activity to demonstrate group work use of clickers for development of conceptual understanding. Presentation will also include various video clips produced as part of the MERLOT ELIXR (see description) clickers case story project.

Summary:
Clickers (more formally known as Audience or Classroom Response Systems) are a teaching technology that is probably more successful than many technologies introduced and hyped over the past several years (Jaschik, 2008). Student response to clickers has been generally favorable (Graham, et al., 2007; Thalheimer, 2007), though student perceptions can be negatively influenced by technical difficulties with the system or by perceived "babysitting" or other less-than-effective use of clickers by instructors (Graham et al., 2007).

That students' perceptions of clickers can be impacted negatively by faculty use of the technology compared to generally favorable student reaction in the absence of faculty use which may be misdirected or off target seems to indicate a need for faculty training on using the tool. Interestingly, faculty perception, in spite of evidence supporting student achievement gains, can be based a great deal on the instructors' conceptualization of the teaching process: Those who

conceive of teaching as a delivery or transmission process "(teaching paradigm") are less likely to use and/or value clickers than are faculty who see teaching as a process of facilitating student conceptual change ("learning paradigm") (Freeman, et al., 2007). This shift from the teaching to the learning paradigm as a necessary precursor to facile pedagogical clicker usage is echoed by Beatty (2004, p. 6): "Perhaps the largest barrier to the adoption of CCS-based teaching is the fact that instructors must learn new skills and adjust to new roles, and this can be intimidating and demanding." Though Beatty's observation pertains partly to the technological learning curve involved in adopting clickers, it also goes to the heart of the teaching-to-learning paradigm shift (p. 6): "More fundamentally, an instructor must learn to think of herself as an engineer of learning experiences rather than a dispenser of knowledge."

There are difficulties with precisely measuring clicker usage impact on student learning because, among other reasons, it is difficult to control for gains resulting from adopting a questioning pedagogy itself irrespective of the technological implementation of that pedagogy (Thalheimer, 2007). Nonetheless, there is an accumulating body of research and evidence which suggests that clickers can be very useful as a means to help students better achieve learning outcomes. In connection with group work, Eric Mazur's use of clickers (1997) increases student conceptual understanding. In more than a decade's worth of clicker usage by the University of Massachusetts' Physics Education Research Group, the group has been convinced of the efficacy of clickers as a teaching/learning technology (Beatty, 2004).

There is evidence that the use of clickers improves student learning (e.g., Mazur, E., 1997; O'Donoghue, M., & O'Steen, B., 2007) and that students react positively to clicker usage (e.g., Beatty, 2004), but there is also evidence for faculty barriers to adoption and effective use of clickers (Beatty, 2004; Freeman, et al., 2007). This situation underscores the need for faculty training in good clicker usage. To that end, the Texas Faculty Development Network (TFDN; www.texasfdn.org) has partnered with the ELIXR Project (Engaging Learners in X [a topic or capability] with R [an exemplary teaching practice and resources to re-use]; http://elixr.merlot.org) at the Multimedia Educational Resources for Learning and Online Teaching (MERLOT) consortial initiative whose sustaining partner is the California State University System (www.merlot.org). Four Texas universities are building seven case stories about clickers for placement within ELIXR. In the process Texas Christian University, the University of North Texas, the University of Texas at Austin, and the University of Texas Health Science Center at San Antonio are assembling not only case stories but a large amount of clicker usage resources, as well. This session will share some of that information and selected video clips, but the main thrust of the session will be to help participates experience best-practice clicker usage along with providing resources about clickers that will enable faculty developers to build clicker workshops and will allow faculty to begin or improve their own clicker usage.

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**Going Green: The Role of Communication and Social Capital
in the Development of On-Campus Student Advocates**

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Summary:
In 1988, Coleman introduced the concept of social capital – the potential strength people find in their public and private relationship – to the broader scholarly community. Over the last 20 years, the concept has been refined and applied to numerous contexts. More recently, Halpern (2005) provided a compelling synopsis of social capital that argued for its value across a broad array of social and geographic settings. The thrust of Halpern's argument is that social situations and relational groups with more social capital generally have more positive and productive environments. However, one component that is often missing from discussions of social capital is the role of relational communication. The purpose of this exploratory study is to investigate how student advocates addressing environmental issues on college campuses are using social capital and communication in order to address issues such as global climate change, carbon neutrality and conservation.

This research is important because of the desire among college administrators for students to integrate their co-curricular and classroom experiences. Ideally, involvement in campus organizations and activities should be an excellent context in which to learn and apply theoretical principles from classes. If done well, students will graduate more civic-minded and environmentally responsible. Understanding the role of communication and social capital for students pursuing the environmental goals of their campus organization can help improve their co-curricular learning.

Key Literature:
The concept of social capital is valuable for understanding how students might improve their attempts to work with administrators to develop reasonable steps to develop local policies that address the extant environmental issues on campus. While Coleman (1988) was fundamental in introducing the concept of social capital and Putnam (1995; 2000) popularized it, Adler & Kwon (2000) developed an excellent model that clarifies the relationship between the relational influences on a person's social capital and the potential risks and benefits that can accrue from that social capital. In their model, they argue that relational networks, rules, norms, beliefs and trust work together to form the social capital inherent in a group of people. By capitalizing on the benefits and minimizing the risks, a person is able to generate value out of his or her social

capital and accomplish a goal. Burt (1992) and Granovetter (1985) have contributed to our understanding by showing how those individuals who are able to bridge across "structural holes" and develop new and unique relationships have the most dynamic social capital. For students concerned about environmental issues, this means they need to bridge boundaries to develop new relationships that will provide resources and support. These students must also actively develop their social capital with the members of the administration connected to their cause.

Communication plays an integral role in students' social capital. By better understanding how communication influences the development of the relational factors in Adler & Kwon's model (networks, rules, norms, beliefs and trust), a student can learn to refine their communication style, improve their social capital and work more effectively with administrators to develop local policies that address their concerns. Therefore, this study explores important relational communication factors connected to Adler & Kwon's model, such as self-disclosure, similarity-attraction, power and trust.

Methods and Analysis

Data will be collected for this study upon IRB approval and presented in a poster format. Open-ended interview questions have been developed that are connected to Adler & Kwon's model. The interview will explore the social capital of student advocates on different college campuses by focusing on the primary members of the participants professional, social and family networks. Questions will also investigate the nature of the relationship the participants have with their contacts within the college administration. Qualitative data analysis will search for themes and significant communication factors discussed by the student advocates. A comparative analysis will also explore differences between students who have successful relationships with administrators compared to students will less successful administrative relationships. Based on the analysis and conclusions, suggestions will be made regarding steps student advocates and faculty advisors can take to develop relational communication and social capital to become more effective campus and civic leaders.

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Rock of Sages: Teaching Students Interpretive Strategies through Music

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Session Objectives:
Participants in this session will:
a) learn about a different way of teaching the concepts of literature and gender studies,
b) engage in simulations of actual activities used in the course,
c) learn about different ways to assess student learning using this approach, and
d) share different approaches that they use in their own courses to engage students in relevant, hands-on activities.

Audience:
The audience for this session should be faculty members who want to adopt innovative multimedia strategies in order to enhance student retention of the knowledge base in a course.

Session Activities:
The session will consist of: (1) a brief overview of the course and student responses to its design, (2) a simulation of an actual class period, and (3) time for discussion of similar techniques and questions about the process, as well as methods of using this kind of multimedia approach in courses across the curriculum.

Summary:
Traditionally students have been painstakingly taught not to trust their own interpretive abilities; they have been taught to memorize, but not to synthesize. However, Piaget theorizes that "children do not receive knowledge passively but rather discover and construct knowledge through activities" (Meyers, 1986), which is an act of synthesis. Hence, active learning, defined as "instructional activities involving students in doing things and thinking about what they are doing" (Bonwell & Eison, 1991), increases absorption and retention of course content. Dodge further asserts, "Active learning puts the responsibility of organizing what is to be learned in the hands of the learners themselves and ideally lends itself to a more diverse range of learning styles" (2004). As study after study indicates (2004), students learn better from hands-on and collaborative practices than from lectures and other such formats.

Engaging students in activities that are not only relevant to their lives, but also to course content, provides a way to promote evaluation and synthesis in learning. Music lyrics that are familiar to

students can have the poetic depth and cultural significance to challenge them to think beyond the surface level. One way to accomplish this is by providing students with copies of the song lyrics, questions for small group discussion, and audio and/or video of the songs. After viewing or hearing the songs, students engage in group discussions and learn not only that they can interpret, but also that several interpretations can be justified and can extend across disciplines. Our session will actively illustrate this method using simulation and participants will discuss ways in which such multimedia strategies can be incorporated in other courses across the curriculum.

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They are logging in, but are they learning?
Techniques for engaging and assessing students in an online environment

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Objectives:
During this presentation, participants will:
a) Engage in self-reflection and analysis of their teaching goals and teaching methods,
b) Learn about online pedagogical techniques that match specific teaching goals and learning outcomes, and
c) Discover different ways to assess student learning in an online course.

Audience:
This presentation will be beneficial for faculty who teach online courses and want to learn about different techniques that match their teaching goals and engage students in active learning.

Activities:
This presentation will include the following activities:
a) Self-reflection activities designed to help participants become more aware of their teaching goals and philosophy
b) Simulations of different pedagogical and assessment techniques that match specific teaching and learning goals
c) Discussion with other participants about different teaching strategies they use in their online courses

Session Description:
Lecture was easy, active learning was a little more difficult, but now the challenge of teaching online can seem overwhelming. Those active learning strategies (Bonwell & Eison, 1991) and classroom assessment techniques (Angelo & Cross, 1993) were great to use in a face-to-face course but when the delivery mode moves to online, how do we achieve the same level of instruction and interaction? Quality doesn't have to be sacrificed just because the delivery mode changes and an online course can engage students and provide the level of interaction necessary to facilitate student achievement of course learning outcomes (Ascough, 2002; Rosie, 2000; Dodge, 2004).

As with any course, you should start by identifying your teaching goals (Angelo & Cross, 1993). What knowledge, skills, and attitudes do you want to focus on during the semester? These goals will help you identify particular strategies you can embed in your online course – strategies that will engage your students in meaningful explorations of content and cause them to interact with the material, classmates, and you. Next, you should consider the course learning outcomes. Just because the course has moved online, that doesn't mean that the learning outcomes have changed. How will you assess these outcomes? If you're new to online instruction you might

think that multiple-choice tests are the only way to assess. However, there are many classroom assessment techniques that can be adapted and used successfully in an online course (Flint, 2003). In fact, you might even be able to provide more efficient on-going assessment as a result of moving your course online.

So how do you do all of this? Come to this session and find out. In this session, I will engage you in activities designed to help with the transition to online instruction. You will learn about strategies you can use and begin to develop assignments and assessments that meet your teaching goals and your students' learning needs.

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Turning Back the Spade: Against a Newtonian Conception of Service Learning

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The purpose of this presentation is to explore the idea that, at a fundamental level, many mental phenomena--like learning from experience--are closed off from our ability to properly articulate them, but that this is concealed by their "surface grammars." This notion is explored primarily in Part II of Wittgenstein's (2001). Specifically he looks at the phenomenon of "aspect-seeing" to suggest that changes we wish to call "internal" or "mental" can only be 'explained' by a thorough DESCRIPTION of how individuals interface with their environments in a given "form of life."

The target will be drawn more closely around Experiential Learning via consideration of Service-Learning, which has been suggested as a veritable cure-all for all ails on college campuses for its imparting of "service benefits" and "its enormous potential for enhancing the learning process" (Astin 1999), both of which are explored by key Service-Learning advocate Barbara Jacoby in her (1999) and (2004). More recently, Swaner has discussed research promoting Service-Learning as a tool for "addressing depression or substance abuse on the college campus" (2007).

I apply Wittgenstein's analysis of "aspect seeing" to this discussion in a brief display of ambiguous figures and through comparison of Wittgensteinian philosopher Rupert Read's discussion of "forgiveness" (2007) as a corollary to many of the "service benefits" expected of Service-Learning engagements. The conclusion suggests an alternative approach to the "experiential learning cycle" presented by Kolb that has been fundamental to the instruction of Service-Learning and that emphasizes "reflection." I suggest "pre-flection" and "foregrounding" as necessary techniques but stress their limitations. The reality is that learning from experience constitutes a "form of life" that cannot be wholly structured within the University setting.

A comparable discussion is going on in the scholarship of "teachable moments." In a 2009 Lily-West Conference on College and University Teaching Poster Session at Cal-Poly University in Pomona, CA on 21-22 March, Stephen White and George Maycock summarized a recently completed study on "College Teaching and Synchronicity" which draws similar conclusions.

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Motivating Students Utilizing the Components of Flow

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Session Description: This session is highly motivational in that it teaches participants how to motivate themselves thus being more productive in their jobs and personal lives. Our mental and physical health can be managed if we utilize the right techniques. These techniques are based on the most complete research in the world on human motivation.

Also, results of a longitudinal study will be revealed that shows how instructors can utilize the Flow components and greatly enhance the connection to the student. Our study proved that boredom is the primary cause of a students' lack of motivation, and due to this motivational breakthrough, this can now be minimized. Instructors will be given data and ideas to use to improve the connectivity between the teacher and student. Students will be more motivated as a result and instructors will enjoy their jobs more than ever before.

The information is also the result of my upcoming book based on the works of the worlds foremost authority on happiness and motivation, Dr. Mihaly Csikszentmihalyi. This work has been praised in *Time Magazine*, *Newsweek*, and the *Today Show*. The audience will leave the program feeling good about themselves and with a specific blueprint for changing their teaching strategies. This could very well be a life changing program.

Measuring Student Appreciation Levels for Sponge Activities:
a Teaching Model Used to Encourage Students to Study

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Summary:
A sponge activity is a group exercise, conducted at the beginning of a lecture, in which a sample of students from the class demonstrates mastery of the concepts covered in the previous lecture. The samples performance is used as a representation of the entire class performance to determine if an instructor should provide additional supplements such as quizzes or homework assignments. The purpose of this study was to measure student appreciation levels of sponge activities quantitatively and qualitatively via a survey. The research also addresses instructor reactions using sponge activities to encourage daily studying habits. The poster presentation will address the finding as well as demonstrate the various sponge activities used.

There are three objectives of this poster presentation. The first objective involves defining a "sponge activity" and the various types. In explaining this objective, the presentation will demonstrate how to construct one in Microsoft PowerPoint as well as give audience members an opportunity to participate in one so that they get a feel of the students' position. The next objective involves addressing the methodology used to measure students' appreciation levels of sponge activities. At the end of the course, a survey was administered to the students that quantitatively and qualitatively measured students' reactions and appreciation levels on how sponge activities helped them learn the subject of statistics. Two research questions will be answered during the demonstration of the analysis. Are grade level, sponge activity participation, gender, ethnicity, type of course taken, and reason for taking the course significant factors that determine appreciation levels? Also, what are student perceptions of the idea of using sponge activities in every introductory college course? A final objective of the presentation is to address instructor opinions and suggestions on how to use sponge activities in an introductory statistics course.

Portrait of the Student as a Young Wolf: Motivating Undergraduates

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Summary:
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. 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.

Armageddon 101: Dealing with Disruptive Students and their "Natural" Aversion to a Discipline

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Summary:
Every teacher, regardless of discipline, must teach it at some point in his or her career: the distribution course, populated almost entirely by non-majors who are there simply because they must be. These students often assert that they "hate" the subject matter because it's inherently stupid, boring, and pointless. Actually, however, it's fear, rather than distaste, which generates their negative opinion. They're positive that they're not "good" at the topic and are terrified that they will wind up with not only a rotten grade, but (perhaps even more frightening) public awareness of what they perceive as intellectual inadequacy. And, since no one wants to look like an idiot in front of one's peers, defence mechanisms kick in: studied indifference and/or sullen hostility abound. Students may also attempt to deal with their fears by giving the courses alternate, less terrifying titles: Art Appreciation 101 is re-christened "Art in the Dark" by iconophobes; Geology 101 becomes "Rocks for Jocks," and Math 100, "Math for Morons."

This distaste is what psychologists call "natural" aversion. I put "natural" in quotes because it may not be natural at all, but rather a product of social conditioning. Example: a female student who heard as a child that girls were not good at numbers might have a similar "natural" aversion to mathematics.

Such aversion among students is fairly common, and many teachers dismiss it as nothing more than an inescapable hazard of the profession. Yet it is far more than that. "Natural" aversion is an insurmountable wall between the teacher and the student. Speaking as a teacher, trainer, and long-standing numerophobe, I am certain that it is virtually impossible to teach a subject with any degree of lasting understanding until the student's natural aversion has been overcome. The instructor must first overcome student certainty that they are doomed to failure and/or humiliation.

Right. That's all you have to do?

I'll admit that this process of reconditioning is not an easy task. It can require considerable time, energy, and creativity. Here's an example. I live and work with a Border Collie named Folly, who had a "natural" aversion to metal. I have no idea why; perhaps she simply hated the taste of it. As far as I know, she was never beaten with a tablespoon.

In advanced obedience, however, a dog must retrieve a metal dumbbell as part of the scent discrimination exercise. I could have forced her to carry the metal despite her aversion, and she would have done it. But she would have always hated the exercise – and that wouldn't have been much fun for either of us. And she would have memorized the exercise by rote, not learning

anything about it except what she absolutely had to. Retrieving a metal article would not have taught her to retrieve a spoon, for example. I'd have to teach that as a separate exercise. If anything unusual happened during the scent retrieve (if a bee stung her on the nose when she went out to get the article), she would have shut down. A student who works out of fear of punishment tends to panic when suddenly called upon to think outside the box: i.e., to be an active participant in her own education.

Here's what I did to overcome the problem.

Folly, like most dogs, loves nothing so much as a ride in the car. So I put a small leather "Coach" tab on my key chain (she has no aversion to leather, and I have no aversion to "Coach's products), and had her carry my keys for me. She soon learned that carrying the keys meant a ride, and would grab them from the table whenever I got ready to go somewhere. In her eagerness, she sometimes forgot to grab the leather tab; eventually, I removed it. Keys – and the taste of metal – became associated with something wonderful, and to this day she will retrieve metal articles with alacrity.

Indeed, when a bee did sting her on the nose as she went out to retrieve the metal article at a summer show, she was unfazed, completed the exercise, and took a ribbon. A student who works for the joy of working has no difficulty thinking outside the box: she is an active and enthusiastic participant in her own education.

But how on earth can one achieve the same positive results with students who have already been badly stung in math, or English, or science, and now loathe the subject? Well, first by realizing the cause of their "natural" aversion: Folly's was probably a matter of taste; as I noted above, student aversion is most often a matter of fear. People – especially adolescents – are afraid of looking stupid. They like things they are "good" at. They like to feel smart. And they like tangible proof – trophies, ribbons, awards, grades – of their skill.
'
One of the most effective ways to overcome "natural" aversion in humans is to completely eliminate their fears through pure positive reinforcement (often called "PPR" by behaviourists). Although PPR is highly ineffective in the long haul, and will rarely be of much use in generating long-term learning or self-motivation, it is nonetheless the easiest, and perhaps the only consistent way that students' fear of a subject – their "natural" aversion – can be reliably overcome.

Here's how I use PPR in the dreaded English 215: Introduction to Literary Interpretation (dubbed Lit for Linebackers by my students). English 215 is described in the catalogue as "Practice in the methods of close reading and formal analysis; identification of primary elements and structures of literary presentation." Students who are genuinely interested in the discipline of English Literature tend to take the 200-level survey courses, so my 215 class is invariably filled with non-majors who consider it as the least detestable (i.e., the "easiest") of the required humanities offerings. The class is thus at once simultaneously unpopular and packed to the rafters.

Poetry, with its intense and condensed language, is the medium in which those "primary elements and structures" so highly touted in the catalogue can be most readily isolated, and is

consequently the most useful in an introductory class.   When, fresh out of grad school, I taught the Intro to Lit class for the first time, I asked students to jot down (anonymously) their initial response to poetry.

After class, I settled in with my results. The initial sheet was disheartening, to say the least. "Poetry is dumb and boring."

Okay. Well, things had to get better. I looked at the second. "Potry [sic] sucks."

With sinking heart, I turned to the third, then the fourth. They got worse and worse, and finally I reached what had to be the absolute nadir: "Poetry is written by a bunch of queers for another bunch of queers to read."

I could go no farther.

Clearly, I was not dealing with like minds – well, maybe they were of a kind, but not my kind – and I was far too inexperienced a teacher to realize that what I was dealing with was natural aversion. My initial attempts to engage students were a series of fiascos.

Convinced that their distaste was based on their lack of experience with really "good" poetry, I inundated them with the best of the best: Milton's sonnet on his blindness, Gray's elegy, Shakespeare's "fortune and men's eyes" sonnet. Student resistance was almost palpable.

Next, convinced that language was at the root of their distaste, I attempted to use "cool" poetry: the work of Bob Dylan and Jim Morrison, for example. This was met with rolled eyes and surreptitious flashing of peace signs. Finally, sure that the problem was chronological, I introduced examples of "their" poetry: hip-hop and rap. But while I learned a great deal about rap imagery ("I ain't gone send him on his way/Put him up in that big caddy," for example, means that the narrator has no immediate plans to murder his associate), I discovered the students learned little or nothing about "primary elements and structures of literary presentation."

Back at square one, I began again, this time establishing a specific minimum set of goals for the first class:

1. Make the reading of a poem a positive experience.   Okay, perhaps that was going too far. But I had at least finally managed to identify part of the real problem: poetry was a foreign language that made my negatively averse students feel like lost wayfarers, adrift in an alien world inhabited by sneaky synedoches and treacherous tropes. Even if I couldn't make the students actually like the material, perhaps I could show them that there was nothing inherently scary about it. I amended my first goal to:

1. Make the reading of a poem a non-negative experience. That seemed like a good start. But even such a relatively modest goal had its pitfalls: in order to move them from negative to neutral, I would have to demystify the text, somehow make it less intimidating. In a logical, down-to-earth way, I would have to:

2. Teach students the rudiments of close reading. Then, assuming I could manage that feat, Id still have to establish some sort of a goal, a finish line that they could cross successfully. These kids weren't going to work for some touchy-feely nonsense about how literature enriched the mind. I'd have to make the poem a game that they could win, a puzzle that they could solve. Aha! I would:

3. Teach them to isolate a theme. Then, when (if?) they solved that puzzle, Id come up with a slightly tougher (not too much tougher) brainteaser; got it! Using a similar piece of verse, I would:

4. Teach them to compare two works and recognize thematic similarities. And, since this class would probably afford them the only exposure to "serious" literature that many of them would ever receive, I would figure out some way to:

5. Use a canonical text. Yeah, that last one was tough. Milton was out for the time being. Ditto Shakespeare, Eliot, Keats, Sidney, Donne, Tennyson, Yeats.

But I had a secret weapon in my literary arsenal: Robert Browning"s Porphyria's Lover."
In case you're not familiar with it, "Porphyria's Lover" is a creepy little poem about a sociopath who strangles his girlfriend. Although written in semi-elevated language, it tells a story of sex and violence with which virtually any twenty-first-century American adolescent can identify.

Was I pandering to my students' baser elements by making such a sensationalistic, even titillating selection? Perhaps. Yet this text wasn't the *National Enquirer*; the poem had a number of very important messages to impart. And anyway, I was nowhere near trying to "elevate" them at that point; I was just trying to overcome negative aversion. I hope the following digression will explain my choice.

Digression

When working toward eliminating natural aversion, I always aim toward the interests of my audience, not of myself. Reinforcers are relative; what I might perceive as a reward might be a punishment for someone else. Gifted science teachers do not overcome natural aversion to physics by employing cutting-edge and probably esoteric topics that interest them; instead they use shaving cream and balloons to demonstrate its principles. Or they overcome natural aversion to chemistry by blowing something up. They juggle. They tap dance. One incredibly brilliant Chemistry professor at my school has worked out a presentation (which takes seven hours to set up) wherein he plays the "1812 Overture" on a CD and the preset chemical reactions go off precisely in time to serve the function of cannon. Yes, it might seem silly. Yes, you might seem to be "pandering" to your audience. But I will restate my belief that it is impossible to teach a subject with any degree of lasting understanding until natural aversion has been overcome. I suppose my motto here would be "Whatever it takes." Pandering – if that's indeed what engaging student attention is – is a small price to pay to open up the wonders of your discipline to a young mind who would otherwise be too intimidated to engage it.
And now, back to our Regularly Scheduled Text

So, "Porphyria's Lover." I knew what text we were going to work with. But how would we work with it? Group work was out; the hostility levels were far too high. Put the students together and they'd start working on ways to blow up my car. A lecture would let them tune out and drift away; they were already way too good at that. I struck upon a method that was at once safe, yet highly confrontational: I would read the poem aloud, and then trigger their own innate prey drive (see below) by moving directly into the seating area – their area – and posing direct but open-ended questions that would be impossible to get "wrong." I still use the process today – every day, in one form or another, and in every class, with any student who is floundering. It's what I referred to earlier as Pure Positive Reinforcement (PPR).

Here's how it works.

The first question I present to my hostile group is vague, and not really meant to be answered. Thus, it is posed to the class as a whole: "Tell me about the narrator." No response. But that's OK. I've made my point. I'm not going to roll my eyes and mutter about student apathy. No one has answered, but the world hasn't ended.

Then I move to an individual student and ask a direct question, one that no student has ever gotten wrong: "would you fix the narrator up on a date with your sister – assuming, that is, that you like your sister?"

The invariably heartfelt response: "No way!"

I back away from the individual, but stay on the fringes of his/her space, scanning the class. Then I ask innocently: "Why not?" I'm flooded with answers.

Bingo. By answering the second and third questions, the students have changed their world in two small ways. First, the kids have – some of them for the first time in their lives – volunteered to open a discussion in an English class, and nothing horrible happened. They feel daring and brave. Second, they made a critical judgment about the narrator: "Cause he's a freaking psycho, man!" and it was spot-on correct. The tiniest seeds of confidence have been sown.

At this point – very carefully, very slowly – I begin to engage them in close reading, in the guise of a game. I ask them at what point in the poem they first realized that the narrator was (ahem) rationally challenged. They'll point to the strangulation scene, and I'll say, "Very good. But I (ha-ha!) figured it out earlier!" Rising to the implied challenge, they work backward and determine through a process of discussion that Browning inserted careful hints about the narrator's state of mind from the very beginning of the poem. Then we move to the character of Porphyria.

And that's how we get through the poem. I'm in their spaces and in their faces – there is no escape – but there are also absolutely no negatives. Starting with open questions to feed discussion, I then frame more focused questions in such a way that the student is almost locked into a correct response. Okay, sometimes a student still doesn't come up with the answer I'm looking for. Sometimes, despite my best efforts at channelling them toward a correct answer, they still manage to come up with something that is flat-out wrong. Then it's my turn to show

what a real teacher's made of: I'll come up with something neutral: "Yeah, I can see how you might go that way, but – " and there will be no hint of disapproval on my face or in my body language.

My finest hour as a teacher occurred when a very tentative student in a "Survey of English Literature" class asked me what William Shakespeare (1564-1616) thought of Dr. Samuel Johnson's (1709-1784) critique of his work. The rest of the class looked at me warily: would I stomp this poor anachronistic fool? Nope. Instead, I turned his remark into a good question:

"Wow! What a terrific idea! What would Shakespeare have thought of Doctor Johnson's critique? How did seventh-century renaissance literature differ from eighteenth-century Enlightenment writing?"

Not only did the poor student escape humiliation – indeed, by the time I was through, he seemed rather pleased with himself for instigating such cutting edge debate, but the remainder of the class was assured that the classroom was a safe place to try out new ideas and take chances. The "dumbest" questions are usually the ones that need the most smiles and encouragement. But everyone in the class, despite their level of understanding, will be supported. And there will be rewards. Lots of rewards.

I'm shameless about rewarding thoughtful – or even conscious – responses. From the first day of class, I'll slam down a "handsome silver trophy" (a quarter) on the desk of a student who's making any sort of effort at all.

Mini-Digression

Quarters. Ah, yes. I experimented with a variety of tangible rewards – miniature candy bars, for example – and found the results mixed at best. Not everyone likes chocolate (particularly if the class is held at eight in the morning); many students are on diets. Some are allergic to chocolate. When I brought in little toys and games that my husband had brought back from trade shows, the students seemed to feel that they were getting junk palmed off on them. Trophies and medals were considered hokey and juvenile. Quarters, on the other hand, are the lifeblood of student existence. They feed washers and dryers, soft drink and candy machines, photocopiers and video games. What else is there in college?

A Micro-Digression on a Mini-Digression

An important aside here: if the tangible rewards a teacher gives out do not have the desired effect (i.e., if students do not actively work for the reward) the teacher should not bother wasting time and energy griping about ungrateful students, but set about to find a better reinforcer. Let's say, for example, that Folly the metal-hater didn't particularly care about rides in the car. I would have found something she did care about: peanut butter on a metal spoon, perhaps, until she associated the reward with the metal. If my students should ever not want quarters (this has never happened), I'd reward them getting out of class a few minutes early. If they didn't like that, I'd keep experimenting.

Meanwhile, back at the Article

Quarters are great, but the biggest PPR is that students start to feel smart, a self-reinforcer if there ever was one. They'll also begin competing for the reward not because they really need the quarter, but because the self-reinforcer has transmogrified a mere two-bit piece into a tangible emblem of intellectual success. And success in the very subject they once feared.

So now I have a motivated class, and I can move them along confidently to the next step in my rubric. After we've covered the entire poem, I give a short, manageable, in-class assignment (again, one that is virtually impossible to get wrong).

Pick one word that is essential to the poem and have a backup or two in case someone else takes your word.

Browning's a good enough poet to have chosen every word carefully. And by now, twenty minutes of PPR has convinced the students that they have a decent shot at a "right" answer and won't be ridiculed for a "wrong" one. I carefully write their word on the board: if the student is weak – or if the class pooh-poohs it (hey, they're so secure that they're getting cocky now), I'll point out that the word is a good choice and explain why (admittedly, sometimes I have to reach a bit). If the student is stronger, I'll let her explain her choice, offering help if she flounders. At this point, they have already seen how elements such as class, gender, and power have driven the poem, and, although they may not understand metaphor yet, they certainly grasp how the impact of class, gender and power affect them, and how certain words are key to these themes.

They generally surprise me: from the entire rich vocabulary of the poem, one young man chose the word" it," and I figured him for a smart-ass. He then proceeded to point out that the poem was really about Porphyria's change from a "she" to an "it." I know full professors who wouldn't have picked that out; certainly I never had. And of course, his reading allowed me to introduce Browning's critique of female objectification and reification. Okay; that sort of thing doesn't happen every time. Yet even the slowest students gradually come to realize that the poem is about far more than a sociopath who strangles his girlfriend.

Finishing "Porphyria," the class is upbeat and enthusiastic; they have a lot less fear about the next meeting, and some students even ask if we can "do" another poem then – "but a good one, like this; not one of the dumb ones." I'm way ahead of them; their next text will be Browning's "My Last Duchess," another creepy little poem about a sociopath who has his wife murdered. And now learning really starts to take place.

After I read "My Last Duchess" aloud – even before we have begun to do any close reading – there invariably is a silence, and someone, usually in the back, will mutter, "S---, it's the same damn poem." Which, thematically, it is; but the level of literary sophistication required to recognize that fact is generally expected only in upper-level undergraduate students. My class is generally amazed by itself. Success is heady stuff – perhaps the most positive reinforcer of all.

So we've done it: the reading of a poem was a non-negative experience, a positive experience for some (perhaps their first); they exercised the rudiments of close reading and learned how to

isolate a theme. They've compared two works and recognized thematic similarities – and they did it employing canonical texts. Most importantly, they've started to overcome their natural aversion. "Okay," admitted one young man, still exhilarated by his realization that the late Porphyria and the Duchess painting are both artifacts, rather than actual women: "not all poems are stupid."

Pure Positive Reinforcement cannot go on forever, of course. Gradually, I must wean them from the constant stream of quarters. Gradually, we get to more difficult poems – although these poems will always be presented as puzzles to be solved (triggering their prey drives, enjoyment of competition, and quest for status). Gradually, they'll begin to write essays and introduce their own ideas into the discussion. But none of this can happen until the "natural" aversion is overcome.

Once it is, though, the fun really starts.

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The Multicultural ABC's: Encouraging Self Reflection in Pre Service Teachers

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Summary:
The role of self reflection as a necessary, if not difficult, step on the road to cultural competence has been widely accepted in research on the Social Foundations (Gay, 2000; Schon, 1983). Self reflection is critical in cultural work as it prevents the slip into essentialist attitudes about those people and dichotomous views of the world. A self reflective individual has been challenged to place themselves within a larger cultural context in which theirs is one of many ways being, seeing, knowing or believing. Similarly, it has been well documented by academics who work in teacher education that Social Foundations courses are the ones most often greeted with dread, if not disdain, by frustrated students (Ahlquist, 1992; Ladson-Billings, 1996). Many feel that their Foundations courses exist to make them feel guilty or blame them for historical wrongs and teacher education students often resent having to spend time on what they see as theoretical issues when they should really be learning about practical concerns such as classroom discipline and pedagogy.

Educators, therefore, who teach Social Foundations courses in teacher education programs are faced with tremendous challenges when attempting to encourage often reluctant students to endeavor to examine themselves as cultural beings who have been and continue to be shaped by dispirit factors. This paper examines a cultural ABC book assignment that is designed to challenge pre service teachers to examine themselves, using culture as the lens. This assignment encourages the students to engage seriously in the act of self reflection, a necessary component in the process of becoming a culturally competent educator. The creation of this book helps students to see themselves as cultured agents who have been shaped by disparate forces. This ABC book challenges them to see the complexity of their own cultural backgrounds and ultimately undermines their tendencies to essentialize other cultural groups and individuals. Simultaneously, it is a goal that this assignment, with the inclusion of students and their narratives in the Multicultural curriculum, helps prevent many of the frustrations and resentments that can occur in these courses for pre service teachers and their instructors. The papers findings indicate that while some student discomfort or resistance remained present, overall the pre service teachers made honest attempts at defining their own cultural identities and do so to varying degrees of success.

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Developing Learner-Centered Undergraduate Internships

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Summary:
Many universities use for-credit internship programs to give undergraduate students professional experience. Students in such programs often work one-on-one with a faculty or administrative supervisor and do internship work either directly for that advisor (internal internships) or indirectly, by interning for an outside organization (external internships). Despite the immense educative potential of this close working relationship between undergraduate interns and faculty or administrators, few internship programs have any guidelines for connecting internship work to learning goals. Our study seeks to correct this lack. We ask: how might internship supervisors develop experiences for undergraduates that support and enhance traditional coursework and learning goals?

Literature in the study of higher education supports the idea that internship programs can be a strong supplement to more traditional learning experiences (Kendall, 1986; Sweitzer, 2004), and a number of studies document best practices for interns in specific career paths (e.g., Brewer & Winston, 2001; Savage, 1997). However, very little scholarly literature offers practical guidelines for developing and sustaining a successful and cross-disciplinary internship program, particularly in liberal arts disciplines. No general model exists for how faculty can create and evaluate undergraduate intern programs, despite the fact that much of the expertise needed to develop sets of best practices for internships already exists. Supervising faculty and administrators as well as undergraduate interns (past and present) have a deep knowledge of the workings of internships in various situations.

Our qualitative study, funded through a grant from the Schreyer Institute for Teaching Excellence, aims to develop a best practices handbook for faculty and administrators working with undergraduate interns. We are interviewing a series of faculty, staff, and students involved in the internship program in the liberal arts college at a large state university, focusing particularly on oral interviews with past and present undergraduate interns. The interview questions are designed to elicit reflection relating to knowledge, skills, and attitudes that were learned in or changed by the internship experience. We will then associate these positive outcomes with effective, practical, and sometimes innovative practices on the part of the supervising faculty or administrators, compiling these best practices into a handbook.

Our research is currently in progress; the interviewing process will be complete in June 2009. Given preliminary results, we see that recommended practices for faculty include:

1) providing periodic feedback to the intern;
2) creating and maintaining relationships with local organizations who may hire students for internships;
3) constructing a meaningful academic component to complement work done in external internships;
4) designing projects for internal internships that allow interns to be part of a complex workflow (possibly including other students, faculty, and graduate students); and
5) providing professional advice and mentoring, both during and following an internship.

Internship supervisors who support interns in these ways help the interns make connections between their academic learning, internship experience, and professional goals.

Our session will share results as two brief presentations (one on internal and one on external internship programs) followed by a discussion of internship practices. We will provide materials for attendees including the handbook of best practices, forms to be used for communicating feedback with interns, and practical ideas for creating or strengthening learner-centered internship programs across disciplines.

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Write On! Building Students' Self-Efficacy in Writing

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Objectives:
1. To engage participants in a conversation about students, writing, and motivation.
2. To discuss how feedback can affect students motivation to write.
3. To probe participants to evaluate their feedback style, writing assignments, and activities.
4. To promote open communication among participants regarding student writing, classroom activities, and feedback.
5. To encourage participants to try new activities and a new style of feedback.

Audience:
Instructors who desire to improve students' writing abilities or want to improve their teaching skills related to writing.

 Activities:
1. Self-evaluation of your writing feedback style and classroom activities
2. Self-evaluation of your assumptions of students' writing abilities
3. Evaluating feedback: Examples of writing feedback (group activity)
4. Role play: Bad versus Good Feedback
5. Group discussion: Ways to effectively provide feedback

Summary:
Self-efficacy is often utilized as a variable in educational studies. According to Bandura (1994), "self-efficacy beliefs determine how people feel, think, motivate themselves and behave" (p. 71). Therefore, the potential for self-efficacy to be a vital component of students' achievement and mastery is great. Because self-efficacy is task-specific, it is not uncommon for people to avoid tasks which they feel are difficult or at a greater risk of failure for (Bandura, 1994).

Writing is often a task that many students struggle with. They view writing as an arduous task. Mental effort, as Bandura (1997) notes, can also affect learners' task-specific self-efficacy. According to Clark (1999), "The experience of mental effort influences our personal efficacy expectations about a learning task" (p. 7).

Several studies have shown a strong relationship between self-efficacy and writing performance (e.g., Pajares & Johnson, 1993; Pajares & Johnson, 1996; Pajares, Miller, & Johnson, 1999; Pajares & Valiante, 1997; Wachholz & Etheridge, 1996). McCarthy, Meier, and Rinderer (1985) found writing performance to be affected by both writing anxiety and self-efficacy.

The purpose of this presentation is to discuss and demonstrate ways to motivate students to write and improve their self-efficacy related to writing. Using self-determination theory (Ryan & Deci,

2000) and self-regulation strategies (Zimmerman & Risemberg, 1997), teachers can aid their students in their writing skills and perceptions of their writing abilities. Classroom activities, writing assignments, and feedback will be covered in this session as areas which can be utilized to build students' self-efficacy related to writing.

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Familiarity with Calculations Improves Patient Survival Rates during Mock Advanced Cardiac Life Support Codes

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Abstract:
For the past four years, one of the Pharmacotherapeutics laboratory activities has been a mock Advanced Cardiac Life Support code.   During this activity, the fifth year pharmacy students, all Red Cross Certified in Basic Life Support, fulfill the various roles of health care professionals on a rapid response teams. One of the key points during the exercise is to successfully calculate the drip rate of a medication that is critical to the patients survival. One of the issues that stymied the instructors was the poor overall survival rate during the code despite a week of orientation.

Proposal:
RATIONALE:

For the past four years, one of the PP556 Pharmacotherapeutics laboratory activities has been a mock Advanced Cardiac Life Support (ACLS) code. During this activity, the fifth year pharmacy students, all Red Cross Certified in Basic Life Support, fulfill the various roles of health care professionals on a rapid response teams. More and more, pharmacists play a critical role as a member of this team in hospitals. During the week of orientation to the mock ACLS code, students are introduced to the mannequin, introduced to the faculty member running the code as the physician (MC, CW, or LP), choose the role they will play on the rapid response team, and become familiar with the treatment algorithms for three arrhythmias: asystole, ventricular tachycardia, and ventricular fibrillation. The students are allowed to bring the American Heart Association algorithms with them when they respond to the mock code. One of the key points during the exercise is to successfully calculate the drip rate of a medication that is critical to the patients survival. The students assigned the role of the pharmacist have three minutes to successfully complete this calculation. One of the issues that stymied the instructors was the poor overall survival rate during the code despite a week of orientation. The first year the mock ACLS code activity was performed in the laboratory, it occurred right after the cardiology block of Pharmacotherapeutics and had an overall survival rate of 20%. The second year the activity was offered; we moved it towards the end of the year, after the students had more lectures in critical care medicine and had an increase in the survival rate to 33%, which although an improvement, was still pretty poor.

Last year, throughout Pharmacotherapeutics laboratory I and II, students were required to perform calculation drills which were comprised of simple calculations that they could do in their heads or on a sheet of paper. The goal of the calculation drills was to see a gradual decrease in time that it took each student to perform the calculations in their heads. Although that goal was not realized, the instructors (LM, MC, and LF) noted an increase in survival rate during the mock ACLS code to 42%, a number that was approaching real lifesurvival.
This lead to the innovation experiment of this year, with the Quick Fire Calculationsactivity.

INNOVATION:
All six sections of Pharmacotherapeutics Laboratory I (261 fifth yearpharmacy students) performed Quick fire Calculations as an activity during the last week of the fall semester. Students were given 15 minutes to perform 13 calculations. In the spring semester, during the ACLS orientation week, three of the laboratory sections (121 students) were given a second drill with the same Quick fire Calculations. The remaining three laboratory sections (120 students) did not perform the drill as part of the orientation activities. The faculty members playing the role of the physician during the mock ACLS code (MC, CW, and LP) were blinded as to which half of the class had the extra practice time with the calculations. All mock ACLS codes contained the same three arrhythmias and the students were allowed to bring the treatment algorithms to the code.

OUTCOMES:
The laboratory sections that received the extra session of Quick fire Calculations had an overall survival rate of 11 out of 15 codes or 73%. The laboratory sections that did not have the extra calculation drill had an overall survival rate of 5 out of 15 codes or 33%.

STUDENT REACTIONS:

Students clearly enjoy the ACLS activity. Out of the 200 students who filled out surveys in the spring of 2008, 96 students or 48% of the class noted that they especially liked the ACLS code activity and wanted it kept as part of the laboratory activities. Forty two students or 21% of those students surveyed stated that they would keep all activities.

Your Lecture Is Just Not That Into You:
15 Strategies for Successful Lecturing

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Objectives:
At the end of this presentation participants will be able to:
1) Identify strategies to improve their lecture
2) Understand how these strategies can enhance and improve student learning
3) Identify ways to implement these strategies in their own lectures

Audience:
This session is open to all instructors who use lecturing in their classroom.

Activities:
1) Explanation: Why and how these strategies can improve student learning, attention, motivation and attendance.
2) Demonstration: Modeling of the strategies as they are discussed.
3) Participation: Participants will break into small groups to brainstorm how they could incorporate some of these strategies into their own lectures.
4) Discussion: A brief discussion addressing some of the roadblocks to using these strategies and how to overcome them.

Overview
Direct instruction, or lecture, tends to dominate most classrooms (Mullis, Owen, & Phillips, 1990). And, contrary to the current anti-lecture zeitgeist, lecture has been supported as an effective teaching strategy within several teaching models (Block, 1980; Madaus, Airasian, & Kellaghan, 1980; Rosenshine, 1985, 1995; Stallings & Kaskowitz, 1974). Indeed, Rosenshine (1983, 1995) generated a series of research-based recommendations for the use of direction instruction. These recommendations included,

* Content material should be presented in small steps.
* Presentations should focus on one thought, point, or concept at a time.
* Digressions should be avoided during presentations.
* When possible or appropriate, modeling should accompany the lecture.
* Lectures are best accompanied by many varied and specific examples.
* Effective lectures are characterized by detailed and redundant explanations.
* Before proceeding to the next point in a lecture, check for understanding.
* Student progress should be monitored through the lecture by means of questions.
* Lecturers should stay on the topic, reviewing material until students understand.

The current presentation, however, is designed to extend, update and model 15 strategies for learner-centered instruction. And, while a learner-centered lecture may seem oxymoronic, it is not!

10 Common Challenges with Online Teaching and What to Do About Them!

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Objectives:
At the end of this presentation participants will be able to:
1) Identify common challenges within online teaching,
2) Explain how to overcome these challenges with the use of specific strategies, and
3) Apply these strategies in their own online courses or online materials.

Audience:
Anyone engaged or interested in online or blended teaching.

Activities:
1) Demonstration: Common online teaching challenges will be discussed and modeled, including why they can cause difficulties.
2) Demonstration: Strategies designed to address these challenges will be discussed and modeled.
3) Collaboration: Participants will break into small groups and brainstorm how they could incorporate online teaching in their courses, avoiding the challenges discussed.
4) Collaboration: Participant groups will share the results of their brainstorming.

The mere quantity of online courses has exploded in the last 10 years and distance education is now a major educational structure within the United States (McIssac, 1998; Molenda & Sullivan, 2000). Rudestam and Schoenhltz-Read (2002) report that over 350,000 students are enrolled in online degree program. This increase in online enrollment is the result of many factors, including access to (a) flexible learning environments, environments that are self-paces, courses of interest and professional growth.

This extreme growth has spawned several research endeavors to understand the ramifications of distance teaching and how students learn in distance environments. A core concern is the generation of instructional strategies designed for effective student learning within the online environment. This research has not yet coalesced into well-structured online pedagogical models (see Reeves & Reeves,1997; Williams, Paprock, & Covington, 1999; Wang-Chavez, Branon, & Mikolaj, 2001).

This engaging presentation is designed to explore pedagogical issues and challenges and to provide assistance in addressing these issues and challenges. While theoretical underpinnings will be briefly addressed, the focus of the presentation is to identify and remediate specific online instructional concerns, thereby increasing student learning.

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Communication Web Sites – Reaching Generation Y Students Their Way

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Objectives:
1. Audience will gain knowledge of the advanced technology tools of Yack Pack and Voice Thread.
2. Audience will gain knowledge of how such sites function as a memory support in learning.
3. Audience will develop skill in using these tools in classroom instruction, discussions, lectures, and student presentations.
4. Audience will evaluate the merit of these tools as instructional supports in their own classrooms.
5. Audience will gain understanding of ways to integrate both Yack Pack and Voice Thread into their courses.

Audience:
Any instructor teaching at any level who is interested in using state of the art communication web sites as an instructional tool to imprint information.

Activities:
1. Short clip from YouTube on instruction and today's students and brief discussion of the Y generation
2. Short power point presentation on impact of audio-visual stimuli and memory
3. Small group examination of Yack Pack and Voice Thread site based on discipline
4. Whole group discussion of findings, including merits and pitfalls
5. Whole group discussion of the use of these sites as an instructional tool
6. Summary of ways to enhance instruction using Yack Pack and Voice Thread in classrooms

Summary:
Psychologists today advocate that information is stored in long-term memory as visual images, verbal units, or both (Clark & Paivio, 1991). In terms of classroom learning, this means that information coded both visually and verbally may be the easiest for our students to learn (Mayer & Sims, 1994). Yet our classrooms today frequently reflect an older model of auditory learning that expects students to transfer information gleaned from a lecture from short-term memory into long-term memory with the touch of a pencil to a notepad. Even further, we then expect a student

to recall this information in an assignment requiring higher order thinking. The question is-- is this expectation a reasonable one for today's students?

As Prensky 2008 summarizes, the world of students is a fast-paced, visually stimulating world of "light" in which they are connected to multiple forms of media simultaneously "through their media and myriad personal devices, both electronic (such as TV) and digital [such as the Internet and cell phone]" (41). As college instructors these facts mean we are no longer viewed as the window to life "out there" as many of us felt in the 60s and 70s. No longer do students hang onto our every word as we attempt to engage them through auditory means. Now the world "out there" is available to young people from childhood on--in a visual, auditory, real-life, up-close manner that can surpass instructors' second-hand accounts in the classroom; in students' eyes, they can learn anything they want by themselves or with their peers as guides.

So how do we reach them and support their learning in a classroom setting, when their cultural tools are so different than our own? The answer is obvious; we must reach across the textbook and enter their digital world, incorporating some of their media into our powered down instruction. Among other means, these presenters have found the Internet sites Yack Pack and Voice Thread to be a viable bridge to the culture of college students as well as a valuable learning tool that reinforces memory by incorporating both visual and verbal units of information.

So what exactly are Yack Pack and Voice Thread? After a brief introduction to the websites, the presenters will afford participants the opportunity to explore each site through a variety of disciplines. Participants will break into groups based on discipline and will review the sites and samples provided by the presenters. During this small group discussion, audience members will focus on an evaluation of these sites, along with an exchange of possible ways this medium may be incorporated into instruction. Small groups will then reconvene into a whole, and presenters will record the exchange of ideas on flip charts.

At the end of the session, presenters will hand out sample assignments that they have used or plan to use in their own classrooms, along with others that colleagues at their institutions have utilized. Throughout this exchange, a discussion of the merits and pitfalls of such web sites in the college classroom will be deliberated jointly by presenters and audience members.

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Academician and Clinician Collaborating to Improve
Teaching, Learning, and Job Performance

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Objectives
The objectives of this presentation are to:
1. Describe the process of collaborating with a clinician to improve teaching and learning;
2. Describe an advanced course in the benefits of using Mind/Body modalities to improve well being and the relationship to job performance; 3. Engage participants in Mind/Body modalities; gentle movement, visualization and breathing techniques to optimize learning and job performance.

Audience
The Mind/Body techniques experienced in this presentation can be applied in all disciplines. In this presentation, participants will learn how to apply the techniques in their particular discipline.

Description
School leaders are under a tremendous amount of pressure to meet state mandated standards and improve student achievement (Ferrandino, 2001). The "No Child Left Behind Act of 2001" requires states to develop high standards for what every child should know and learn in grades 3-8 as well as requiring school districts to close the achievement gap between students, improve school safety, character education, and teacher preparation. The principal's role requires strategic leadership, instructional leadership, cultural leadership, human resource leadership, managerial, external development, and micro-political leadership (http://www.dpi.state.nc.us/docs/profdev/guidelines/standards.pdf).

As a result, principals are citing job-related stress as a factor in deciding to leave the profession (Sorenson, 2007). Schools are becoming a "culture of stress" (Queen, J. & Queen, P., 2005). Principal preparation programs are being asked by school districts to develop coping skills in principal candidates in order for them to deal more effectively with work-related stress. School districts are realizing that the school leader's personal wellness influences the organization's effectiveness (Palmer, 2008). How can principal preparation programs develop coping skills among their candidates and how can school districts provide professional development in this area to their practicing administrators? One method is to teach these candidates about mind-body

connections. Understanding the relationship between the mind and body can improve the one's ability to manage stress (Schure, Christopher, J. & Christopher, S., 2008).

In this presentation, participants will be engaged in Mind-Body techniques and will learn how to integrate these techniques into their courses. Participants will also learn how these techniques can improve job performance.

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Aiding and Abetting the Narcissist 2.0: Personal Epistemologies, Constructivist Pedagogies, and the 21st Century Student

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Summary:

> It was already one in the morning; the rain pattered dismally against the panes, and my candle was nearly burnt out, when, by the glimmer of the half-extinguished light, I saw the dull yellow eye of the creature open. The beauty of the dream vanished, and breathless horror and disgust filled my heart. His jaws opened, and he muttered some inarticulate sounds, while a grin wrinkled his cheeks. He might have spoken, but I did not hear; one hand was stretched out, seemingly to detain me, but I escaped.
> (Mary Shelly's Frankenstein, 1881)

In the 1970s, Sigmund Freud's (1914) concept of narcissism gained secular prominence as the paradigm shifts that began in the 1960s in American culture became manifest in new societal norms (Lasch, 1976; Trzesniewski, Donnellan & Robins, 2008; Judge, LePine & Rich, 2006). Featuring the rise of "the other" through a decentering of authority and a reprioritization of experiential significance, changing ideologies and worldviews challenged those traditional, canonical knowledge bases that were established upon the foundations of patriarchy and religious, ethnic, sexual, and socioeconomic conformity. Paradoxically, this rise of "the other" was enabled only through the rise of the "me," a sociological phenomenon-turned-sociopolitical trend-dubbed-psychological pathology. Any promotion of individual epistemology and experience counter to the normative "great melting pot" identity was sure to raise some eyebrows and some ire, yet "despite the many outcries against it, including President Jimmy Carter's 'National Malaise' speech in 1979" the victory of "me as other" remains palpable and omnipresent in myriad social reforms and liberations, not the least of which are visible in the microcosms of American society, our public universities (Tyler, 2007; Rich, 1979). The legacy of the "Me Decade" of the 1970s flourishes in the 21st century lives, actions, and attitudes of their children, in the population known as "Generation Me" (Twenge, 2006), the next generation of narcissists, in the "Narcissist 2.0."

Recent inquests into this new breed of college undergraduate have returned a laundry list of labels and characteristics (e.g. Frand, 2000; Prensky, 2001; Howe & Strauss, 2000; Sanchez, 2003; Barone, 2003) designed to help faculty better understand the generalized culture of their student body in an effort to best address this narcissistic Zeitgeist. Is the social contract of the modern university an anachronism? (Prensky, 2001; Barone, 2003; Duderstadt, 2000) Are we, as faculty members, equipped to meet the needs of a needier student? (Aviles, Phillips, Rosenblatt & Vargas, 2005)

Nearly 50 years after the subterranean rumblings, we are now facing the monster of our creation, and like so many Victor Frankensteins we are prone to respond inappropriately, often

confounded by what we have done. Broadly conceptualized, the Narcissist 2.0 of the 21st century shares many of the traits assigned to those diagnosed with Narcissistic Personality Disorder, beginning with a grandiose sense of self-importance. Narcissists, in the traditional sense, are preoccupied with fantasies of success, power, brilliance, beauty, or love; and they believe that they are innately special or unique. Narcissists require excessive admiration, possess a sense of entitlement, and are prone to exploit interpersonal relationships for their own gain. Lacking empathy, narcissists are often envious of others, believe others to be envious of them, and exhibit arrogant behaviors (DSM-IV; American Psychiatric Association, 2000). If, as Lasch asserts, these narcissistic tendencies are the psychological manifestation of social change (1976) and if "socially sanctioned self-importance" (Twenge, 2006:72) has become the new normal, then we must find ways to embrace – or at least tolerate – the pathology to reveal and harvest its positive potential.

The transformation of family structures and parenting practices, consumerism, media saturation, and emerging technologies can be credited – among other catalysts – with the evolution of the "narcissistic condition" (Lasch, 1976 and 1979; Manovich, 2001). The Narcissist 2.0 can post anything on YouTube, on Facebook, on Twitter with the assumption that there is an interested audience out there awaiting the next status update. They hold the earnest belief that their voice matters and that their experience count: from texting their American Idol votes to control the next big pop star to asserting their own opinions on SAT tests to develop one-sided arguments (Twenge, 2006). There is little wonder that undergraduates come to college expecting to succeed; they have always been awarded for their efforts and congratulated for their experiences. The good news for educators is that this generation is empowered in ways that no generation before them has been; with guidance, patience, and time the Narcissist 2.0 of today may well prove to be the Humanitarian 2.0 of tomorrow.

This presentation, appropriate for any audience who works with undergraduates in any capacity, will explore the ways in which constructivist approaches to teaching and learning may both satisfy and perpetuate perceived pathologies inherent in student personalities of the 21st century. By sharing anecdotal evidence of student culture through discussion and role-playing, participants will explore ways to positively channel the gifts our students bring with them to class by teaching them the art of reflection, the value of critical thinking, and the liberating process and purpose of identifying their personal epistemologies (Pintrich, 2002; Muis, 2007; Hofer, 2005; Perry, 1981).

Objectives for this session include:
1. Describe the common characteristics of undergraduate students as they relate to traits identified as psychological and/or social narcissism.
2. Discuss the significance of constructivist pedagogy and specific methodologies in light of prevalent characteristics and learning needs of students.
3. Discuss the role of interdisciplinarity in existing curricular structures to enhance student engagement through their own experiences and worldviews.
4. Explore the importance of developing reflection skills and critical thinking tools for students to identify and articulate their own epistemological beliefs and to recognize the origins of their assumptions and paradigms.

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Can a required course be taught democratically?

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Summary:
Too many of us have experienced an education that was done to, not with, us. We were required to take a series of courses mandated by others, with few elective options. This is extremely problematic for teacher candidates, for how can we expect them to help prepare democratic citizens when they have little experience with a democratic education themselves (an education that allows them a high degree of autonomy and choice)? This session will explore how the presenter co-constructed a course with her teacher education students. We will discuss specific tools for enacting more engaging, democratic practices in all courses.

Audience:
University teacher educators or any other university-level instructors

Objectives:
Participants will hopefully:
- identify different levels of democratic education
- recognize the potential pitfalls and institutional constraints of such an education
- delineate the potential benefits of such an education particularly for pre-service teachers
- discuss the purposes of student engagement (is it to better memorize a canon of information, or to aid in personal growth and development, etc.?)
- apply the methods discussed in the session to their own teaching and begin to employ some democratic practices

Activities/Description:
I will begin the presentation with a discussion of my background research in freedom-based education and will show a short (8 minute) video clip of one of the schools I studied (will use my laptop and LCD projector for this latter item). I will discuss the potentials of a more engaging and democratic approach to education, but point out the difficulties of applying the practices of freedom-based schools to more conventional education settings. Using a PowerPoint presentation, I will go through each of the practices outlined in previous section, which I employ to both increase student engagement in my courses and to model engaging, democratic practices for these future teachers. At this point, I will break the audience into small groups for them to discuss their reactions to these practices-do they use them too? What fears do these practices raise? After about 10 minutes of this small group discussion, I will move on to a discussion of the potential pitfalls of these approaches, and of the reactions I have pulled out from student journals and course evaluations. I will save a significant amount of time (20 minutes or so) for in-depth discussion with the audience of their questions and for us to delve into the question of why we want to engage students (a philosophical discussion of what education is for).

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Application-Based Service Learning:
Bringing the Outside World into the Classroom

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Objectives:

- To describe Application-based Service Learning (ABSL)
- To demonstrate how ABSL was used in three different courses to help students apply what was learned in class to a community problem
- To demonstrate how ABSL was used to link undergraduate laboratory experiences with community-based research
- To share preliminary results of ABSL on student engagement and learning
- To have participants discuss ways in which they may use ABSL in their classrooms

Audience:

This session would be appropriate for any instructor wishing to explore a different pedagogy that integrates experiential learning with traditional classroom learning. The content of the presentation will be especially appealing to those interested in using the scientific method to address community problems and enhance student learning.

Activities:

The participants will be introduced to the concept of ABSL and how it differs from Service Learning via a PowerPoint presentation. The use of ABSL in three of the instructor's courses and undergraduate research will be demonstrated. Participants will be encouraged to come up with ways in which they can incorporate ABSL into their classrooms in a discussion that follows the presentation.

Summary:
Universities strive to provide an educational experience that engages students, encourages deeper learning, develops critical thinking, and fosters responsible citizenship. A growing body of research supports experiential education as a way for students to apply what they are learning in their courses to community problems while gaining deeper understanding. Application-based Service Learning (ABSL) is an experiential learning strategy with greater relevance to the sciences, using the scientific method to address community problems and connecting undergraduate laboratory experiences with the outside world.

Through ABSL, instructors integrate the scientific process and methodologies into their classes and apply them to real life situations, which will lead to increased student engagement with the material as has been found in the scientific literature (Cohen & Kinsey, 1994). With ABSL,

students are provided opportunities for critical thinking and problem solving using a tractable, understandable community problem. The three courses in which ABSL was used by the instructor were a non-Biology major course and two Biology major courses. ABSL was used to address the community problems of animal overpopulation/feral cats,zoonotic diseases and public health, and animal hoarding and disease. Additionally, physiology students applied what they learned in class and through their service project (helping at an animal shelter or a feline surgical sterilization clinic) to how various diseases affect the body and how stress contributes to infectious disease. This pedagogy was widely accepted by students and increased student engagement. Data are currently being collected to assess the effects of ABSL on student learning.

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Motivating Students by Implementing the Micro-Burst Model

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Objectives:
As a participant in this presentation, you will:

1) gain an understanding and appreciation of the Microburst Teaching and Learning Model.

2) discuss the importance of implementing the Microburst Model in the learning environment.

3) take away valuable tools and resources that will allow you to use the Microburst Method in the classroom.

Audience:
Anyone interested in creating a positive, motivating learning environment.

Activities:
Participants will participate in a learning style assessment, explore Microburst Model methods, develop a Microburst Model plan to implement in your classroom.

Summary:
Motivating learners is a complex endeavor; however, instructors can influence motivation in many ways and at various levels, including the learner and the learning environment. The Microburst Teaching and Learning Model is one strategy that combines various teaching styles and methods in 'bursts' with different learning styles to enhance the learning process. The Model is unique in that it combines key elements of both educational theory and practice into a framework that is fun, easily identifiable and useable.

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Interdisciplinary Studies and the Everyday Student:
The Role of Active Learning in Promoting Student Exploration of Educational Phenomena

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Abstract:
For over a decade, significant attention has been placed on the development of educational programs that encompass inquiry- and activity-based learning strategies. Such strategies have been empirically shown to provide lasting educational value and increased student engagement, particularly in comparison to traditional, didactic pedagogical methods. In this session, participants will learn about currently utilized activity and discourse-based models of instruction as they apply to interdisciplinary courses and programs across a variety of domains. Participants will also be given the opportunity to engage in the development of such tools and discuss the relevance of these tools in light of current educational practices and goals.

Objectives:
Upon completion of this session, participants should be able to:
- Describe approaches for engaging students enrolled in discipline-based programs in issues regarding interdisciplinary studies in education and curriculum design
- Describe the role and impact of student-driven curriculum design in shaping student learning and educational outcomes
- Apply active-learning and discourse strategies in courses on their own campuses

Audience:
Pedagogical practices involving discourse and active learning are paramount to many, if not all, academic fields of study. For this reason, it is anticipated that this session will be of significance to those participants interested in the aforementioned practices, as well as issues of curriculum design and interdisciplinary approaches in teaching, regardless of academic discipline.

Activities:
The session will begin by defining and contextualizing the role(s) of discourse and active learning in the classroom. I will then briefly provide a case study from my own experience teaching an interdisciplinary course in science education as a means to demonstrate potential active learning tools and the impact of such tools in educational settings of this nature. The remainder of the session will be devoted to allowing participants to explore these tools through direct engagement in active learning-centered activities (such as think-pair-share, concept mapping, lesson planning, etc.). The session will close with an open discussion, allowing participants to share their opinions of those tools discussed, suggest potentially novel tools, ask questions, etc.

Summary:
Research has consistently identified didactic instruction as the primary means by which information transmission occurs in the classroom (Wenning, 2005). While this is the case, such research has also been pivotal in suggesting potential avenues for increasing student engagement in course content and enhancing student knowledge of various discipline-based phenomena (see, as example, Hmelo-Silver & Baron, 2006). As a result, significant efforts have been made both in the expansion of active-based learning strategies to alternative content domains and educational contexts, as well as the development of such strategies for students of all ages and cognitive levels (see, as examples, Leshowitz, Jenkens, Heaton, & Bough, 1993; Taraban, Box, Myers, Pollard & Bowen, 2007). Such efforts have traditionally been met with success and support. While this is the case, there remains a concern in the literature as to whether or not active learning truly does work across all disciplines and, if so, what methods demonstrate the greatest degree of success in implementation and outcome (Prince, 2004). In light of this concern, it is perhaps imperative that we, as educators, continue to be aware of the development and utilization of novel inquiry- and active-based learning strategies in an effort to promote best practices and enhance student comprehension of key phenomena in our respective domains.

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**Effective Facilitation: a series of action research to develop facilitation skills
for teacher training classes using reflective self observation and focused peer observation.**

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This poster session introduces a series of action researches examining different facilitation skills for facilitators of teacher training classes at the Defense Language Institute (DLI) to maximizing discussion time, use the flip chart effectively and other skills to create a learner centered environment. The presenter will share his personal experience of conducting this series of action research to identify his own skills to be developed using reflective self observation, the suggestions found in literature to develop these skills and how suggestions were carried out in the follow up action research and the feedback received from co facilitators through peer observation. Finally, suggestions to continue this research series will be presented.

Assistive Technology Instructional Module Using Student Created Tutorials

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Abstract:
This study expands on ongoing instructional design research by the authors and reports on the development and formative evaluation of an assistive technology student-created tutorial in traditional and online format. The tutorial was field tested with 75 undergraduate students at a Northeastern Pennsylvania college in both traditional and online classrooms during 2009. The purpose of the study was to examine student feedback on the impact of a student designed and developed assistive technology tutorial on academic experience and achievement when dealing with students with disabilities, and propose some guidelines for further exploration of the method. The objective of this primarily qualitative study was to go beyond the traditional classroom instructional modes (e.g., lectures and online assignments) and to incorporate assistive technology into online education. More specifically, this study investigated whether or not the use of student-created assistive technology tutorials in a collaborative learning process enhances student learning and evaluation of classroom experiences for both the student-teacher and the student with disabilities. In-depth interviews were performed and surveys distributed to examine student perceptions of tutorial effectiveness; recurring perceptions were grouped into themes. The following themes emerged from qualitative analysis: Effect on learning, the learning environment, student development, and amount of time and effort needed. The findings of the study indicated that student-created assistive technology tutorials lead to higher levels of perceived skill development, self-reported learning, and evaluation of classroom experiences in comparison with traditional learning.

Introduction:
The increase in the hardware and software capabilities of interactive media has facilitated an increase in the use of technology in learning environments (Owens & Dwyer, 2005). Moreover, a proliferation of computer learning environments is capitalizing on ever-expanding technologies and transforming present learning industries.

In contrast to static presentations, computer-generated presentations can enhance a figures prominence (Hannafin & Peck, 1988). This was evident in the previous study using Microsoft MovieMaker, as student feedback on the use of this animated program as a learning tool indicated a significant positive effect on perceived student learning (Owens & Fralinger, 2007).

Therefore, researchers are increasingly exploring whether computer learning environments in instruction can improve learning.

For children with disabilities, assistive technology computer based learning environments extend physical, social and communicative abilities and provide the means for academic and cooperative inclusion. Assistive technology has the potential to augment abilities and bypass or compensate for barriers that disabilities create (Lewis, 1993).

A tremendous variety of assistive technology is available today, providing the opportunity for nearly all people to access information technology (IT). However, access is not guaranteed with proper assistive technology; rather, IT accessibility is dependent on accessible design. IT products must be designed and created in ways that allow all users (including those who use assistive technologies) to access them (University of Washington).

"The devices that help the least, especially in classrooms, are those that the teachers don't understand. Kids have an amazing ability to utilize devices, but if there isn't a high enough level of training for staff, many devices are a waste of time and money" (Steele-Carlin, 2006).

This research seeks to improve training modalities by implementing student-created tutorials. Tutorials are one of the most ancient and commonly used methods of education. A good tutorial presents information and guidance, makes sure the learner has an opportunity to understand the instruction, and only then continues on to new information. Many tutorials basically consist of a linear presentation of content. When implemented poorly, a tutorial can become what is derisively referred to as "an electronic page-turner" or if web-based, a "scroller." This type of program presents content directly without giving the learner any opportunity to interact other than to call for the next screen. When implemented properly, using the classic principles of instructional systems design, guided tutorials can be engaging and effective. Research conducted by Norton and Crowley (1995) indicated that students in tutoring develop more sophisticated ideas about how to approach learning and the development of their learning, but no significant differences resulted in overall academic achievement.

Another method of training in the classroom is peer tutoring. The process of peer tutoring can be defined as one in which a person who is proficient in a subject matter comes to the aid of one who is less proficient (Gartner & Riessman, 1993; House & Wholt, 1990; Topping, 1996). Historically, the practice of tutorials was deemed a necessary and essential component of a student's learning and education process (Zartisky, 1989). However, this practice has received less emphasis in recent years.

Teaching is one of the best ways to increase the understanding of the instructor. An article by Naevdal (2003) describes how as a graduate student his understanding of Optimal Control (OC) techniques was enhanced by developing a spreadsheet algorithm to solve OC problems. He also describes how showing the solution to other students increased their grasp of the concept. The present study was an attempt to give undergraduates students that same experience by constructing an assistive technology student created tutorial and using that tutorial to teach the subject matter to other students. The exercise gave the students the opportunity to review and understand the theoretical relationships underlying assistive technology and student disabilities.

This study sought to address the perceptions of college level students who designed and developed an assistive technology computer-based tutorial and taught the subject matter contained in the tutorial to their peers.

Purpose of the Study:

The purpose of this study was to explore a teaching exercise conducted with 52 undergraduate students in a traditional classroom environment and 23 students taking online courses, explain a functional orientation to the use of assistive technology to meet the needs of people with disabilities, examine student feedback of how the tutorial design process impacted their academic experience and academic achievement with assistive technology, and propose some guidelines for further exploration of the method. The objective of this study was to go beyond the traditional classroom instructional modes (e.g., lectures and online assignments) and to incorporate assistive technology into online education. More specifically, this study investigated whether or not the use of student-created assistive technology tutorials in a collaborative learning process enhances student learning and evaluation of classroom experiences for both the student-teacher and the student with disabilities.

Definition of Terms and Concepts

Assistive Technology (AT) – A generic term that includes assistive, adaptive, and rehabilitative devices for people with disabilities and the process used in selecting, locating, and using them (Cook & Hussey, 2002). Assistive technology is technology used by individuals with disabilities in order to perform functions that might otherwise be difficult or impossible. Assistive technology can include mobility devices such as walkers and wheelchairs, as well as hardware, software, and peripherals that assist people with disabilities in accessing computers or other information technologies. For example, people with limited hand function may use a keyboard with large keys or a special mouse to operate a computer, people who are blind may use software that reads text on the screen in a computer-generated voice, people with low vision may use software that enlarges screen content, people who are deaf may use a TTY (text telephone), or people with speech impairments may use a device that speaks out loud as they enter text via a keyboard.

Peer Tutoring/Tutorial Learning – These terms are used interchangeably. For the purpose of this study, peer tutoring is defined as a campus service that is provided for students who request additional academic assistance. Peer tutoring can be used as a vehicle for reflection about the cultural and structural significance of the central discipline being studied or, indeed, about the nature and purpose of education itself (Goodlad & Hirst, 1994).

Learning Styles – The different ways people think and feel as they solve problems, create products, and interact. Learning styles models tend to concern themselves with the process of learning: how individuals absorb information, think about information, and evaluate the results (Montgomery, Moody, & Sherfield, 2001; Silver, Strong, & Perini, 1997).

Significance of the Study:

Limited research exists on assistive technology and student created tutorials and the role of personality preferences in relationship to tutorial learning. Disability advocates point out that

technology is often created without regard to people with disabilities, creating unnecessary barriers to hundreds of millions of people.

The current study investigated whether the use of student created computer-based assistive technology tutorials in a collaborative learning process enhanced student learning and evaluation of classroom experiences. By using qualitative methods to obtain student perceptions of effectiveness of student created tutorials, this study adds to the knowledge base of the existing literature. Further, in-depth interviews provide more detailed explanations and insight into student perceptions, which is needed when establishing guidelines for future implementation.

Qualitative Research:
Formative evaluation is the activity in the product development cycle in which versions of instructional products are tried out with representatives of the groups for whom the training is targeted (Baker & Schutz, 1971). Such evaluation typically comes in the form of field tests in which participants provide feedback to the product developers about their reactions to various features of the instructional product and the way in which it is presented. Qualitative research has been defined in a variety of ways. In one definition, Strauss and Corbin (1998) identified qualitative research as: Any type of research that produces findings not arrived at by statistical procedures or other means of quantification. It [qualitative research] can refer to research about persons' lives, lived experiences, behaviors, emotions, and feelings as well as about organizational functioning, social movements, and cultural phenomena (p.10-11). These authors elaborated that qualitative research is best used when the methods are: (a) complementary to the preferences and personal experiences of the researcher, (b) congruent with the nature of the research problem, and (c) employed to explore areas about which little is known. Miles and Huberman (1994) expressed an expanded position and indicated that qualitative research is conducted to: (a) confirm previous research on a topic, (b) provide more in-depth detail about something that is already known, (c) gain a new perspective or a new way of viewing something, and (d) expand the scope of an existing study. Based on this collection of reasons, qualitative methods were appropriate for this study. Limited research exists on student created tutorials and the role of personality preferences in relationship to tutorial learning. The current study adds to the knowledge base of student created assistive technology tutorial effectiveness and establishes guidelines for further exploration of tutorials in the classroom.

Population:
Fifty-two second-year undergraduate students taking Educational Technology and 23 students taking online Fast Track courses during the 2009 school year at a Northeast Pennsylvania college.

The Tutorial:
Step One: To innovatively and effectively help the students learn the basics of assistive technology, we had individual students create a step-by-step computer-based tutorial without regard to people with disabilities. For their tutorial, we included instructions for executing a specific layout using Microsoft Word 2003 as a Web based tutorial. The content, however, had to be completely designed and developed by the students. The individual students were Education majors so the tutorials dealt with simple lessons for K through 12. The tutorials consisted of such topics as:

1.   Fractions for third grade students

2.   The planets

3.   The solar system

4.   The life and times of a butterfly

5.   High school gangs

6.   Learning French as a second language

7.   Elementary Grade Math

The tutorial described in this paper takes advantage of two valid teaching principles: Learning by doing and learning by teaching. The tutorial also served a dual role: As an assessment of student learning and as a tutorial resource for other students. In the tutoring process, an essential aspect is to explore the concept of critical thinking or the approach used in learning, not just receiving a correct response. The tutorial gave the student a chance to interact with the material and concepts to be learned (Topping, 1996).

A commercially built tutorial can, however, become just a "black box." The more interactive approach is to let the students build the tutorial themselves. Not only did the students understand how the tutorial development worked, but they also gained a greater appreciation for classroom management. According to Gardner, Jewler, and Cuseo (2000), when students actually become involved with their academic studies, they expend more mental energy, and this significantly enhances the learning process. The goal of tutoring, particularly at the college level, is to engage students in the process of learning (Billings, Shroyer, & Wells, 2000).

Getting students to teach other students meant that they had to understand the content and think through how it fit together. Furthermore, this role reversal put students in the teacher's position. Students had to think not only about content and structure, but also how best to convey the information effectively.

Step Two: After the completion of the tutorial and evaluation that it was a reliable and valid teaching aid each student was given a trait of a person with a disability including but not limited to:

Learning Disability: A learning disability is a disorder that affects the manner in which individuals take in, express or retain information. It manifests as a deficit in one or more of the following areas: oral expression, auditory processing, written expression, reading decoding, reading comprehension, or math calculations. Students with learning disabilities or attention deficit disorders may also experience difficulty with sustained attention, time management, social interactions and executive functions.

Physical Disability: Children with physical disabilities are defined as those who physical limitations or health problems interfere with school attendance or learning to such an extent that special services, training equipment, materials, or facilities are required. The traits included vision, hearing, and motion impairment.

Each student was then instructed to research the disability and redesign the tutorial as an assistive technology tutorial to meet the needs of the disabled student. The student created assistive technology tutorial was then used to teach another student that was acting with the disability trait. Examples include:
1. Word completion or word prediction programs to increase typing speed when used with an input method (an on-screen keyboard) for students with physical limitations.
2. Glare-reduction screens, screen magnifiers that enable visually impaired students to participate more fully.
3. Voice-recognition software that turns the spoken word into type on a computer screen so students unable to move their limbs can take part in the lesson.
This experiment was conducted over two semesters (fall 2008 and spring 2009). Students were informed that their performance would be graded. The overall objectives were to:
- Expand access to computer-based educational tools for assistive technology
- Research disabilities and end use of assistive technological applications
- Make abstract concepts visible through technology
- Select, implement and adapt technology to teaching assistive technology methodologies and integrate a variety of software, applications, and learning tools
- Assist learners in organizing and analyzing complex information
- Amplify students' means of expression through the use of assistive technology
- Collaborate to enhance student, teacher capabilities and improve student learning
- Enable students to develop polished products through technology

Data Collection:
Marshall and Rossman (1999) suggested that data collection methods in qualitative research could be categorized into four types: (a) participation in the setting, (b) direct observation, (c) in-depth interviews, and (d) document analysis. For the purpose of this research, we utilized in-depth, individual interviews as the primary method of qualitative data collection. Coffey and Atkinson (1996) suggested that data collection and analysis are best conducted simultaneously in qualitative research to allow for necessary flexibility. Data collection and analysis occurred in a cyclical process until concepts and themes became detailed and redundant and new information ceased to emerge (Miles & Huberman, 1994). Therefore, we targeted all 75 participants who participated in the assistive technology tutorial learning. The logic behind this decision was to gain an in-depth understanding of participants' perceptions of their experiences in developing a tutorial. To gain a detailed depiction of participants' perspectives related to their tutoring experiences, we conducted individual interviews, each lasting up to 30 minutes. These interviews were semi-structured with each student writing their responses. The students were unaware of each other's responses. However, the results were revealed to participants during a concluding interview. The majority of the responses were in the form of statements. The specific questions explored were included in an interview guide and summarized in the following survey:
Assistive Technology Student Created Tutorial Evaluation

Directions: Please indicate your responses by checking the most correct answer appropriate.
1. Was the instruction interesting?
   YES   NO   Don't know/Not applicable/Refuse

Comments:

2. Did you understand what you were supposed to learn?
? YES   NO   Don't know/Not applicable/Refuse

Comments:

3. Were the materials directly related to the assistive technology objectives?
   YES   NO   Don't know/Not applicable/Refuse

Comments:

4. Was the tutorial exercise relevant to your teaching?
   YES   NO   Don't know/Not applicable/Refuse

Comments:

5. Did the final product really measure your understanding of assistive technology?
   YES   NO   Don't know/Not applicable/Refuse

Comments:

6. Did you receive sufficient feedback on your tutorial exercises?
   YES   NO   Don't know/Not applicable/Refuse

Comments:

Was there a better way to learn about assistive technology other than the student created tutorial?

Quantitative Methods:
Data obtained from each of the 75 completed surveys were coded and entered into the Statistical Package for Social Sciences (SPSS 9.0) computer software program. Data analysis included primarily descriptive statistics. Descriptive statistics are procedures used for classifying and summarizing, or describing, numerical data (Hinkle, Wiersma, & Jurs, 1998). By using descriptive statistics, one is able to describe distributions and individual scores, and determine the relationship between variables (Hinkle, Wiersma, & Jurs, 1998). In this study, descriptive statistics including frequencies, means, medians, modes and standard deviations were calculated and used to examine scores for the questions presented in the survey to the students.

Qualitative Methods

Qualitative methodology lends itself to multiple meanings and interpretations (Lincoln & Denzin, 1994). The focus of inquiry in qualitative research is the use of participants' voices. Foremost, it is the voice of the participants that enables the researcher to study the phenomenon of interest (Lawrence-Lightfoot & Davis, 1997). The stories unfolded as vivid descriptions of people who are real and who were willing to share their experiences in an effort to aid my study. The stories contain quoted information from the participants perspectives as they were entrusted to us for the intended purpose of the study. The submission of the profiles, while written in story form, was in keeping with the "methodological activities of the portraiture process" (Lawrence-Lightfoot & Davis, 1997).

The truth-value, or credibility, of conclusions in a qualitative study is comparable to the concept of internal validity in quantitative research. Lincoln and Guba (1985) and Miles and Huberman (1994) suggested that research results be scrutinized according to three basic questions: (a) Do the conclusions make sense? (b) Do the conclusions adequately describe research participants' perspectives? and (c) Do conclusions authentically represent the phenomena under study? We relied on triangulation and member checks to enhance credibility. According to Lincoln and Guba (1985), triangulation is the corroboration of results with alternative sources of data. Consultation with an expert in the field was utilized as an alternate data source. Additionally, presenting results to participants during a concluding interview was to serve as a method to enhance the credibility of this study's results.

Results:
Study Sample
The study sample consisted of 75 subjects. Administration of the survey was done at the conclusion of the project.

Analysis of the Data
The data obtained in this study were analyzed using both quantitative descriptive statistics (including frequencies, means, medians, modes, and standard deviations) and qualitative methodologies. Specifically, the researchers examined participant perceptions of the effectiveness of the Assistive Technology tutorial project as a learning tool.

Quantitative Analysis:
Coding System
The 6 questions of the survey quantitatively and qualitatively assessed student perceptions. The quantitative portions of each question were treated as dichotomous "yes/no" variables (1=Yes; 0=No), with the third option of "Don't know/Not Applicable/Refuse" treated as a missing variable. Descriptive statistics (mean, median, mode, standard deviation ratings) for the quantitative items on the feedback questionnaires are displayed in Table 1.
Table 1. Descriptive Statistics

Frequency Distributions
As noted above, the purpose of this study was to investigate student perceptions of the effectiveness of the Assistive Technology tutorial project on their learning so that a future educational workshop to teach the basics of creating tutorials may be implemented. A survey

containing both quantitative and qualitative portions was administered to gather information on student perceptions. Below are frequency distributions of data obtained from the 6 quantitative portions of each question. Frequencies were calculated to determine the mean score for each issue. The mean score represents the average ranking given by respondents for each question. The mean scores and frequency distributions were used to determine with which statements respondents most strongly agreed. Overall, results indicated that the majority of respondents answered "yes" to each of the 6 questions concerning the effectiveness of the Assistive Technology tutorial project, indicating positive perceptions of student learning. Figures 1 through 6 show the frequency of participant responses for these questions.

Figure 1 represents question #1 (Was the Assistive Technology tutorial instruction interesting?). Responses for this question yielded a mean score of .96, indicating that most participants responded yes. The standard deviation was .20, signifying that responses to this question had little variability around the mean. Thus, the majority of respondents felt the Assistive Technology instruction process was interesting.

Figure 1. Assistive Technology Instruction Interesting. The mean score was .96 and the standard deviation was .20, indicating a majority of "yes" responses.

Figure 2 represents question #2 (Did you understand what you were supposed to learn?). Responses for this question yielded a mean score of .97, indicating that most participants responded "yes." The standard deviation was .16, signifying that responses to this question had little variability around the mean. Thus, the majority of respondents understood the material learned from the Assistive Technology tutorials.

Figure 2. Understanding of Learned Material. The mean score was .97 and the standard deviation was .16, indicating a majority of "yes" responses.

Figure 3 represents question #3 (Were the materials directly related to the objectives?). Responses for this question yielded a mean score of .96, indicating that most participants responded "yes." The standard deviation was .21, signifying that responses to this question had little variability around the mean. Thus, the majority of respondents felt the materials of the Assistive Technology tutorial project were directly related to the objectives.

Figure 3. Materials Related to Objectives. The mean score was .96 and the standard deviation was .21, indicating a majority of "yes" responses.

Figure 4 represents question #4 (Was the Assistive Technology tutorial exercise relevant to your teaching?). Responses for this question yielded a mean score of .93, indicating that most participants responded "yes." The standard deviation was .25, signifying that responses to this question had little variability around the mean. Thus, the majority of respondents felt the Assistive Technology tutorial exercise was relevant to their teaching.

Figure 4. Relevance of Tutorial Exercise. The mean score was .93 and the standard deviation was .25, indicating a majority of "yes" responses.

Figure 5 represents question #5 (Did the final product measure your understanding of assistive technology?). Responses for this question yielded a mean score of .88, indicating that the majority of participants responded "yes." The standard deviation was .33, signifying that responses to this question had some variability around the mean. Thus, the majority of respondents felt the final tutorial product positively measured their understanding of assistive technology.

Figure 5. Final product measurement of understanding. The mean score was .88 and the standard deviation was .33, indicating a majority of "yes" responses.

Figure 6 represents question #6 (Did you receive sufficient feedback on your final results?). Responses for this question yielded a mean score of .85, indicating that most participants responded "yes." The standard deviation was .36, signifying that responses to this question had little variability around the mean. Thus, the majority of respondents felt they received sufficient feedback.

Figure 6. Feedback on Final Results. The mean score was .85 and the standard deviation was .36, indicating a majority of "yes" responses.

Qualitative Analysis:
Effect on learning: From the feedback, it appeared that this method had a significant positive effect on students' learning. By requiring them to prepare, research, redesign and teach, students were compelled to fully understand the content of that lesson and the design process. Interestingly, the majority of students welcomed the challenge to construct the tutorial and all seemed well motivated to complete the assignment. As the students wrote:

1. I learned more and realized how in depth things had to be explained.
2. It showed us how we could help kids with special needs because we might come across kids who need help.
3. I understood what we were supposed to do, but trying to accommodate every "type" of children was difficult (e.g., autistic).
4. I actually enjoyed learning how to make this and some new facts about my topic.
5. I liked that we were able to be completely free and creative with our tutorial.
6. This gave me a new perspective of how to get my point across.
7. I learned making it and from it learned more about the topic.
8. Exercise forced us (or at least me) to do extra background research in order to make an honest attempt to create an appropriate tutorial for a student with colorblindness and cerebral palsy.
9. The assignment was simple but effective.
10. I am going for an elementary education degree; this could be helpful for students when their teacher is absent and a substitute is present.
11. Before I did not know how to use certain tools on the computer to help disabled students; now I do.

12. I am able to use what I know and think students with disabilities know to teach more effectively.

13. I think it was an effective way to learn, especially since it will be something we encounter when teaching. No one can expect their lessons to fit every student. All in all, it was a good exercise.

14. I thought this was a good way to learn how to tend to the needs of students with disabilities.

15. One could teach an entire whole semester course on assistive technology, perhaps even several courses on the topic. In my opinion, the professor has fallen victim to the thinking that plagues most teachers. They don't understand why their students "don't get it." The professor is obviously comfortable with computer technology and applying it to teaching – so much so that it has become second-nature to him. To someone like me, who still struggles with using a computer, designing a lesson plan around assistive technology is like falling off a cliff. I'm still not even sure what a lesson plan is, let alone how to design and implement one.

16. I can't think of anything else that would help us learn about assistive technology. After all, the only way you really learn is by doing and I feel that we did just that!

The learning environment: Although some students stated they would not incorporate the assistive technology tutorial project into their future classrooms due to applicability to certain subject matter or grade level, the majority perceived the project to be a useful tool that could enrich the learning environment. Students expressed the following:

1. We had to make sure the lesson was usable to all students.

2. I thought the project was an innovative way to show and teach information to a class.

3. I feel the project was a good way for us to experience how we will have to modify our lessons in our future classes.

4. The opportunity of learning how to modify lessons to accommodate students with special needs was phenomenal.

5. I will definitely use something like this in my class.

6. We can use this project in the classroom.

7. The tutorial is something I'd likely utilize as a teacher. This project also made me aware of changes I might have to make to offer each student an appropriate education.

8. I don't think I would use this project at the elementary level.

9. There were a lot of things out there to help those who need it. I feel that some of these programs are helpful and I would definitely use them in the classroom.

10. I don't feel that I will use this in my classroom if a student had a learning problem.

11. If I taught elementary education, I probably wouldn't use this for them.

12. I feel that this will not be very helpful in my classroom; I feel math is better taught in person; the most effective way to teach math for any student is through a hands-on approach.

13. The project is relevant to teaching because it may help students with special needs; however, I just don't know how realistic a tutorial like this would be for 3rd graders.

14. The assignment made me realize the significance of assistive technology and how it will benefit a student with a disability. It also made me think of all of the things a teacher has to be aware of when dealing with a student with a disability.

Student development: Overall, students felt that the assistive technology project aided in their teacher preparation. By designing tutorials to accommodate individuals with special needs, students were forced to research and learn about different disabilities and creatively modify

lessons. Further, most students expressed that the assistive technology project would help in the development of their future students who may have disabilities. As the students wrote:

1. I liked this project. I think it's important to be able to accommodate those who may need extra help in what they are learning.
2. We got a feel of different ways to help students.
3. I had to change my project to fit all my students, including those with disabilities.
4. I was thinking about bringing my tutorial to an advisement meeting or interview.
5. I now know how to better accommodate all students.
6. Now I will think about students with disabilities when I teach in my future classrooms.
7. Its easy to use this project and incorporate it into the classroom.
8. The constructive criterion of this project will make my future tutorials more effective.
9. I learned a lot about technology and creating a lesson on the internet.
10. I learned how to adapt uses of technology to help handicap students.
11. Future students could definitely benefit from this tutorial.
12. I'm a special education major, so this project was especially helpful in my teacher preparation.
13. I like to use technology in class so this project will be very relevant to my teaching.
14. I truly never considered adapting technology lessons to accommodate students with disabilities so I really learned so much.
15. This project provided a good method of instruction.
16. Now I know how to use these programs to teach a class.
17. I know now that I have to think more about catering to every student in my classroom.

Amount of time and effort needed. A common difficulty was that some students felt that too much the time and effort was put into developing two tutorials, one traditional and one assistive. They felt that one assistive tutorial would have been sufficient. Further, students expressed that due to their lack of understanding of certain disabilities the project became more difficult and required additional time and effort. As the students wrote:

1. The instruction was interesting but annoying at the same time when trying to get everything together.
2. I know I was supposed to change my tutorial for those who have some form of disability but I never had any instruction on some of these disabilities.
3. Not enough background was given in regards to the type of disabilities and potential technological accommodations. No visual was provided to "drive home."
4. I understood what I was supposed to do, but I had some trouble adapting my lesson for special needs students since not a lot of background was provided.
5. I liked the idea of changing our tutorial to better accommodate the needs of ESL students; but again, I do not have much experience at this point with adapting my original lesson to address the special needs students.
6. There were probably better ways to do my project, but I was confused and focused mostly on creating an interesting tutorial; therefore I did not fully understand everything.
7. A lot of it was complicated and I as well as others had problems getting the tutorial exactly the way we wanted it.

8. I feel there should have been a lot more instruction on some of the disabilities so I knew exactly how I could change my tutorial. I don't want to do something halfway through when it probably wouldn't help.

9. I feel as if I were shown a blue-print of a house and then told, "Go build one," without any knowledge of carpentry, masonry, electrical wiring, plumbing, etc. You could teach a whole-semester course on assistive technology and still only scratch the surface. Trying to cram it into a two-week on-line assignment is ludicrous.

Conclusions:

From this study, we found that student perceptions of the assistive tutorial design and development process experience connected with increased learning. The shared comments of participants produced an increased awareness of how students described their relationship with the process, how they gained assistive technology learning strategies, and how they perceived derived benefits of tutorial learning. The findings may help to explore institutional practices that encourage excellence in academics for all students. The results also address how students' preferences relate to their tutorial designed learning experience, specifically, and their overall learning, in general.

Limitations of the study:

A number of problems did surface throughout the course of the designing phase. These included:

1. The students had a limited knowledge of technology. EDUC 251 is the first class educational majors take in the four year curriculum.
2. The students had a limited knowledge of disabilities.
3. Some students were unsure of the project requirements and objectives.
4. Students worked individually on projects, which increased the workload.
5. The project was not applicable to all subject areas of teaching.

Recommendations

The purposes of the experiment were achieved in varying degrees. Of course, one experiment and limited feedback are insufficient to determine the usefulness of this method. More "experimentation" over a period of time and a broader base of students and subjects will be required. Below are some suggested guidelines for colleagues who might be interested in conducting similar experiments:

1. Expand on disabilities traits and methods of accommodation.
2. Explain in detail why two tutorials need to be developed.
3. Thoroughly explain the technology methodologies involved in constructing a tutorial.
4. Incorporate the option of working in groups to construct tutorials.
5. Provide examples of tutorials geared toward a variety of subject matters.

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Promoting active learning among traditionally passive learners

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Summary:
Considerable work has been done to identify the learning style of Asian students and compare/contrast them with their western counterparts. Ballard and Clanchy (1991) belong to the camp that holds the view that, generally speaking, Asian students favour a reproductive approach to learning. This has been attributed to cultural and contextual factors. For instance, Confucianism--which is still fairly pervasive in Chinese belief systems and practices--advocates respect for authority and reinforces the notion of the teacher as sage-on-stage. Traditionally, too, memorization is seen as foundational to learning; it ensures grasp of information without which there is no basis for its understanding or transformation to knowledge. On the other hand, there are others, such as Kember (2000), who argue that the passive Asian learner is a misconception: "evidence from over 90 action research projects disprove the common assertions that Asian students prefer passive learning."   In his study of Asian international students in Australian, Wong (2004) found that "initially more of them (33%) preferred the lecturing style but as they moved in to their third and fourth year of study this preference seemed to lessen& learners are highly adaptive for learning."

Indeed, students can adapt and, sensibly, will adapt if they see a good reason to do so. Therefore, part of promoting active learning involves helping learners to understand the rationale and see the gain – both short and long term – in adopting such an approach. In a longitudinal study at the National University of Singapore (NUS) that tracked >4000 freshmen through 3 years of study, it was found that in their first semester in NUS, students in the faculties who use a dominant achieving or deep approach tend to score better than those using a dominant surface approach. However, by the end of three years of study, the pattern seems to be the reverse, with students using a dominant surface approach doing better than those using a dominant achieving approach, and with the dominant deep approach no more associated with highest performance. This would suggest that students are mindful of whether active learning will result in better grades, and signals that the assessment system has to be aligned to drive desirable learning outcomes. But arguably more important, it suggests the need to convince learners of the longer-term gains of quality learning – beyond the purely academic – and a quality learning experience.

To promote active learning among engage such learners requires sensitivity to cultural factors and mindsets, purposeful effort at educating learners about the usefulness of active learning, and exploring ways to encourage participation in such learning. This session proposes to share some experiences and strategies built on input from students and colleagues, classroom experimentation and reflective evaluation. Given the internationalization of higher education and the increasing ubiquitous presence of Asian students, hopefully these strategies will be transferable across geographical borders and trigger discussion and exchange of information.

Feedback in One-to-one Teaching: Its Use In Many Learning Settings

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Presentation objectives
- Participants will gain an understanding of the music teaching strategies.
- Participants will discriminate music teaching strategies from other types of teaching strategies.
- Participants will recognize small teaching "frames."
- Participants will see music teaching strategies modeled.
- Participants will engage in using music teaching strategies with their own content.
- Participants will be encouraged to develop a cross-discipline approach to learning further teaching strategies with a view to arts teaching and learning in general.

Audience:
This presentation is most appropriate for college faculty and high school educators who teach in classrooms with students in small and large groups. Administrators may also find this presentation rewarding as they can share the teaching strategies with their faculty at their own institutions.

Activities:
This presentation will focus the second portion on interactive role play, as modeled by the presenter. Participants will be given scripts which they may alter to suit their content, while keeping the strategies intact. This will allow them to understand, demonstrate, and recognize music teaching strategies and how they may be useful in their own learning settings.

Summary:
While the best practices of teaching and learning have remained, in principle, somewhat stable in the wider educational community, the teaching strategies of music teachers have not been often shared with this community. Music studio teachings have held an oral tradition that takes place in a small room, once a week, one-on-one with a musical instrument. This tradition has proven to be very successful for the purposes of teaching musical instruments and many of these strategies are to be found also in the music performance classrooms of band, chorus, and orchestra, but can they be useful to other teachers and educators? Recent research in the field of music education has revealed what Duke (2005) calls "teaching frames." These frames (p.161) occur within an instructional period and involve students reaching small goals in small time intervals. These teaching frames are evidenced in all music teaching although may not be necessarily labeled as such. According to Duke, "there is always an identifiably goal, and it encompasses all of the teacher and student behavior devoted to the accomplishment of the goal" (p. 160). Teacher behaviors include interventions, information, directives, questions, modeling, and feedback.

Student behaviors include verbalization, information, question, and musical performance. If the musical performance label is removed and we allow student performance to take its place, then the music teaching strategies can transfer to other learning settings where there is still an identifiable goal.

The key difference of the music teaching strategy is that a teaching frame can happen very quickly and much interaction will occur. For example, Henniger et al (2006) found that frequent and highly positive reinforcement is used in the music studio. The placement of feedback in the instructional sequence has been prominent in music education research for some time. Price (1983) illustrated that students were more successful in accomplishing defined objectives if their teachers used a complete sequential pattern of instruction – teacher instruction, student performance, teacher feedback – than students who received incomplete patterns of instruction. Yarborough and Price (1989) ascertained that teachers with more experience tend to follow each student performance of feedback.

Henniger et al (2006) and Creech & Hallam (2003) provide a detailed literature review of the concepts of effective teaching in the music domain which is suggested for a more in-depth review than can be illustrated here. Current research supports the predominance of positive feedback occurring after each student performance (Brogla-Krupke, 2003; Henniger et al, 2006; Colprit, 2000; Benson & Fung, 2005) and the effects this has on student progress (Costa-Giomi, Flowers, & Sasaki, 2005; Brogla-Krupke, 2003). There are several widely accepted and successful characteristics in the one-on-one music domain (Duke, 1999/2000; Duke & Simmons, 2006). The music teaching strategy uses accepted instructional sequence but it happens in a short time frame. As the frames happen frequently, the level of reinforcement via feedback also increases and the outcome is often higher levels of achievement for students. The sharing, modeling, and practicing of the music teaching strategy may have implications and impact on the wider community of teachers and learners; it also improve achievement for the students of other faculty and administrators.

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Facilitating and Evaluating Reflective Practice within Electronic Portfolios

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Presentation objectives:
- Participants will gain an understanding of the nature of reflective practice within electronic portfolios.
- Participants will discriminate high level reflective practice from other types of reflective practice in electronic portfolios
- Participants will examine evaluative rubrics appropriate for reflective practice
- Participants will see high quality reflective prompts modeled
- Participants will engage in creating effective rubrics for reflective practice
- Participants will use model rubrics to evaluate cases of student reflection

Audience:
This presentation is most appropriate for college faculty and high school educators who teach in classrooms with students in small and large groups. Administrators may also find this presentation rewarding as they can share the reflective practice strategies with their faculty at their own institutions.

Activities:
Participants will engage in discussions of the how to support and evaluate reflection within electronic portfolios. In addition, participants will be given prompt material which they may alter to suit their own teaching needs, while keeping the evaluative strategies intact. This will allow them to understand, demonstrate, and recognize appropriate self-evaluative strategies about their students (and potentially their own) reflective practice and how this may be useful in their own teaching and learning settings. Participants will have the chance to "play" and use model rubrics to evaluate examplars of students' reflection within electronic portfolios.

7.

Summary:
With the exception of progressive work in higher education in regard to improving the quality of teaching (ISETL), little evidence is found in regard to faculty using self -reflection. The majority of research carried out in this area is done so with pre-service teachers who are required to show evidence of their journey from student to teacher. At the higher education level, it is tacitly assumed that faculty have assumed the role of teacher smoothly and often review their teaching styles and abilities. The notion of doing so with reflective practice, instead of the prominent "student perceptions of instruction" scores, is perhaps novel but is certainly progressive. Examining the support for reflective practice in students assists in illuminating its potential for use with faculty in two important ways: first, that faculty can incorporate reflective practice for their own undergraduate students in fields other than teacher education, and second, that they may use it to examine their own teaching at the higher education level.

Teaching is "a process of ongoing learning, reflection and decision making" that develops over the course of multiple stages of preservice teachers' education (Barr, et al., 2000, p. 464). Beginning with undergraduate studies, preservice teachers develop their knowledge through academic coursework. Subject-specific content knowledge develops through the preservice teachers content-specific coursework, but pedagogical content knowing (PCKg) does not typically begin to develop until preservice teachers are provided with opportunities to apply subject-specific content knowledge to actual teaching situations (Cochran, DeRuiter and King (1993), Wilson, Shulman, & Richert, 1987). PCKg is defined by Cochran et al (1993) as: "a teacher's integrated understanding of four components, pedagogy, subject matter content, student characteristics, and the environmental context of learning" (p.266) For the purposes of this work, pedagogical content knowing will include teachers' purposes for teaching content, knowledge of students content understandings (and potential misunderstandings), knowledge of curriculum and materials, and knowledge of instructional strategies for teaching particular topics within the context of their internship settings. As Grossman (1991) explains, "teachers must draw upon both their knowledge of subject matter to select appropriate topics and their knowledge of students' prior knowledge and conceptions to formulate appropriate and provocative representations of the content to be learned" (p. 9).

The literature in the field has emphasized the importance of reflective practice in leading preservice teachers to restructure prior understandings and refine pedagogical thinking (Schon, 1987; Calandra, Gurvitch, & Lund, 2008). This is especially critical during the semester in which students complete their student teaching placement, while compiling a culminating electronic portfolio (and accompanying defense/hearing/oral presentation). Fenstermacher (1994) is useful here in terms of understanding what it means to reflect on ones practice in a deliberate manner:

> Yet another way to justify that we know something is to offer good reasons for doing or believing it... the reasoning of the teacher takes place in folk or commonsense language... Reasoning of the sort I am referring to here is what Aristotle called phronesis: deliberative reflection of the relationship between means and ends. (p 44-45)

Building on this understanding, Posner (2005) argues, "if preservice teachers do field experience without thinking deeply about it, if [they] merely allow [their] experiences to wash

over [them] without savoring and examining them for their significance, then [their] growth will be greatly limited" (p. 3). Preservice teachers' accounts of well remembered events / critical incidents can serve as important ways to provide good reasons for their actions and understandings within the context of their program and thus serve as a way for them to begin to articulate their PCKg. While recent scholarship continues to advocate for providing preservice teachers with opportunities to exercise reflective practice, we do not know how the use of tiered assessments or rubrics can elicit, support and capture students' growth as deliberative reflective practitioners. Where methods courses typically have included written reflections to exercise and engage preservice teachers' reflective thinking (Smagorinsky & Whiting, 1995), these approaches are subject to selective memory and lack of supportive evidence (Yerrick, Ross & Molebash, 2005).

In summary, much of this literature and theoretical framework can support students in other content areas, not simply teacher education. The tenets of teacher education are salient for improving teaching skills in faculty also and the nature of reflective practice makes is suitable for faculty to use in their own classrooms and with themselves. Participants in this session will learn to synthesize the use of reflective practice both for their students and for their own teaching, in addition to learning the skills appropriate for evaluating reflective practice material

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Using Multi-modal Reflective Practice in Teacher Education

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Purpose and literature:
Teaching is "a process of ongoing learning, reflection and decision makingthat develops over the course of multiple stages of preservice teachers' education" (Barr, et al., 2000, p. 464). Beginning with undergraduate studies, preservice teachers develop their knowledge through academic coursework. The English, history and social science, and music education programs at Virginia Tech are post-graduate programs, immersing students in graduate academic and pedagogical coursework as well as field-based teaching experiences, all leading to a Master of Arts degree in Curriculum and Instruction (MACI) and Virginia postgraduate licensure in the respective discipline. Subject-specific content knowledge develops through the preservice teachers' content-specific coursework, but pedagogical content knowing (PCKg) does not typically begin to develop until preservice teachers are provided with opportunities to apply subject-specific content knowledge to actual teaching situations (Cochran, DeRuiter and King (1993), Wilson, Shulman, & Richert, 1987). PCKg is defined by Cochran etal (1993) as: "a teacher's integrated understanding of four components, pedagogy, subject matter content, student characteristics, and the environmental context of learning" (p.266) For the purposes of this work, pedagogical content knowing will include teachers' purposes for teaching content, knowledge of students content understandings (and potential misunderstandings), knowledge of curriculum and materials, and knowledge of instructional strategies for teaching particular topics within the context of their internship settings. As Grossman (1991) explains, "teachers must draw upon both their knowledge of subject matter to select appropriate topics and their knowledge of studentsprior knowledge and conceptions to formulate appropriate and provocative representations of the content to be learned" (p. 9).

The literature in the field has emphasized the importance of reflective practice in leading preservice teachers to restructure prior understandings and refine pedagogical thinking (Schon, 1987; Calandra, Gurvitch, & Lund, 2008). This is especially critical during the semester in

which students complete their student teaching placement, while compiling a culminating electronic portfolio (and accompanying defense/hearing/oral presentation). Fenstermacher (1994) is useful here in terms of understanding what it means to reflect on ones practice in a deliberate manner:

> Yet another way to justify that we know something is to offer good reasons for doing or believing it... the reasoning of the teacher takes place in folk or commonsense language... Reasoning of the sort I am referring to here is what Aristotle called phronesis: deliberative reflection of the relationship between means and ends. (p. 44-45)

Building on this understanding, Posner (2005) argues, "if preservice teachers do field experience without thinking deeply about it, if [they] merely allow [their] experiences to wash over [them] without savoring and examining them for their significance, then [their] growth will be greatly limited" (p. 3). Preservice teachers' accounts of well remembered events / critical incidents can serve as important ways to provide good reasons for their actions and understandings within the context of their program and thus serve as a way for them to begin to articulate their PCKg. While recent scholarship continues to advocate for providing preservice teachers with opportunities to exercise reflective practice, we do not know how the use of tiered assessments within an electronic portfolio can elicit, support and capture students' growth as deliberative reflective practitioners.

Where methods courses typically have included written reflections to exercise and engage preservice teachers' reflective thinking (Smagorinsky & Whiting, 1995), these approaches are subject to selective memory and lack of supportive evidence (Yerrick, Ross & Molebash, 2005). This study aims to leverage the unique capacities of the multimodal electronic portfolio in an attempt to more authentically capture critical thinking and reflective practice through multiple modalities (i.e., video vlog entries, videos of field work remixed and edited to showcase elements of practice, podcasts, written reflections), with and between project members, and their students, in terms of emphasizing "learning as the process of joining a community of practice, reversing the traditional pattern, and allowing students to engage in learning to be even as they are mastering the content of a field" (Brown & Adler, 2008, p. 30).

In the process of compiling the complete electronic portfolio, preservice teachers will need to tie theory, beliefs and practices. Artifacts included in the portfolio provide rich texts for analysis of the tie between teachers' espoused pedagogical knowledge (that which they are articulate) and their in-use PCKg (that which is apparent in their practice), providing yet another dimension of the value-added in the use of multimodal composition as opposed to written reflection (Strauss, 1993; Yerrick, Ross, & Molebash, 2005). Here, multimodal composition allows for "a different system of signification, one that transcends the collective contribution of its constituent parts" (Hull & Nelson, 2005, p. 225). The project aims to access teacher knowledge by creating a space for the telling and interrogating of stories of practice that can continually be reviewed, re-seen, re-evaluated, and re-interpreted by multiple instances of re-viewing, and re-seeing.

Methods:
Our primary research question was what are the differences in content, themes, and narratives between multi-model reflections as shared by undergraduates? Our analysis of multimodal

artifacts and students reflection became a tool for understanding their growth and development as critical thinkers and reflective practitioners. Our qualitative analysis used Scribe, Transana, and Nvivo. Preliminary findings from the analysis suggest that students narratives are markedly different between the two contrasting modalities, but that content and themes remain consistent between disciplines (music, history, and English). In summary, much of this literature and theoretical framework can support the use of reflective practice with two contrasting modalities with undergraduate students in other content areas, not simply teacher education.

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Mental Health and Grading Practices Targeting
Personalization, Participation, and Productivity

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Summary:
The proposed poster session will demonstrate the components of a generalized learning contract designed to reinforce principles of good mental health organized around the innovative learning paradigm Pedagogy 2.0 as described by Catherine McLoughlin and Mark Lee in the International J. of Teaching & Learning in Higher Education (2008). A power point presentation with handouts will also engage the research on hardiness and resilience which supports the model learning contract which has been used in numerous psychology and general education courses. The audience will have the opportunity to participate in an exercise which discriminates between quality designs and focuses on individual disciplinary needs.

University Students' Online Learning Experience:
Factors that Influence Involvement, Performance, and Satisfaction

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Summary:
The purpose of this study was to examine the factors that influence students' involvement, course performance, overall satisfaction with regards to their online learning at an urban university. The population studied consisted of primarily undergraduate students enrolled in seven week block courses that were taught solely online.

The literature review examined previous research concerning online leaning. Specifically, research on the characteristics of online students, instructor involvement in the online classroom and how that contributes to student involvement is examined and discussed.   Research on student expectations for their online course, attrition rates, course outcomes and lastly, student satisfaction with their online experience is also critically reviewed.

The study incorporated both quantitative and qualitative research. A simple longitudinal prospective panel design without replacement was used. The study followed the same groups of students through a seven week online course format. Surveys and interviews were conducted at the beginning of the course and then at a second point in time once the course had been completed. Classroom observation took place during weeks 3 and 4 of the course.

The study revealed that students' initial perceptions of online courses were not always realistic. Students often misjudged course workload, course difficulty, and the extent that the faculty would be involved with the class. The amount of hours per week that an online course entails was often underestimated by students, sometimes by as much as 50%, and caused some students to contemplate withdrawing from their course.

The study found those instructors who are more involved in their online courses have students who are more involved in their online courses. Pearson correlations showed that there was a moderate/high correlation for faculty and student involvement. Further analysis of the data revealed that the students who put the most hours into their online course gave the highest ratings to their faculty member in terms of the instructors involvement in the class.

Students' overall satisfaction with their online class came from a variety of sources. The three most important factors were deemed to be: faculty involvement, that the student possessed the characteristics necessary to be successful in their online environment i.e., they are self-motivated and self-directed with regards to their coursework, they enjoy working independently, and lastly, the online environment fit their learning needs.

It is clear from this research that students have a number of preconceived notions before beginning their online course. Students who do not realize the rigors involved in an online class may find themselves struggling with the amount of coursework, not prepared for the long hours involved, unhappy at the lack of participation and guidance on the part of the instructor, and ultimately end up with less than desirable course performance and less than desirable satisfaction with the course.

The instructor's role in an online course is the key, for many students, to course satisfaction and course performance. The instructor's involvement, or lack thereof, has a significant impact on the student's involvement. For online instructors to meet the needs of their students, they need to be prepared to invest the time and energy necessary to build relationships with their online community just as they would in their classrooms.

Student satisfaction in their online courses comes from a variety of sources. The first element for satisfaction is that the online environment is a right fit for the student. Not every student will thrive in the online environment, but for those who do, the rightness of the course fit had the highest correlation to overall course satisfaction. Instructor involvement also contributes to student satisfaction with online courses. Instructors need to realize how critical their role is not only to student satisfaction but also to student success and persistence in online classes. Students who are self-motivated, self-directed, happy working independently, and actively participate in their courses reported higher levels of satisfaction than their peers.

Making Portfolios Work: Overcoming Validity and Reliability Hurdles

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Presentation Objectives:
- Showcase quantitative analysis of portfolios;
- Demonstrate how instructional feedback provides a dynamic process of the professional development of teacher candidates;
- Elaborate how the process provides an opportunity for teacher candidates to illustrate their use of student data to make better informed decisions to modify and differentiate their classroom-level instruction; and
- Engage the participants regarding the development, implementation, and analysis of pre and post assessments.

Presentation Audience:
- Faculty and administrators from teacher education colleges
- Others interested in our methods used for our quantitative analyses

Presentation Activities:
The presentation will start with the authors providing related background information, which will include a literature review of implementing and assessing portfolios. The audience will then be involved in an activity analyzing teacher candidates' portfolios and providing feedback. The activity will be followed with a discussion.

Presentation Description:
Portfolios are not a recent discovery. The concept of presenting a body of work has been around for centuries. Artists, musicians, models, actors, sales agents, and other professionals have always used portfolios to showcase their work.

In the dynamic context of teacher education, the portfolio is used as a "teaching tool" to help the teacher candidates make connections to the material during their student teaching experience. The portfolio creates opportunities for reflective practice on the dynamic learning environment of the classroom. The portfolio process provides evidence that documents how they used various approaches in assessing student learning, how they modified instruction, and how they impacted student learning.

Student teaching provides an opportunity to gather information about one's personal capabilities for teaching. Some of the most powerful influences on the development of teacher efficacy occurs during student teaching and the induction year (Hoy & Woolfolk, 1990).

During the student-teaching experience, there is a strong commitment to implementing an evidence-based approach as a means of addressing issues of accountability. Field supervisors and cooperating teachers use a multiple-measures approach that provide teacher candidates with the appropriate feedback regarding their teaching efficacy. By applying a process-oriented and formative approach during student teaching, the portfolio is used on many levels. This evidence-based approach informs their instructional practice and ongoing professional growth.

This multiple-measures approach provides evidence and data for supervisors for more critical instructional (formative) feedback for individual teacher candidate growth. We are exploring innovative ways to measure their impact on improving student achievement and for providing credible evidence to support our national accreditation efforts.

In addition, this multiple-measures approach provides valuable data for program assessment in a concerted effort to initiate engaging collegial dialogue with the faculty. Formative assessment provides a dynamic impact on the professional development of teacher candidates.

The data mining process used for evaluating the portfolios fosters productive discussions toward program modification via the quality control system. Data gleaned from the portfolios can help establish links between teacher candidate assessment and student performance (Denner, Salzman, & Bangert, 2001). By analyzing the performance data, we are investigating the relationship between the preparation of the necessary set of skills needed for teacher candidates to be successful in their student teaching experiences.

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Professional Ethics: Architectural Education and Practice

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Objectives:
Share teaching methods for the study of professional ethical dilemmas.

Audience:
Academics committed to the teaching of professionals in a "real world" context.

Activities and Description:
Introduction and Overview
Student and Professional Interaction Experiences
Case Studies of Ethical Dilemmas
Professionals Review and Comment
Review of Case Studies in Context
Closing

Summary:
Professional practice meets architectural education initially in the academic world and eventually in the world of architectural practice. The ethics of practice crosses both worlds. The Department of the Architecture in collaboration with architectural offices is introducing students to the realities of practice and the opportunities and challenges of making the transitions from the academy to practice during their academic years.

The transition between education and practice has traditionally had its challenges but it is even more complicated in today's climate of accreditation, internship, and architectural registration examinations. With the common goal of most architectural students being licensure, it is essential to assist students in navigating this sometimes complicated path. In Building Community: A New Future for Architecture Education and Practice, Boyer and Mitgang concluded, "that architectural education is really about fostering the learning habits needed for the discovery, integration, application, and sharing knowledge over a lifetime." The sharing of knowledge from practicing architects to today's students is essential.

The unique opportunity for students to visit and have candid access to successful practitioners has become invaluable to our architectural students formal education. Key to this success is communication and collaboration. Architects in practice and architectural students find great benefits in the success of the collaboration between education and practice.

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Being Here: Energizing the General Education Curriculum
through Engagement with Place

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The objectives of this session are for participants to:
- Understand the goals, structure, challenges to, and support and rationales for the Philadelphia Experience
- Become acquainted with concrete examples of the Philadelphia Experience
- Consider the possibilities for instituting their own place-based learning program

Summary:
The Philadelphia Experience (PEX) is a key feature of Temple University's new General Education program. PEX courses develop disciplinary and interdisciplinary understanding through bringing students into direct connection with the city itself. In every PEX designated course, some learning goals are met through integrating Philadelphia experiences into the curriculum. These experiences range from interviewing local artists, to tutoring young readers, to touring one of the citys water treatment plants. While we will share more about PEX, the focus of this session will be on considering the possibilities for bringing place-based learning to youw own institution.

The session will begin with a mini-lecture on the Philadelphia Experience, presented from both the Teaching & Learning Center and General Education points of view. In addition to speaking about the program, we will show video clips of faculty and students engaged in and talking about PEX. Following a brief question and answer period, participants will work in small groups to envision possibilities for designing place-based courses or programs in their own institutions. The session will end with participants sharing some of the ideas they have developed.

The audience for the session includes faculty and administrators involved in designing general education and/or other interdisciplinary programs as well as those interested in collaborations between Teaching & Learning Centers and academic units.

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Starbursts & Brainstorms: Developing a Classroom of Creative Thinkers

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Objectives:
Participants will share ideas and discuss why creative thinking is important to student learning and learn how to initiate and integrate creative thinking skills, using specific creative thinking methods.

Participants will take back to their classrooms strategies for motivation, methods of application, and facilitation activity for student engagement in creative thinking that can enrich their curriculum content and lead to an energized learning experience for students and faculty alike.

Participants will gain valuable ideas and implementation strategies to make learning an experience beyond the textbook. Productive concepts that take only a little time to understand at this session can be easily adopted across disciplines. Taking risks to lead students to re-arrange boundaries, make innovative associations, and avoid polarized thinking and mere recitation of the thinking of others will result in a stimulating learning experience for students that go with them well beyond the completion of one course. It also can be an invigorating way for instructors to take standard course material and cause students to take ownership of their learning, thereby raising the level of satisfaction from a faculty perspective as well as the student perspective.

Audience:
Faculty who want to increase the level of creative thinking that results in students full engagement with course content.

Activities:
Types of activities to be used during this presentation include:
- Audience participation in a brief discussion on creative thinking and challenges associated with generating it.
- Demonstration by session leaders of how to use creative thinking methods to enhance course content.
- Demonstration by session leaders of how to use the creative thinking methods to help students to rearrange boundaries, make innovative associations, and use their own experiences to think about course content.

- Practice opportunity during session for participants to use the creative thinking methods on course of participants choice.
- Distribution of tools for educators to take with them to use in classrooms across disciplines.

Presentation Summary:

Creative thinking can produce unexpected twists and turns in students' ability to overcome limitations, challenges, and negative attitudes about learning, but it also involves hard work on the part of the instructor as well as the student. Thomas Edison understood that, "Genius is one percent inspiration and ninety-nine percent perspiration," and many who already use creative thinking methods in the classroom would agree (Kirby and Goodpaster, 2nd Ed, 114). Instructors may know about creative thinking strategies, but they may be reluctant to add new elements of risk and/or add more work to an already heavy load that accompanies implementation of a new methodology. Creative thinking might be measured by some as "more work," which would be a good example of not thinking creatively on how to energize the learning environment.

In order to take advantage of an existing learning strategy defined by interdisciplinary boundaries, this session presents methods and reasons why creative thinking can enhance learning for students. The outcomes are worth the measure of added work for instructors, and for most, the time to prep and use creative thinking methods is a small investment for the return of a positive learning experience. The power of creative thinking has long been lauded as a tool for coaxing original problem solving results. In the classroom that fosters and encourages creative thinking, students are encouraged to desire the opportunity without fear of failure, learn individual skills based on collective knowledge, which potentially may result in a satisfying eureka moment, or help them rearrange and expand limited boundaries on how they think about their course content.

The purpose of using creative thinking strategies in the classroom is to teach students to think beyond what's already been said and/or accomplished. It is a strategy to validate the diversity of personal experience and identity of students and add real value to the learning experience. Faculty will present a memorable learning experience, one that may be marked by serious retrospection, fun, or fueled by an opportunity for unfettered imagination. For students, this results in not only enhanced learning of the subject matter, but also in ways to think about challenging it. Creative thinking leads to critical thinking, with particularly rich opportunities for students to understand that learning does not always come to them. Instead students begin to see that they have creative resources within themselves that will expand their thinking, enrich it, and help them connect to their course material in incredible new ways.

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Instructor and Student Classroom Perceptions:
An analysis of disjuncture in perceptions of curriculum and implementation

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Research Purpose:
The purpose of this research was to gain an understanding of the extent to which there is a disjuncture between instructor and student perceptions of curriculum and implementation. This knowledge is helpful in interrupting the schisms between instructors' curriculum goals and students understanding of the material. Furthermore, this research assesses instructor/student divisions in the favorability of instruction techniques.

Literature Foundation:
Classroom interactions require some degree of unity between the instructor and student perceptions of the curriculum provided and the instruction techniques.

DISJUNCTURE BETWEEN INSTRUCTOR/STUDENT PERCEPTIONS OF CURRICULUM

In one review of an attempt to integrate a post-secondary curriculum, Goodstein (1994) outlines barriers to curriculum transformation. The overwhelming problem was that many faculty members believe that they are without need of assistance in terms of curricular reform. As a result, they run the risk of not meeting the intended reform goals.

Hodson (1993) reviews teachers' epistemological views of science and scientific inquiry. He suggests that these views are reflected in teaching practices. As a result, the teacher's theory of science knowledge has a great impact on students' understanding.

In order to combat mismatches in curricular reform goals and implementation, Rothenberg (1994) suggests that "intensive learning experience for those involved" (292) is a necessity for curricular changes to maintain focus and serve the goals of curricular reform. This is a steep hurdle, particularly to post-secondary education. It is necessary (in terms of curriculum and teaching practices) to provide and (perhaps require) intensive learning experiences for faculty.

A disconnect in terms of student expectation may have harmful effects for the student. For instance, Smith and Wertlieb (2005) found that students who had unrealistically high academic expectations had lower first-year GPAs than other students. This suggests that perhaps giving students unrealistic expectation of curricular outcomes can result in harmful consequences to performance outcomes.

Furthermore, Rothenberg (1994) points to the fact that changes in the syllabus of a course do not necessarily relate to reformed curriculum. Although, the course outline may be used as one tool of introducing information, students, over the course of a semester, may understand the relative importance of ideas addressed in the syllabus but not in the body of a course as not worthwhile. As a result, it is necessary to understand the perceptions of both instructors and students in terms of the curriculum offered throughout a course.

DISJUNCTURE BETWEEN INSTRUCTOR/STUDENT PERCEPTIONS OF INSTRUCTION TECHNIQUES

In an evaluation of student knowledge and student perceptions of instructors, Lake (2001) found that students in active learning courses performed better on assessments than those in lecture based formats. However, students' perceptions of their instructors and what they had learned compared to their perceptions of lecture-based courses was poor. They generally believed that they learned less and that the instructor was less effective. Machemer and Crawford (2007) found that students valued lecture and active learning, but were most concerned with their own academic outcomes. Lake (2001) suggests that the views of instructors may be a result of the culture of institutions of learning that does not regularly offer active learning as the ideal or as productive. This can be mediated by slowly applying active learning techniques throughout a

semester. Furthermore, recognizing that academic outcomes play a large perceptual role for students, it is necessary for instructors to communicate both content and pedagogical choices with students.

Methods:
The Temple University "Science and Mathematics Assessment Research for Teachers (TU-SMART)" project is improving student learning. One part of this goal is "advancing the knowledge base on the preparation, induction, enhancement, and retention of STEM teachers, and on the strategies that strengthen and diversify the STEM teaching workforce" (Teacher Professional Continuum material). To assess this goal within the TU-SMART project, questionnaires and interviews have been done with post-secondary instructors and their students at Temple University.

Temple University is a large metropolitan university in Philadelphia with instruction in a variety of areas including the sciences, mathematics, and education focused toward pre-service teachers in these areas. Temple has secured more than 150 scholars from around the world in tenured and tenure-track faculty positions since fall 2004. The main campus academically supports 21,500 enrolled undergraduates. The student body is diverse with about 45% male and 55% female students. Furthermore, Temple is "one of the most diverse campuses on the east coast with around 17% African American, 10% Asian, 3% Hispanic, 3% international, 9% "Other" and 58% white students" (TU: Admissions Material). Although the University is a research institute there is an emphasis on providing smaller class sizes with an average of 27 students per class.

At the beginning and ending of each of the last eight semesters, questionnaires have been completed by undergraduate students in a variety of the sciences, mathematics, and education courses offered on the main campus of Temple University. The instructors for these courses have been given similar questionnaires. Each respondent has been asked a variety of questions about the curriculum in the classroom and the instruction techniques used. This material has given us a source to identify disjuntures between instructor and student perceptions of curriculum and implementation. To supplement these questionnaires, 50 minute classroom observations were made to assess the levels of engagement and instructional practices used in the classrooms providing both quantitative and qualitative assessments of instructional implementation.

Results and Discussion/Conclusions:
The final analysis is yet to be completed (last of data collection early May 2009). However, preliminary findings include:
- The classroom culture plays a role in the connection between instructor and student perceptions of implementation.
- The course subject plays a part in the connections and disjuntures between instructor and student perceptions of curriculum.
- Student and Instructor perceptions of beneficial assessment techniques vary based on course content, but are generally consistent with one another

It is apparent that there is a variety of factors that affect the existence or extent of disjuncture between instructor and student perceptions of curriculum and implementation. Of particular interest are the subject matter and the classroom culture. This knowledge is helpful in interrupting the schisms between instructors' curriculum goals and students understanding of the

material. Furthermore, these findings underscore the necessity of instructor/student communication in terms of instructional expectations and design.

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Planning a Hybrid Online Course for Graduate Students

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Objectives:
1. Share lessons learned from the development of a hybrid online graduate course.
2. Discuss issues related to this format of course delivery.

Audience:
Instructors of online courses in any discipline.

Activities:
The session will begin with a PowerPoint-assisted description of the development of the course. A rationale and description of the course structure will be explained as well as an overview of the implementation of the course. The instructor of the course kept a reflective journal throughout the implementation of the course and issues that were raised and lessons learned as a part of that reflection will be shared. Next, evaluation data from students in the course will be shared and summarized. The final activity of the session will be to engage the audience in small and whole-group discussions about issues related to the development and implementation of hybrid online courses.

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Teaching With(out) a Net:
Lessons Learned from Teaching Without Textbooks

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Objectives:
- To present the authors experience in teaching without texts.
- To engage the audience in discussion concerning the pros and cons of such an approach.
- To present tips for adopting this approach in ones classes.

Audience:
Appropriate for all full-time faculty, part-time faculty, and graduate students

Activities:
Take Audience to Bb Course Portal to See Author's Current Course Content;
Think-Pair-Share. Pros and Cons of Such an Approach;
Present brief PPT re Authors Experience

Description:
Here's a statement with which most everyone can agree: College instructors cannot assume that students come to their classes having done the required reading. Now heres a statement sure to generate some controversy: In many cases textbooks deter the pursuit of knowledge more than they help it. Some textbooks do a fabulous job of making our course content relevant, but others insult students' intelligence by oversimplifying and fragmenting the subject matter so much that it becomes incomprehensible. Still others explore only a few topics instead of a standard content set.

While some textbooks are excellent, most bore my students and frustrate me. They are frequently composed of mind-numbing language, and since most textbooks are marketed nationally they frequently try to be all things to all course instructors, resulting in ten-pound tomes that cover all topics superficially. Many promulgate content misconceptions or even outright errors. They present ideas as discrete facts to be accepted, rather than as clues of principles to be discovered and explored. And consistent with Steven Colbert's "truthiness," our students believe that if it is in the text, then it must be true.

I didn't set out to banish the textbook from my courses. During my early years of teaching I based much of my course content on the textbook. In my middle years, after my initial exposure to the scholarship of teaching and learning, I continued to use a text but found that I assigned very little reading from it. In class I focused more on using active learning activities rather than lecture on the content of the text. More recently, I scrapped the use of the text altogether and really have not missed using one. As I have added more alternative course resources, I have found that students have learned far more without the text.

Most of us assign textbooks for what we always assumed were good pedagogical reasons: We wanted students to be able to fill in gaps we don't get to, engage in fact-checking, hear other perspectives, have easy access to data, find a framework for some of our more esoteric departures, and provide students with a specialized reference guide rather than having them reach for a general topics encyclopedia. Great ideas – except that it doesn't work that way anymore!

Today's texts are too expensive, too long, and too dense to be of much practical use. I freely admit that it was the first of these sins that first led me to eschew a text in my courses. I decided to stop using a text when the $55 paperback I was using shot up to well over $100 and I simply couldn't justify the price, given how little I teach from a text. I have found that very little generates more student complaints than a professor assigning a book that's not used.

Without a textbook, I can create a curriculum that engages students by relating the topics of my course to their everyday lives. Lessons become clearer when I link the topic to an issue that affects them personally. For example, most if not all of my students are daily Facebook users, and I can use Facebook as a teaching tool to explore topics/concepts such as privacy and security concerns regarding personal information, the influence of social networking on the political process, and how social software is transforming typical business models to sustain a competitive advantage in a particular industry. A little creativity is all that is needed to apply Facebook to practically any discipline. Other student-related examples common to most university environments include all of the typical "hot-button" student issues such as on-campus housing, food service, campus parking and transportation, and registration.

Teaching without a textbook means more preparation time, especially in the first few semesters. It means amassing and adapting curricula and lessons from a wide variety of sources, including journals, lab books, Web sites, packaged curricula, and other teachers. It means mapping this collection of resources to the course content standards and student/course learning objectives of your discipline. Additionally, it can mean proactively engaging and persuading the university administration, the faculty, and the students that ditching the textbook is in the students' best interests. But it's worth this effort. My students are more engaged, they understand more of the content, and they develop a deeper comprehension of the subject matter.

The process itself was a gradual weaning. I wouldn't recommend that any teacher -- particularly a new teacher with multiple classes to prepare for -- try to create a year's curriculum alone or over a single summer. Beginners should take careful note of which of their activities are working and why, and then make adjustments suited to their students individual abilities and needs. For example, students at my university typically have stronger reading and writing skills than math skills, so I integrate a review of basic mathematics and algebra into my work with Excel spreadsheets. The use of Excel recurs throughout my course, but the required algebra review is not covered in textbooks.

Whenever possible, I develop curricular/learning activities that encourage students to draw their own conclusions. My curriculum is also peppered with activities that allow me to gauge the students' understanding and adapt quickly to their needs; such unscripted activities are an anathema to many textbook publishers

But what about all those good reasons we assigned texts? Sorry, folks, but that's old thinking and old learning style. Students tell me that if they need a fact, it's a mouse click away. They also know about databases the likes of which no textbook can touch, can locate images to illustrate their papers through a simple Google search, and have access to every one of their library's specialized reference guides from their laptop. In fact, quite a few of them get so excited by thoughts stimulated by lectures and online searches that they get actual books off the library shelf.

If one assumes the ability to read as the rock-bottom criterion for college entry, there's really no point to rehashing text material with students other than to clarify what confuses them, a matter that should be approached on a case-by-case basis. Any institution still devoted to text-and-test could usefully place said courses online.

Are there some students who can benefit from a text? Yes, but why make them shell out $150? Almost every discipline has several online texts they can read for free, as well as outlines that are much more coherent than most texts. One can also, as I do, simply place a text -- any current one will do -- on library reserve. Not surprisingly, students don't seem to resent texts nearly as much when they can consult them when needed and for free. My advice is trash the text and don't worry about covering every topic. Your students will thank you.

Though I don't discuss with the students my rationale for shunning a textbook, on a recent student feedback form, I asked them whether they'd prefer to use one. More than 95 percent said no. Some complained that textbooks are heavy; many derided them as boring or difficult to read. As one student put it, "Textbooks are filled with stupid words that make things harder." Several responses indicated that textbooks are useful only for certain kinds of learning. "You don't learn stuff from textbooks," one student wrote. "You just memorize for a test, then forget it." I won't settle for that in my classroom; without a textbook, I don't have to.

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Mentoring New Faculty: Developing Strong Teacher-Scholars and Building Bonds Across Disciplines

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Objectives:
This poster session will provide a model for interdisciplinary faculty development that not only benefits individual faculty, but that also builds bonds among an interdisciplinary cohort of new faculty.

Audience:
Department chairs, deans, administrators who plan faculty development options.

Activities:
Discussion of the challenges facing new faculty and how to plan faculty development workshops that respond to those needs.

Description:
Historically, our institution, like many others, has offered a one-day orientation for new faculty members across the entire university. In this setting, faculty are provided with information on a wide range of topics including academic policies and procedures, crisis management, employee benefits, and faculty governance. This type of overview allows new faculty to get a general sense of the many issues that they will confront over the course of their first year; however, it does not fully prepare them to deal will these issues. In response to the expressed need for on-going faculty development during the first several years of employment in the College of Arts and Sciences, we have developed a three-year series of workshops designed to ease the transition of new faculty entering our college within the larger institutional context.

Our model has expanded in response to the demands of the faculty over the past three years. Originally envisioned as a series of two or three workshops per semester for the first year of full-time employment, we now offer three workshops each semester for each of the first two years of employment as well as two workshops for third year faculty. The program for the first year faculty includes workshops that cover the following topics designed to help faculty get started as teacher-scholars: general orientation, insider tour of campus, on-campus funding, proposing new courses, using our learning management system more effectively, course design, and balancing teaching, research and service. The second year program includes workshops that treat the

following issues that come up as faculty take on increased responsibilities as members of the university community: advising (2 workshops), participating in faculty governance, crisis management, strategic planning, and demystifying university governance and administration. The third year program consists of workshops on general education and assessment as well as on international opportunities for faculty. We also host informal lunch meetings with each cohort at the end of the year in order to discuss general concerns they may have. In addition, we have begun an orientation meeting for adjunct faculty as well as a workshop for newly-tenured faculty to discuss the next stage of their career.

Recent research has begun to establish the value of mentoring for new faculty, but most studies focus on one-on-one mentoring and not on cohort-based faculty development workshops as a mechanism for mentoring. In particular, we are interested in exploring not only how such mentoring benefits individual faculty members, but how it contributes to a more cohesive academic community by giving faculty an opportunity to build bonds across disciplines with members of the faculty cohort to which they belong by virtue of being hired simultaneously.

Participants will gain information about how to assess new faculty needs and how to build a faculty development program for new faculty that addresses these needs. We will provide information about the various workshops we have organized as well as our early assessment of the program's success based on feedback we have received from faculty.

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University Students Do Respond to Incentives:
Embedding Formative Assessment techniques in Mathematics Courses

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Abstract:
The focus of this research paper is on improving mathematics instruction by embedding formative assessment techniques in courses. Data (pre/post content tests, pre/post attitudinal and behavioral surveys, and quiz, test, and final grades) from six sections of the same course, differential equations, spread over four semesters were collected. The conditions that varied were different weights of quiz grades (0% to 20%) in the final grade and the amount of response the

instructor gave on the quizzes (grade only, comments only, and grade and comments). Preliminary analyses indicate that students do respond to incentives.

Research purpose
The issues of assessment and accountability have gone beyond the classroom and entered the political arena. With this development they have become less nuanced as broad generalizations and policies are sought. What sometimes gets lost in many of these discussions is the fact that the educational sector is incredibly varied by grade, by subject, and by instructional format. Yet, at every level of instruction within the educational sector, the focus continues to be on improving instructor practices and raising student achievement. In this research paper we are going to consider an aspect of assessment that has been garnering increasing interest, specifically formative assessment, and consider how what types of students benefit most from its use.

Literature foundation
According to one report on the subject, "Assessments provide an operational definition of standards in that they define in measurable terms what instructors should teach and students should learn. When students engage in assessments, they should learn from those assessments" (National Education Standards, 2001). Thus assessment, whatever form it takes, defines the playing field of academic interaction where the processes of teaching and of learning should be mutually reinforcing. However, in an era where accountability through standardized tests has become a driving force in educational reform, the definition of how and what an instructor should teach and how and what a student should learn is becoming significantly narrower.
As usually understood, assessment is used by most instructors to determine what learning has occurred, and serves as the basis for the assignment of grades. Such assessment is summative as it is the end point of the teaching-learning sequence. Assessment is formative when the evidence is used as an on-going process within the class to adapt the teaching to meet student needs as well as provide feedback to students (Black and Wiliam, 1998). It is very difficult for instructors not to focus on summative assessment measures since the prevailing standards and accountability pressures drive them inevitably in this direction. Some have indicated that the time has come when formative assessment, occurring within the learning process, needs greater prominence (Black and Wiliam, 1998; Layng, Strikeleather, and Twyman, 2004). In reality, both perspectives need to be incorporated into a total learning process.

Formative assessment informs both instructors and their students as to the degree to which the students have mastered the material. Feedback to the students serves two functions, to identify problem areas and to provide reinforcement of successful learning and achievement. Feedback to the instructor serves to identify the degree to which instruction was successful and identify needed changes in instruction. It can be used to distinguish between individual and group problems that can then be used to suggest solutions: revision of instruction, specific group work, or individual remediation. Yorke (2003) offers a prescription for an approach to formative assessment. In the model as depicted in Figure 1: put in summative here.

1. The instructor constructs a lesson module and related assessments based on the perception of the students readiness and prior knowledge and then presents the module (Stage 1).

2. The instructor administers an assessment (Stage 2).

3. Both the instructor and the students consider the assessment results. (Stage 3).

4. Dialogue between the instructor and the student begins (Stage 4). Depending on dialogue with the instructor, the student adjusts learning style or proceeds with current style. Depending on the dialogue, the instructor adjusts teaching or proceeds to the next learning module (Stage5).

Figure 1
Stages of Formative Assessment Process

As is apparent from Figure 1, the conceptualization of the process is not difficult. However, the measurement of the degree to which it has been implemented and the degree to which it results in a measurable effect is another situation. Also, not only is this a staged process, but there are two different perspectives to consider, that of the student and that of the instructor. Further, variations within the educational process – different grades, different subjects, and different classroom characteristics such as size and instructional format – make estimations of effect difficult.

For the instructor, formative assessment generally implies frequent assessments that vary by: a.) length, b.) depth of knowledge expected, c.) relative importance, and d.) format; altered instruction based on assessments; instruction on the interpretation and use of the assessment results; and perhaps altered classroom interaction to increase student engagement. For the student formative assessment means considering adjustments in studying and perhaps in classroom behavior in light of assessments (see Figure 1).

research base on formative assessment and the efforts to demonstrate its effectiveness in improving teaching and learning have focused very heavily on K-12 classrooms and the professional development of in-service instructors, has generally focused on the role of the student and the student reactions, and has been based on small samples (Boston, 2002; Hattie and Jaeger, 1998; Ruston, 2005; Taras, 2002). Further, while Ruiz-Primo and Furtak (2004) do broaden the discussion of assessment to informal interactions, more attention has been paid to formal, planned assessment contexts. However, not enough attention has been paid to the fact that this teaching/learning process can be operationalized in different ways, that there can be different levels of implementation, and that the focus can be on instructor, students, or both. Sadler, in an article about formative assessment, argued that grades may be counter-productive to formative assessment in that they are focused on what has been accomplished and not what needs to be done (Sadler, 1989). Taras (2002) argues that grades often have the unfortunate effect of distracting students from what they should be focused on and that is learning. Specifically, "I reiterate that marks have a place even in formative assessment, but not in isolation and not before feedback and judgments have been interiorized" (p. 507.).

Methods
In this study a type of formative assessment, increased feedback to students, was tried under different conditions in eight sections of a differential equations course during four semesters at

an urban university. The university where the research was done is very large thus reducing within semester and between semester contamination threats. None of the students were to be told about the study. The sections were generally of the same size (N=30 students) and did not differ in gender and race/ethnicity distributions, nor on their ability as measured by their entrance SAT scores.

The same materials and the same number of tests (4) were administered in each class. What differed was the number and weight of the quizzes and the amount of feedback on the quizzes. The weights of the quizzes in the final course grade varied from 0 to 20%. Also, On some of the quizzes the instructor provided grades only, comments only, and grades and comments. Lastly, in addition to a content based pre and post test and final grades, pre and post survey attitudinal and behavior data were collected as well.

Table 1: Research Conditions by Semester and Course Section

Spring 07	Q1 Q2 Q3 Q4 (T1)	Q5 Q6 Q7 (T2)	
251.01	Grades Only	Grades & Comments	Quizzes 12% of final grade
251.02	Grades & Comments	Grades Only	Quizzes 12% of final grade

Fall 07	Q1 Q2 Q3 (T1)	Q4 Q5 Q6 Q7 (T2)	
3041.01*	Grades & Comments	Comments only	Quizzes 0% of final grade
3041.02	Grades only	Grades only	Quizzes 0% of final grade

Spring 08	Q1 Q2 Q3 Q4 (T1)	Q5 Q6 Q7 Q8 (T2)	
3041.01	Grades & Comments	Comments only	Quizzes 20% of final grade
3041.02	Grades & Comments	Comments only	Quizzes 10% of final grade

Fall 08	Q1 Q2 Q3 (T1)	Q4 Q5 Q6 (T2)	
3041.01	Grades & Comments	Grades & Comments	Quizzes 20% of final grade
3041.02	Grades & Comments	Grades & Comments	Quizzes 10% of final grade

     * University course number change only

Summary of Results to Date:
While the final analysis is yet to be completed, preliminary analysis indicates the following:

- The variable most strongly related to the dependent variable was the students pretest content score. However, controlling for differences in ability, being in one of the formative assessment sections added 10.30 points to the final score which is equivalent to a whole grade difference, that is, a "B," instead of a "C."
- A value added model designed to capture the effects of what happened in the classes was used when the difference score, predicted score minus actual score, was calculated for each student. The students were then sorted into three groups: those who achieved well above what was expected (80th percentile and above), those who achieved well below what was expected (20th percentile and below), and those in the middle percentiles. A student classified in the 80th percentile or higher on this difference score need not have

achieved at the highest level, but certainly achieved significantly higher than predicted. Also it was possible for a student to have achieved a good grade, yet be in the 20th percentile or lower on the difference score. The difference score findings were:

1) Students who performed significantly above expectations devoted time early in the semester to their course work, while those who performed significantly below expectations spent almost twice as many hours at a paid job. At the end of the semester, students in this latter group reallocated their time and most likely were playing catch up.

2) On the pre attitudinal survey, those students who performed well above what was predicted had the highest mean on the academic confidence scale and the highest mean on the like science scale. Those students performing well below expectations, had the highest percentage responding that they do the best they can to learn and the lowest percentage on the like scienceitem.

3) On the post attitudinal survey students performing well above expectations had the highest percentage of students responding that they were certain that they could do well in mathematics and felt that they learned the skills needed to get a good job. The students performing well below expectations had the highest percentage agreeing that they tried to do the best they could in mathematics classes and were certain they could learn the materials when they tried.

Discussion and Conclusion:
It is apparent that integrating formative assessment techniques, in this case quizzes of different weights in the calculation of the final course grade during the semester, into a university course did have a significant effect on student performance. A number of issues still need to be addressed. Is this the only effect that the integration of formative assessment can have? Are some students affected more than others? Do some students need to be affected more than others? A larger student base is needed to address these issues and will be in the next study.

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Active Learning During Lecture: Not an Oxymoron

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Objectives:
- examine the benefits/drawbacks of lecture as an instructional strategy
- consider the barriers to the implementation of active learning strategies in large courses
- participate in active learning strategies during a lecture
- enhance knowledge and skills in the implementation of active learning strategies during lectures

Audience:
Anyone who uses lecture as an instructional strategy

Presentation Activities:
Participants will experience a variety of active learning techniques integrated into a lecture given by the presenter. The activities will lead participants to examine the benefits and drawbacks of lecture as an instructional strategy, consider barriers to the implementation of active learning strategies, particularly in large courses, and identify active learning strategies that they could incorporate into their lectures.

Summary:
The value, or lack thereof, of lecture as an instructional strategy has recently received much attention in the literature (e.g. Burgan, 2006; Bland, Saunders, & Kreps-Frisch, 2007). The criticisms of lecture as an instructional strategy are many. Critics assert that lecture results in passive students, and is ineffective as an instructional strategy (Mazur, 1996; Powell, 2003 as cited in Walker, Cotner, Baepler, & Decker, 2008) and that student attention wanes after 10-15 minutes of lecture (Benjamin, 2002; McKeachie, 1999; McKeachie & Svinicki, 2006). Lujan and DiCarlo (2006) contend that instructors feel as though there is so much content that needs to be covered that they resort to lecturing because of its efficiency, with the result being that student learning is relegated to committing facts to memory. Students develop little deep understanding and soon forget much of what was "learned."

However, Walker et al. (2008) believe that there is value in lecture and that "good lectures can be compelling." Burgan (2006) asserted that "students benefit from seeing education embodied in a master learner" and "students who have the opportunity to observe a reasonably articulate expert presenting difficult knowledge can, at the very least, gain the insight that ideas matter." Burgan goes on to say that the two factors that that most engage undergraduate students related to individual instructors' pedagogy are control of material and concern that students understand the material.

Critics of lecture advocate for active learning strategies that require students to engage with the material in an active way through discussion, problem solving, group work, and hands-on exercises (e.g. Lujan & DiCarlo, 2006; Walker et al., 2008; and Yazedjian & Kolkhorst, 2007). Advocates of active learning strategies identify numerous benefits including increases in student motivation and engagement (McClanahan & McClanahan, 2002) and increases in student critical thinking abilities, conceptual understanding, attendance, and confidence (Cooper, MacGregor, Smith, & Robinson, 2000).

It would appear there are benefits to both lecture and strategies identified in the literature as active learning strategies. Thus, it would seem that instructors would want to incorporate both into their teaching. In this session, the presenter will model how to efficiently incorporate active learning strategies into a lecture in an effort to keep participants engaged, and also facilitate the active processing of information.

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Constructing Performance Assessments for Your Course

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Summary:
Performance assessment has been widely debated at the K-12 level, but less so at the college level. Some college courses have used performance assessment for years, for example creative writing, student teaching, medical case studies, and even publishable experiments in sciences and social sciences. Other professors are tied through their own undergraduate experience to essays or multiple-choice tests. Without training in assessment, it can be difficult to figure out how to evaluate such complex tasks as as a case study, and most professors have not had courses in classroom assessment.

Donald (2002) points out that assessments tell students what they are not required to learn, as much as what they must learn. Multiple-choice tests are typically limited to testing isolated bits of information. Proponents argue that performance assessment can measure what multiple-choice tests and essays cannot: students' actual performance and thinking processes, not just their ability to recognize a correct answer or to write about performance. Detractors decry subjectivity and extra work for the instructor. Stiggins (2008) points out that all assessments entail subjectivity and require work on the part of the instructor. For multiple-choice tests the work comes in the preparation of the test – a new test each semester – and subjectivity is in the choice and wording of questions and distracters. For essay tests, the work and subjectivity are both in grading. For performance assessment the primary teacher work comes in initial development of the task and the grading rubric. Subjectivity can enter either in development or grading. However, in subsequent years the well-designed performance assessment needs only tweaking, not a totally new test. The instructor's work is front-loaded.

Performance assessments typically require more work on the part of the students than do more traditional assessments. Cognitive psychologists are fond of pointing out that the person who does the work of thinking is the person who learns (Bransford, Brown, & Cocking, 2000). Considering this, who should be doing the work of assessment, the instructor or the students?

In this session we will work together in the large group and in small groups to construct performance assessments aimed at participants' own courses. Examples such as case studies, simulations, and authentic projects in several fields will be distributed and critiqued to initiate the discussion. Small discipline-based groups will brainstorm performance assessments appropriate for their own fields. Scaffolds will be provided to help participants develop brainstorms into performance assessments, modeling authentic performance for different academic levels. Guidelines will be presented for developing valid and reliable rubrics. The same small groups will then draft a rubric specific to the performance assessment on which they have been working. Participants will leave with a draft of an authentic performance assessment in their own field and an accompanying rubric for evaluation.

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Starting with the End in Mind:
Writing Learning Outcomes Based on Authentic Performance

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Summary:
In the current climate of accountability, accrediting agencies are asking college departments across the campus to define learning outcomes for both programs and specific courses. Professional programs have been required by their licensing agencies to delineate learning outcomes for some time, but in the liberal arts, this is relatively new territory. When faced with the task of spelling out their students expected learning, many professors look at the amount of knowledge these students do not have and feel overwhelmed by what they feel they must teach, even in introductory courses.

Wiggins and McTighe (2005) suggest taking a step back to reconsider the issue as starting with the end in mind, what they call backward mapping. This involves envisioning the performance expected from students by the end of the course, then writing learning outcomes and teaching toward this performance. This is very different from teaching to the test because the performance envisioned is not a test, but an authentic professional activity, albeit at a lower level, appropriate to the studentsunderstanding.

The learning outcomes arrived at using this process most often include not only knowledge, but also important thinking processes and frequently skills and dispositions as well (Stiggins, 2008). Designing a course around a performance also lends coherence to the body of knowledge that students may otherwise perceive as a collection of knowledge fragments. Such coherence helps students construct their understanding in a usable fashion, thus improving learning (Bransford, Brown, & Cocking, 2000).

Furthermore, if the intended performances are chosen carefully, this can become a way to clarify for the instructor what knowledge is vital at each stage of learning and, importantly, what might be better in a different course or different level. When this method is used in designing programs, it can help instructors determine which courses are necessary pre-requisites to others, in order to meet benchmark performances along the way toward a degree.

In this interactive session we will begin by envisioning the end: brainstorming in the large group and in small discipline-based groups the types of authentic performances and/or products appropriate for different disciplines, and consider together which are reasonable for specific levels and course content. We will then use those desired end performances and/or products to help develop reasonable learning outcomes, whether at the course or program level. Participants will leave with a draft of course or program learning outcomes based on authentic performance in the discipline.

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Critical and Creative Thinking: Designing Courses that Make Students Think

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Objectives:
Participants attending this session will:
1) Have an appreciation of the importance of incorporating critical and creative thinking at the design stage of developing courses and/or programs.
2) Learn the 3 stages of the "Understanding by Design" framework, sometime called the backward design.
3) Practice writing, reviewing, and improving their Enduring Understandings in the design stage of course/program development.

Audience:
Individuals responsible for course or program development

Activities:
Using provided templates, participants will practice developing "Enduring Understandings" or "Overarching Ideas" that will be used to emphasize both the heart of the discipline/unit/class as well as incorporate critical and creative thinking. Participants will also be given instruction in proper assessment types for different levels of understanding. Finally, each participant will be introduced to a method of planning learning experiences and instructions that tie back to the enduring understandings and selected assessment types.

Description:
This session provides an alternative for curriculum development where the desired student outcomes take center stage and the resulting curriculum follows naturally. The author encourages participants to experiment with the Understanding by Design methodology, during the session and as part of the continuous improvement process for their curriculum.

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Marriage of Knowles and Bloom by MBA Students

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Presentation Objectives:
- Sharing a method of modeling reflexivity and synthesis with graduate students
- Illustrating the value of reflection, questioning, and dialogue to adult learning

Presentation Audience:
Professors of graduate students

Presentation Activities
Description of process being shared with directions (10 minutes): Participants read a paragraph about adult learning and write 3 sentence reflections about the topic, exchange papers, evaluate with the rubric CES: Content: 2 points; Errors: 2 points; Style: 2 points, then share the paper youve evaluated with the group (15 minutes). Discussion of writing & thinking on the topic. Debrief, Q & A about the process and its outcomes particularly how final theory papers are evaluated (final minutes).

Presentation Description
For seven years I have taught MBA students in an accelerated eight week course meeting once weekly for four hours each night, helping students form a personal theory of leading. The use of the word Leading as the title of the course is deliberate over Leadership or Leader Skills as students only initiate the journey of learning in the course; learning about leading is an ongoing, context influenced process not an end state. My expectation is that students begin to examine their thinking about and possible behaviors during the leading process. Continuing to apply reflexivity, synthesizing divergent, disparate ideas to form a unified whole will be an ongoing challenge throughout the work life of manager-leaders. Through weekly readings of research, case studies, book chapters on selected topics, students write six two-page reflection papers. The papers are exchanged with class members, read, evaluated, then briefly described and questioned by the members who read them. Discussion follows.

Despite the ability to write not all students write reflectively; many are challenged to think and write reflectively about what is read for many reasons. Some have difficulty getting out of the summarizing-what-they-read phase. Others claim to have difficulty understanding concepts they have not experienced. However I find an inability to be open to totally new ideas is their real toe stumper. Ego can also get in the way of a student trying on new ideas. All these attitudes, belief systems, awareness of thinking and its role in guiding behavior come out in the struggle to define what one thinks leading is. For if they can not identify how they think leading happens, what sort of preparation are we giving them for this process they are entering?

Our weekly class readings, reflective writing based on the reading, and subsequent discussions are influenced heavily by the teachings of Malcolm Knowles (1980), who first defined andragogy as separate from pedagogy. Knowles suggests that adult learning works best when adapted to fit the uniqueness of the learners and their learning contexts. Practitioners who teach adults are cautioned by Knowles that adults have goals and purposes for learning as well as individual and situational differences that impact learning.

Knowles (1980) suggests adult learners need to know why they are learning, what they will learn, and how to do it. Adult self-concept is reflected in their self-directedness while simultaneously prior experience acts as a resource or mental picture for adults in learning. Adults generally become ready to learn when their life situation creates a need to know, as is the case with many part time graduate students in a course on leading. Adults orient their learning to solving problems around them, desiring success in learning while also wanting choices in learning. Adult learners want to learn something they value and to experience learning as pleasurable.

Synthesizing ideas about leading then developing their own thinking in a final paper is a direct application of Blooms Taxonomy (Anderson & Kratwohl, 2001; Bloom & Krathwohl, 1956). Bloom believed that classifying thinking behaviors was important to guide student learning. Through reading current theory/thinking, research findings or case studies and reflection in the context of their personal experiences, students are making sense of what they are learning with the goal of creating a personal model of leading. From knowledge to application to synthesis they begin to evaluate self and others about leading and in doing so are engaged in the process they need to know.

Our Students
Our part-time program is composed of varied students including those with and without business backgrounds but all wish to pursue an MBA in Managerial Leadership. Some are missing promotions because they lack a graduate degree, others feel the degree will help them change fields or find more challenging work. Still others own a business, will inherit a family business, or want to start a business. Some just want to learn more about helping people in their field of expertise, like nursing, accounting, or finance.

The Managerial Leadership concentration requires this course Leading as part of their specialty coursework along with a course in Employment Law as well as Negotiation, Mediation, and Conflict Management. The requisite core MBA courses in finance, accounting, marketing, and international business are also taught.

Contact for more dialogue: Pat Sherrer psherrer@piedmont.edu. Special thanks is extended to Dr. William Kahnweiler. He facilitated my own learning in just the described manner Fall 1997 in a class titled Human Resource Development Consulting Theory where I examined for the first time consulting as helping others.

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Enabling Active Distance Learning

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Abstract:
Distance learning (DL) imposes unique challenges to MBA programs that inherently demand extensive interactive learning activities. Rather than being shy away from DL and thus giving up on many potential benefits readily achievable due to technological advances, we have been trying various measures to enable active DL and eventually have come up with a framework with which we can effectively promote active learning in DL. Apart from other approaches that are either overly comprehensive or somewhat too narrowly defined, our framework consists of intervention measures that can be classified into four aspects, namely activity, accountability, participation, and assessment. Although the framework still needs thoughtful tactics applicable to individual DL courses, our experience shows that it can serve as useful guidelines to mitigate the disadvantages of DL and at the same time to leverage the advantages of DL that are increasingly overwhelming.

1. Background

The online MBA program at CSU Dominguez Hills has received significant recognition since it was established long before distance learning (DL) became popular. Some compliments by reputable rating agencies are quoted as follows:

- 1997 - Forbes magazine identified CSUDH in 1997as one of the top 20 Cyber Universities in the United States, recognizing its leadership in distance learning.
- 2003 - The Wall Street Journal commented that "one completely online program with a growing reputation is Dominguez Hills.
- 2007 - Cal State Dominguez's online M.B.A. degree is ranked by GetEducated.com as one of the most affordable and robust curriculums in the country.

The Program is dedicated to serving the segments of people who otherwise wont be able to pursue advanced education in business. The characteristics of the student body of our online MBA program include the following:

- Many of our online students are working professionals,
- Some of our online students are from overseas,
- Many of our online students are restricted by the choice of location to further their educational objectives, and

- Many of our online students would otherwise juggle among career, family, class availability, and freeway traffic.

However, challenges to offering a quality MBA program solely online have been abundant, and a profound one is how to keep DL interactive throughout a semester. Before discussing what we have tried to address the challenge, in the next section, we highlight the findings from our literature review upon which we have come up with our initiatives.

2. Literature Review

Drawing on the principal literature, Zhao (2003) thinks that both process and outcomes of DL should be assessed and Fresen (2007) categorizes all success factors of DL into taxonomies in line with multiple perspectives. Their DL methodologies are sound in theory, but they are a bit too holistic to be easily applicable in practice. However, these frameworks for assessing DL do provide us a baseline based on which we can develop specific teaching and learning models according to the characteristics of each unique educational environment.

We agree with Tu and Corry (2003) in that simply transferring traditional instruction to an online environment usually does not generate effective interaction for high-order learning. In their study, three theoretical constructs – interactivity, social context, and technologies – are considered as necessary for interactive learning. In light of these three constructs, they suggest that we use various kinds of interaction, including communications, online discussions, technology selections, peer evaluations, team moderations, team projects/presentations, and online learning specialists.

In addition to a variety of interactions, it is widely recognized that people should learn via multiple channels as summarized by Gardner (1999) and that technological advances render these channels entirely feasible for DL. Educators are convinced that multimedia facilitates learning and that the Internet in conjunction with multimedia has made DL much more appealing than just a decade ago. However, Notar et al. (2005) believe that although technology plays an important role in DL, it is not as critical as a learning process if the goal is to achieve high-order learning as specified in Blooms Taxonomy (1956), which, they believe and we agree, is more difficult to obtain in DL than in a traditional setting. Notar et al. do not specify what such a model learning process should be in their paper, but they highlight some pivotal components of the process and one of them is motivation which could be inspired through immersion, reflection, flow, collaboration, learn control, curiosity, fantasy, and challenge (Stoney and Oliver, 1998). In exploitation of multimedia in DL with a focus on suitability for adult students, Lawson (2003) studies various models of game learning and concludes that even adult students can benefit significantly from learning by playing games.

While theory supports interactive learning and technology is available to deliver it, active learning in an online setting may still not happen since students do not easily get known to each other in DL. Glass and Sue (2008) have conducted a study of student preference, satisfaction, and perceived learning effectiveness in an online college mathematic course for business majors, and they have found that of the learning objects investigated, homework still emerge as the factor students have preferred, used the most, and felt the greatest impact on their learning. In the meantime, participation in online discussions do not surface as a favored or significant factor in

their learning. Their findings again confirm that we must scrutinize the usual success factors of DL and then synthesize them into an appropriate learning process in the context of each unique educational environment.

3. Efforts to Promote Active Distance Learning

Based on the literature review, we strategize our efforts to promote active learning in four dimensions, namely activity, accountability, participation, and assessment. This section describes our efforts broadly and the next section discusses the student-perceived effectiveness of our efforts.

Activities:

Online learning inevitably is short of interactive lectures, which must be compensated in other creative ways of learning. In preparation of an online course, we strive to organize a variety of learning activities, and we have found the following sources typically helpful for us to generate learning activities:

- Textbooks
- Real-World Cases
- Multimedia Communications
- Threaded Discussions
- Individual and Group Projects

With at least one required textbook for each course, DL can be more focused and better structured while allowing us to incorporate more materials without losing the main theme. The problem-solving nature of any MBA program usually requires an emphasis on real-world case studies regardless of teaching modality. The resultant challenges in online and onsite settings, however, are quite different. Given the popularity of some business cases, especially those developed by elite business schools, we have experienced additional difficulties to achieve the effectiveness of case study if we teach them in an indifferent way. Unlike ground-based MBA courses that typically require students to prepare the written analysis of a business case before the class meet to discuss the case, students in our online courses are often required to share their case analyses as an additional source of learning.

Communications through multimedia can help both faculty and students visualize a classroom learning environment in which interactive learning is encouraged. Without losing any advantage of DL, on an occasional basis, instant messaging in our experience is effective in holding student contact hours between the instructor and his students. By rotating a time slot on a weekly basis, nearly all students can contact their instructors in a mutually convenient way.

Threaded discussions as another format of interactive learning provide an arena based on which all communications for a course are initiated, developed, concluded, and reviewed. Threaded discussions are in general more time consuming and demand well-worded points of view in an interactive style. Threaded discussions should promote the debates across the whole class, which is hard to get full participation in traditional classroom learning mainly because of the time constraint.

Both individual and group activities are equally important, so they both are required in our online courses. In comparison to the ground-based learning, online students are better facilitated to learn on their own because of convenient access to all the course materials that are posted online. As telecommunications become inexpensive and efficient, group activities have not encountered significant inconvenience due to distance, but rather they serve a diversified student body very well and facilitate full involvement.

Accountability:

In teaching online courses we are particularly careful about possible free rides and thus consistently constitute a series of measures to enforce accountability on student learning outcomes:

1. Students must complete individual assignments, which usually impact the final grade more heavily than other kinds of learning activity. Our online courses are less emphatic on exams than on other learning outcomes, allowing students to demonstrate their understandings of the subject matter constantly and timely.

2. Although teamwork is not in any way less important, it is organized somewhat differently than we would do in a ground-based course. Typical teamwork assignments include that students can work within their team in preparing a case analysis designated as teamwork and that study teams take turns to lead certain learning activities. We also deliberately allow that a student can be dropped from a team for legitimate reasons. Meanwhile, study teams are periodically reorganized and in this approach the chance for any individual to be mistakenly rated or unfairly treated by his/her teammates is much smaller than if they have to stay within one team throughout a semester.

3. All students are invited to comment the learning outcomes by their classmates. In each semester, we ask students several times to recommend one or two teams that have prepared the best case analyses and one or two individual students whose arguments are most logically sound in a weekly threaded discussion session. The main purpose of all of this is to facilitate learning from each other in addition to from textbooks and lectures. The former source usually instills in the class more relevant business issues than the latter source does.

4. Typically, the final grade reflects on individual work (50%), group work (25%), class participation (15%), and feedback from teammates and classmates (10%). Because of limited direct contact time with the instructor in DL, we calculatingly designate a small number of percentage points of the final grade, yet still significantly greater than what we usually do in ground-based classes, to the feedback from their peers, and we find that it promotes accountability.

Participation:

Enforcement or encouragement of full participation in all required learning activities is necessary although it is much harder to do in an online course than in a ground-based one. Threaded discussions (TD) on a weekly basis usually come into play in promoting it with which we can connect all the activities and keep students involved, so participation in each TD session in a consistent and active manner is always a critical component of the overall participation. We constantly remind every student of active involvement in threaded discussions by following through these steps:

1. Each team posts at least two and at most four TD questions relevant to weekly assignments,

2. Each team is responsible for its teammates' participation in TD,
3. Each team responds to TD questions posted by other teams, and
4. Each team prepares a brief summary of each weeks TD.
5. Each TD session must be reviewed in some kind of format.

It is possible that some students just enter their comments without reading others and without checking back several times a week.

We understand that enforcement and encouragement would not be effectual if TD sessions are disinteresting, so we, as well as asking our students to, use creative formats of TD, such as word puzzles, contest, and debate. We have found it particularly inviting when someone shares a relevant, real-world story and raises questions in accordance. A real-world story usually triggers interactive, pragmatic discussions and consequently keeps students involved throughout a TD session. One of distinct advantages of DL is the traceability of "classroom learning." In DL we are no longer able to observe teamwork activities in conventional means. To compensate that inability, we ask teams to keep track of their interactions by using forums to discuss team assignments and let us have access to these forums. We usually exercise some intervention if need be in the beginning of a semester, and then soon see teamwork get full involvement for the remainder of the semester. Few complaints have been reported about lack of participation from teammates since we started using forums as arenas for teamwork activities.

Assessment:
We understand that the ultimate success of any academic program must result from reliable measures of student learning outcomes as well as continuous improvement upon assessment results. However, assessing learning outcomes in DL requires unconventional methods, and some of the methods we have tried are as follows:

- Customizing case studies to thwart plagiarism,
- Reorganizing/combining textbooks to discourage getting help from previous students,
- Rotating study groups to hear fair feedback from fellow students,
- Using oral and video quizzes to interact with students,
- Making assignments as specific as possible and expecting answers to be logically sound rather than numerically correct,
- Assigning mini group projects to promote interactions among students
- Designing games and other activities to encourage active and consistent participation in "classroom" learning.

To further make our courses unique, we design our own real-world cases and then tie them to the principles conveyed in textbooks. In each semester, students are asked to collect business cases with specific issues in mind. We also draw exam questions on these cases so that each exam is specifically made and thus requires fresh efforts if students want to score high on the exam.

4. Perceived Effectiveness
As we make efforts to promote active leaning in DL, we are mindful about the effectiveness of our efforts. There are two sources available for us to collect feedback; one is from student learning outcomes and the other is from student opinions. The former is called direct assessment

and the latter is called indirect assessment. We have been assessing students excessively using instruments and measures discussed in the previous section. In this section, we discuss indirect assessment, namely the effectiveness perceived by our students. In a recent survey we asked a group of thirty students to respond to a list of suppositions shown in the second column of Table 1. Students indicated their perception about each of these suppositions on a scale of one through five. In addition to providing rankings, students were also asked to give brief explanations about their rankings. We think the survey results exhibit some patterns of student perception, as highlighted hereafter.

First and foremost, we can suggest that our students like DL so much that they don't want lose a bit of its intrinsic advantage, i.e., DL means to keep distance from the instructor so they do not like any attempts that would make DL in anyway like a traditional setting, as demonstrated in their responses to Suppositions 13, 12, 2, and even 3. Their explanations about their dislike are quite consistent: One is that they do not want to lose the most valuable characteristic of DL, namely asynchronism; and the other is that they do not like mandatory participation in every weeks TD forum just as some students prefer listening to talking in a ground-based class. However, as indicated in their responses to Suppositions 1 and 7, they welcome threaded discussion forums in general, but they demand multimedia forums and consider text-only forums inefficient.

Second, they need specific guidance in DL, as witnessed in their responses to Suppositions 5, 6, and 8. They overwhelmingly like clearly specified assignments, including case studies that we usually dont mandate what must be discussed, but in DL we prefer to make them more specific and they seem to appreciate it. As a resultant advantage, we could nearly double the number of case analysis assignments in an online course without provoking significant complaints about student workload. Because of the nature of DL our students are highly diversified in all aspects including cultural background, disciplinary knowledge, work experience, and even political environment. The high degree of diversity brings about another rich source of learning. This survey confirms that our students appreciate us sharing student work samples anonymously, through which we believe students especially those who have had a weak background in the subject matter could catch up at a fast pace.

Last but not the least, their responses to Suppositions 7, 9, and 10 clearly show their satisfaction with DL in general and with the online courses we have taught in particular. The main objectives in offering a DL course are to make it interesting for our students, uniquely demanding for creative and critical thinking, and worthwhile for students to make efforts. The feedback we get from our students indicates that we are achieving these objectives, though a lot of work is still ahead of us.

5. Conclusions

Distance learning imposes additional challenges, especially to MBA programs that inherently demand extensive interactive learning activities. Rather than being shy away from online learning and thus giving up on many potential benefits that are readily achievable due to technological advances, we should promote DL and meanwhile effectively address resultant challenges. In teaching online MBA courses we have tried various measures in light of four aspects, namely activities, accountability, participation, and assessment. Our experience in

teaching online MBA courses in the past several years makes us believe that DL courses can be as effective as traditional ones if we have a right process or framework that allows us to mitigate the disadvantages of DL and at the same time leverage its advantages that continue strengthening as technologies continue advancing at an alarming pace.

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Creating and Maintaining Enthusiasm: The Professors' Guide
to Building a Community of Learners through Multifaceted Lessons

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Objectives:
A) Participants will identify the components of their courses
B) The presenter will assist in the development of course
 formats that meet the demands of participants disciplines
C) Groups will brainstorm for various methods of delivery and
 student-centered instruction

Audience: Instructors or curriculum designers who want to increase attention and transfer in their courses.

Activities and Format:

Participants in this interactive session will identify and ultimately design a daily format for their course that increases student attention, interaction, and retention. Through a brainstorming exercise attendees will develop lists of potential activities which fit into their pre-established daily format.

Frightening. Simply horrifying! A sea of glazed eyes, a chorus of groans, lifeless postures, all indicators of & Class of the Living Dead! Yes, just when you thought you had them on the edge of their seats, you lost them. Not to worry! You'll have their attention again when you mention the information will be on the final. No doubt a chorus of questions will even follow. But, do we have to stoop to such measures to keep our students awake& alive?

The goal of instruction is the acquisition of skills and knowledge by students. Increasingly, institutions are also focusing on the ability of students to transfer acquired skills and successfully collaborate outside of the classroom. Transfer occurs when students can successfully relate what they have learned in school to a new situation. Collaboration, in the Mercy tradition, takes place when individuals work together to create a better community. In order to accomplish these goals, however, students must initially attend to the information presented in the classroom.

Implementing various methods of instructional delivery increases attention and impacts the likelihood of transfer.

Instructional strategies can be divided into two major categories: direct instruction, a teacher-centered strategy, and student-centered instruction. Student-centered instruction focuses on guiding students to construct their own understanding. Traditionally, models of teacher-centered instruction have prevailed in the college classroom. However, current research indicates student-centered instruction that considers students' prior knowledge, learning styles, affective thoughts and social or cultural environment maximizes effectiveness.

Creating and Maintaining Enthusiasm: The Professors' Guide to Building a Community of Learners through Multifaceted Lessons will assist instructors in creating a routine format for their course with a variety of student-centered instructional options to maximize attention, retention, collaboration and transfer.

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Which of the "4-I's" is for you? Multiple Contexts for Service Learning

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Objective:
The primary objective of this session is to provide attendees with the information necessary to consider adoption of a variety of Service Learning (SL) techniques including the less traditional environments often associated with this pedagogical tool. Expansion of SL venues may enhance students' critical thinking skills (Joseph, et.al, 2007; Sapp, 2002), and civic engagement (Peters, McHugh and Sendall, 2006), resulting in increased retention and a future of more civically engaged and acclimated employees (Hugg and Wurdinger,2007). In so doing, the goals of ISETL are likewise promoted.

The appropriate audience includes students, teachers and administrative personnel who have an interest in a greater awareness of Service Learning opportunities. The particular interests and/or disciplines of attendees will be assessed at the beginning of the session. Then, the attendees will be exposed to traditional and non-traditional SL venues, while discussing which of these venues is contextually optimal, given their particular institution and pedogogical needs. Participants will receive a learning packet to include definitions of SL, a chart which depicts SL in comparison to other experiential learning possibilities, lists of advantages and challenges involved with these different venues and a comparison of these different venues.

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White Space in the Classroom

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Objectives:
Upon completing this session, the participant will leave with a new understanding of the importance of planning for "white space" during class presentations and strategies for implementing this process.
In order to obtain the aforementioned goal, the following objectives will be mastered:
- The participant will investigate the problems surrounding learning without sufficient time to process new information.
- The participant will discuss various strategies for including process time in classroom presentations.

Audience:
Faculty members and administrators working directly with professional development of faculty

Activities:
Participants in this interactive session will engage in large and small group discussion in addition to analysis and application of a framework to support faculty as they plan class presentations to include "white space." The presenters will serve as facilitators.

Description:
Effective instructors teach in ways that facilitate learning, and the learning process demands time. Early pioneers have stressed the importance of leaving space during the learning process for time to think. Specifically, Dewey (1933) used this time for reflection. Reflective learning requires students to make sense of their experiences as they relate to the new information they are learning. Without time for reflection, Dewey stressed that student learning would remain ambiguous, and students would not be able to revise their understandings or construct a meaningful context for future learning. Peltier, Hay, and Drago (2005) supported Dewey's

findings with their study emphasizing the importance of reflection in MBA programs. Making the time (space) for this process allowed students to change their personal beliefs and to use the newly learned information in the real world of business. Reflection is only one concept that can support student learning. Planning for these kinds of learning processes can occur with a myriad of strategies.

This session will utilize the findings Richard A. Swenson (2004) proposed in his book, Margin: Restoring Emotional, Physical, Financial, and Time Reserves to Overloaded Lives. The framework presented in his book encourages leaving space in our lives to live a more complete and balanced life. Specifically, Swenson asserted that people have to find space in their lives to alleviate the pain that comes from living hurried life-styles. His principles that support leaving space between ourselves and our limits can translate into the classroom. These principles will be explored as a worthy complement to classroom teaching that allows for students to learn in a more complete and balanced way. Creating "white space" in the classroom can alleviate the pain some students may associate with classes that leave insufficient time for processing new information.

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Ready, Set, Click: An Innovative Approach to Research Data Collection
Using Clicker Technology at Conferences

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Summary:
This session will present the results from a pilot study integrating an audience response system, i.e., "clickers," at a nursing education conference as means to engage the audience and support the research process. Audience response systems are gaining in popularity among educators as a means to engage students actively in learning. There is considerable literature that indicates that substantially greater learning occurs in comparison to traditional teaching methods. There is great value to both the learner and the educator in immediately seeing the responses, as it can stimulate discussion foster deeper learning. A convenience sample of nursing conference attendees were surveyed using clicker technology prior to a panel presentation on the "Impaired Health Professional." The positive participant response to the "clicker" audience response system and the results obtained has identified this method not only as easy and reliable, but also as an enjoyable and engaging tool for learning and research in a nursing education conference environment. Clearly the ability to collect responses easily, anonymously and voluntarily in real-time indicates that this tool is well suited for both education and research. The successful application of clicker technology to our pilot study demonstrates its exciting potential as an innovative tool for bridging nursing education with nursing research in a conference setting.

Objectives:
1. Discuss benefits of using audience response systems to promote learning.

2. Discuss process involved in using audience response systems to support research in variety of settings.

Purpose: A pilot demonstration of integrating an audience response system, i.e., "clickers," at a nursing education conference as an engaging tool for learning and research.

Method: A convenience sample of nursing conference attendees were surveyed using clicker technology prior to a panel presentation on the "Impaired Health Professional."

Findings: The 208 subjects who used the clickers were mostly women (93%) and were nurse educators (81%) with at least 20 years of nursing experience (75%). The ease of data collection, real-time analysis, the active engagement of both participant and presenter were all findings of this study. The utility of this tool as a stimulus for discussion and learning was also reported.

Conclusions: Pilot testing demonstrated the value of the use of clickers at an education conference for data collection and educational purposes.

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Formative Assessment in the University Classroom:
Observations of Student/Instructor Interactions

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Abstract:
The focus on improving instructor practices and raising student achievement continues. In this research paper we consider formative assessment which has been garnering increasing interest. Observation data were collected in 65 classrooms in a variety of subjects (mathematics, chemistry, biology, physics, and educational assessment). Class size ranged from 20 to 170 students. Some of the classes had formative assessment techniques embedded in them (use of clickers, incorporation of quizzes, and use of different grading schema) and some not. Preliminary analyses indicate considerable variation in interaction patters and instructor awareness of the effects of how differences in instructional delivery affect students.

Research Purpose

The issues of assessment and accountability have gone beyond the classroom and entered the political arena. With this development they have become less nuanced as broad generalizations and policies are sought. What sometimes gets lost in many of these discussions is the fact that the educational sector is incredibly varied by grade, by subject, and by instructional format. Yet, at every level of instruction within the educational sector, the focus continues to be on improving instructor practices and raising student achievement. In this research paper we are going to consider an aspect of assessment that has been garnering increasing interest, specifically formative assessment, and consider how what types of students benefit most from its use.

Literature Foundation

According to one report on the subject, "Assessments provide an operational definition of standards in that they define in measurable terms what instructors should teach and students should learn. When students engage in assessments, they should learn from those assessments" (National Education Science Standards, 2001). Thus assessment, whatever form it takes, defines the playing field of academic interaction where the processes of teaching and of learning should be mutually reinforcing. However, in an era where accountability through standardized tests has become a driving force in educational reform, the definition of how and what an instructor should teach and how and what a student should learn is becoming significantly narrower.

As usually understood, assessment is used by most instructors to determine what learning has occurred, and serves as the basis for the assignment of grades. Such assessment is summative as it is the end point of the teaching-learning sequence. Assessment is formative when the evidence is used as an on-going process within the class to adapt the teaching to meet student needs as well as provide feedback to students (Black and Wiliam, 1998). It is very difficult for instructors not to focus on summative assessment measures since the prevailing standards and accountability pressures drive them inevitably in this direction. Some have indicated that the time has come when formative assessment, occurring within the learning process, needs greater prominence (Black and Wiliam, 2003; Layng, Strikeleather, and Twyman, 2004). In reality, both perspectives need to be incorporated into a total learning process.

Formative assessment informs both instructors and their students as to the degree to which the students have mastered the material. Feedback to the students serves two functions, to identify problem areas and to provide reinforcement of successful learning and achievement. Feedback to the instructor serves to identify the degree to which instruction was successful and identify

needed changes in instruction. It can be used to distinguish between individual and group problems that can then be used to suggest solutions: revision of instruction, specific group work, or individual remediation. Yorke (2003) offers a prescription for an approach to formative assessment. In the model as depicted in Figure 1: put in summative here.

1. The instructor constructs a lesson module and related assessments based on the perception of the students' readiness and prior knowledge and then presents the module (Stage 1).

2. The instructor administers an assessment (Stage 2).

3. Both the instructor and the students consider the assessment results. (Stage 3).

4. Dialogue between the instructor and the student begins (Stage 4). Depending on dialogue with the instructor, the student adjusts learning style or proceeds with current style. Depending on the dialogue, the instructor adjusts teaching or proceeds to the next learning module (Stage5).

Figure 1
Stages of formative assessment process

As is apparent from Figure 1, the conceptualization of the process is not difficult. However, the measurement of the degree to which it has been implemented and the degree to which it results in a measurable effect is another situation. Also, not only is this a staged process, but there are two different perspectives to consider, that of the student and that of the instructor. Further, variations within the educational process – different grades, different subjects, and different classroom characteristics such as size and instructional format – make estimations of effect difficult.

For the instructor, formative assessment generally implies frequent assessments that vary by: a.) length, b.) depth of knowledge expected, c.) relative importance, and d.) format; altered instruction based on assessments; instruction on the interpretation and use of the assessment results; and perhaps altered classroom interaction to increase student engagement. For the student formative assessment means considering adjustments in studying and perhaps in classroom behavior in light of assessments (see Figure 1).

The research base on formative assessment and the efforts to demonstrate its effectiveness in improving teaching and learning have focused very heavily on K-12 classrooms and the professional development of in-service instructors, has generally focused on the role of the student and the student reactions, and has been based on small samples (Boston, 2002; Hattie and Jaeger, 1998; Ruston, 2005; Taras, 2002). Further, while Ruiz-Primo and Furtak (2004) do broaden the discussion of assessment to informal interactions, more attention has been paid to formal, planned assessment contexts. However, not enough attention has been paid to the fact that this teaching/learning process can be operationalized in different ways, that there can be different levels of implementation, and that the focus can be on instructor, students, or both.

Sadler, in an article about formative assessment, argued that grades may be counter productive to formative assessment in that they are focused on what has been accomplished and not what needs to be done (Sadler, 1989). Taras (2002) argues that grades often have the unfortunate effect of distracting students from what they should be focused on and that is learning. Specifically, I reiterate that marks have a place even in formative assessment, but not in isolation and not before feedback and judgements have been interiorized. (p. 507.)

Given the implicit expectation of increased student interaction embedded in formative assessment, it is assumed that the incorporation of formative assessment techniques would result in different types of student interaction patterns.

Methods
Methods: In this study, 50 minute classroom observations were made using an instrument based on one created in a National Science Foundation focused on improving undergraduate education. The 50 minute observation period was broken down into 10 minute intervals. Data were collected on the classroom contexts (number of students, subject, etc.), the type of instruction that was occurring (15 different subcategories), how engaged the students were measured in percentages, and the cognitive activity (4 subcategories). Further, summary observations were made on nine items (e.g., "This class encouraged students to seek and value alternative modes of investigations in problem solving," or "Students were reflective about their learning.").

A statistical power analysis have been done to determine the sample size needed for robust analyses and the plan is to recruit twice the number of students needed to accommodate attrition. In the proposed research project, sample size was calculated using Cohen's methods (1988, Bohrnstedt & Knoke, 1994). Power equal to .80 was used as is advised when the exact figure is unknown (Borman, Hewes, Overman, and Brown, 2002). In a difference of means/difference of proportions analysis with ? = .05, d (effect size from Borman et al., 2002) =.80, and power = .80, a sample size of at least 26 is needed. In a multivariate analysis (Multiple regression, MANOVA, HLM) with ? = .05, u (the number of independent variables) = 10, R2 (results obtained in Borman et al., 2002) = .08, and power = .80, a sample size of 25 is needed. Note, multivariate F tests are robust so that moderate departures from assumptions generally have little effect on the validity of the null hypothesis and power analyses. According to our calculations our sample size of 65 should be more than adequate.

In addition to the observation data that were collected, all instructors completed surveys which included demographic data and attitudes and behaviors relating to teaching of science and mathematics.

Results
Data collection will not be completed until May 2009. Thus results reported thus far must be preliminary at this time. They are:

- What instructors think they are doing as evidenced by their survey responses is not what they are observed to be actually doing in class.
- There is wide variation in what instructors assume of students' knowledge and motivation.

- Class size is less of a factor in explaining variations in student/instructor interactions than variations among instructors.
- The type of formative assessment technique used was less a factor in explaining student achievement than the degree to which it was implemented.

Discussion and Conclusions

Given the fact that the use of formative assessment techniques have been shown to improve student achievement (Varnum, Stull, Schiller, and Ducette, 2007; Stull, Schiller, Varnum, & Ducette, 2008), it would appear that instructors be encouraged to use them more. It appears that instructors can successfully implement formative assessment in different ways. The discussion of formative assessment must go beyond helping students to assess their learning to instructors assessing and rethinking their teaching.

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Using 'Seminaring' to Engage Students
in Integrative Learning with Primary Source Texts

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Description:
This session introduces participants to 'seminaring' - a social pedagogy for promoting active learning of subject matter using primary sources. The seminar has long been a central component in learning community and coordinated studies courses but has increasingly found application in traditional, stand-alone courses across the disciplines (McCartney, 2002). This session describes the use of seminaring as a process for engaging students in critical understanding of primary source texts in order to facilitate integrative learning of course concepts and ideas.

Objectives:
In this session, participants will learn what the seminar process is and is not, and the goals of seminaring. The seminar approach is not a class discussion with its usual instructor-led interaction. In seminaring, the instructor takes a back seat, facilitating student responsibility and skill development for peer discussion of texts and their relationship to the course themes. The seminar process brings together a group of learners who are prepared for collaborative discussion (Harnish, 1995). Before seminaring, students are asked to complete a close reading of the text, identifying ambiguous or important text passages. The instructor, prior to each seminar, presents a lecture emphasizing important concepts located in the text and interwoven throughout course content. Session participants will learn that structuring the seminar process in this fashion promotes integrative learning of course concepts and development of critical reading, thinking, and communication skills useful beyond the seminar experience (DeMarois, 1998).

In this session, participants will explore the use of seminar tools and techniques. The seminar environment is designed to help students explore a diversity of perspectives, process the complexity and ambiguity of content, and develop critical thinking and active listening skills through consensus and dissensus. The overall goal of the seminar is to promote student creation, expansion, and revision of knowledge located in primary source texts. Since students approach seminaring with different learning styles and interaction skills, seminaring is not something that comes naturally; it needs to be taught (CASTL, 2005). Creating an environment that encourages deep exploration of ideas and full participation is essential to good seminars (Mino, 2007). Productive seminaring requires training students to use various discussion conventions (e.g., asking questions, paraphrasing ideas, being text-centric, mapping the conversation), conversational strategies (e.g., pre-writing, round robins, bone-piling, parking-lot), and ongoing assessment. Session participants will learn that assessment of the seminar process is key for encouraging student reflection and responsibility regarding how the seminar is working and what individuals are doing.

Audience:
This session is intended for instructors across all disciplines who want to develop or improve seminar pedagogy using primary source materials as course text.

Activities:
1) The session organizer will describe seminar pedagogy. She will deliver a PowerPoint presentation describing the assumptions, guidelines, and procedures involved in seminaring. Course assessment data collected by the session organizer describing the impact of seminaring on student learning will be presented. Handouts will be distributed to participants. (20 minutes)

2) Session participants will engage in a brief mock seminar. A short reading will be distributed and participants will be organized into small groups to practice seminaring. (20 minutes)

3) The session organizer will lead participants in a debriefing session. Participants will reconvene as one group and the session organizer will lead a discussion to process comments and questions generated by the seminar process. (10 minutes)

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Communication + Creativity + Images = Conflict Resolution through Art Online

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Objectives:
To assess specific conflict situations with regard to the possible application of art during the mediation process
To create examples of art that apply to conflict and its corresponding mediation
To document acknowledgment of art's role in communication and conflict resolution by successful identification of historical examples and self created examples
To appreciate the historical role of art in conflict and conflict resolution

Description:
Last year's workshop, "Use of Drawings and the Drawing Process in the Online Virtual Classroom," influences the 2009 description.

Part One of the session will pertain to Conflict Resolution through Art, an online class that I teach in Negotiation, Conflict Resolution and Peacebuilding (NCRP) programs at California State University, Dominguez Hills (CSUDH). It will include brief consideration of what art is and sound bites from interviews with artists (which include a hip-hop musician, a music professor, and a potter-art professor) who associate their art with conflict resolution. Part One will provide examples of images that document conflict and images that pertain to conflict resolution.

Part Two will provide workshop participants with the opportunity to apply instructor provided images to conflict fact patters and to create images for application during the mediation conflict resolution process to clarify verbal commentary.

Activities:
The order of the activities follows: vici taus -
1. narrates a presentation that documents historical examples of the relationshjiop between art and conflict and between art and conflict resolution
2. splits the audience into disputant duos with third party neutrals
3. distributes fact pattern paragraphs
4. distributes relevant images
5. instructs dyads and third party neutrals to depict stated conflict through use of images
6. assists the trios to use relevant images during resolution efforts
7. provides assessment Likert scale questionnaires that pertain to the question of whether or not images assisted in disputants' and third party neutrals' efforts to clarify oral descriptions and explanations.

Audience:
The target audience consists of college instructors who teach communication, education, or conflict resolution classes (especially online) and those college instructors who are either interested in teaching online classes or who will be teaching online classes whether or not they are interested in that approach.

The target audience also includes anyone who is interested in using images and the drawing process as teaching tools.

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Integration of Components in Subject-Specific Wiki Development

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Objectives:
1. Participants will become familiar with social networking.
2. Participants will engage in interactive lessons that incorporate components used to develop a wiki.
3. Participants will create a subject-specific wiki.

Audience:
This session is geared towards those who are interested in developing a social network within a similar subject-specific wiki.

Activities:
The session will begin with an overview of social networking and the use of wikis within groups of individuals with similar interests. An example of a wiki that was utilized for students to communicate about their content area will be shared, and then the participants will break into groups and participate in a variety of activities designed to determine the components available for a wiki and discuss how each activity can be adapted to the content area of the participants. The workshop will end with a discussion of how participants could use the activities from the workshop in their higher education classes to promote social networking, authentic learning, and critical thinking, deepen comprehension and interact beyond the walls of the classroom.

Summary:

Students enter our classes with a substantial knowledge base, and to acknowledge that knowledge base is to validate the student and draw them more into the learning process. As students and instructors work together to construct meaning in their classes through wikis, they are exploring ways to present material to each other, their classmates, and others. As Garrison (1997) notes, "Finding means to desirable ends is a matter of inquiry, imagination, and creativity. It also requires technique" (p. 22).

Social networking software assists in supporting and structuring learning communities. Within that social network individuals are poised on the cusp of inquiry and creativity. It has been noted that "recognizing contributors as individuals with unique experience and as members of a group allows for a personalized learning experience while also experiencing learning as part of a community through collaborating with others in shared activities" (Grant, 2006).

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Extra Credit: To Offer or Not to Offer - That is the Question

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Presentation Objectives:
- Present examples of the range of extra credit options faculty offer.
- Share research findings on using or not using bonus points or extra credit.
- Look at the advantages and disadvantages for faculty in offering extra credit.
- Provoke participants to think about their own extra-credit practices.

Presentation Audience:
This presentation/workshop is appropriate for instructors from all disciplines at all levels of their career.

Presentation Activities/Format:
Interactive lecture/presentation on research findings, use of discussion groups with exercises. .

Presentation Summary:
As teachers we've all heard the question, "Can I do something for extra credit to raise my grade?" For any number of reasons, many college students request opportunities to earn extra credit and few colleagues have never succumbed to student pressure for an extra-credit assignment. (Hill, Palladino, & Eison) Some faculty members routinely offer extra credit while others never do. Others offer it only in certain cases or classes. Bigger questions underlie the practice of providing extra credit. Does it motivate students? Does it add to the learning experience? Are some forms of extra credit better than others? This interactive presentation aims to provoke instructors/teachers into thinking through what extra credit can and cannot do for their classes.

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**Optimal Performance: Three Vital Steps for Teachers
to Change the Classroom Experience from the Ordinary to the Extraordinary**

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Objective:
A practical and interactive presentation and discussion of the vital steps that comprises preparation and execution of teaching,

Audience:
Teachers of all categories including High School and College Instructors.

Activities:
Case studies – Three case studies will be utilized to illustrate how teachers have changed their classroom presentation and teaching using the three steps outlined in this presentation. Interactive group discussion – the attendees will be divided in three groups to discuss the practical implications of each step and to give commentary.

Description:
Teachers of higher learning are generally people of high intelligence, good imagination, and great knowledge, but many feel ineffective as instructors because they lack optimal performance in teaching. Optimal performance is where the teacher converts intelligence, imagination, and knowledge into spectacular results in the classroom; where the behavior and performance of the teacher involves the best possible use of all his or her innate potential.

Unlike what many believe, optimal performance is not a mystery. Some theories hold that only certain personalities and traits can develop optimal performance and that only an exclusive few have these personality traits - if you don't have the right personality or traits, then you simply can't perform optimally and success in the classroom is out of your reach. The reality is that anyone can develop the skill of optimal performance. Optimal performance consists of certain specific factors and behaviors that can be developed and applied by any teacher willing to take the time and effort to learn how. Optimal performance leads to a style of functioning in the classroom that, once mastered, becomes spontaneous and effortless. The performance of the teacher becomes the full and seamless integration of all his or her knowledge and skill developed and practiced over time. When the teacher operates and functions optimally, his or her behavior is super efficient; immensely creative; and macro-productive. The aim of optimal performance is

not merely to perform highly, but to effortlessly execute your task at hand; to derive fulfillment and joy from doing your task; while maintaining ultimate productivity.

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Getting Wiki with it.
How to introduce WikiSpace to everyday teaching practices.

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Obejctives:
- To explore the use of new technology (Wikispaces) to engage students.
- To provide the basic tools for teachers to develop and utilize Wikispaces in implementing their school curriculum.

Summary:
WikiSpaces allows students to contribute to curriculum and content in their own way, at their own pace, via the web. The WikiSpace is interactive where students create pages of information that other students can contribute to or edit. Visitors to the WIki can download and upload data (video, audio, text). We would look at how to set up a WikiSpace and how to use it within the curriculum.

Setting up a WikiSpace is as easy as submitting a proposal to present at an education conference. IT however, never seems that simple to some. And that's fine. What teachers need to learn is that we don't need to know how to do everything all the time before the kids know. It's ok for the kids to be and become the experts whilst we teachers become better facilitators. Kids are better at technology, generally, and we need to work with and indeed celebrate that. Kids are inquisitive and very capable of learning how computer software programs work. All schools and teachers need to do is present them with the tools and time.

IT has never been such a prominent part of the teenager's lifestyle. Technology is how teens communicate, socialise and engage with community and with themselves. From SMS, to Google to Facebook to Twitter, information and communication is becoming increasingly immediate. And so too is information presented in Curriculums. Students can learn, confirm and contribute like never before and they know it. WikiSpaces is one way to allow kids to engage with learning on their terms.

Is Communicative Language Teaching Context-free?

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Summary:
Communicative Language Teaching (hereafter CLT) dominated English language teaching for a long time- it still does in many countries- and it firmly established itself on a worldwide basis (Jarvis & Atsilarat, 2004). Some practitioners think that the key to teaching English is learner-centered CLT (Oxford, 2003). On the other hand, other researchers have challenged the claim that it is effective and appropriate for various contexts. The applicability of CLT to different contexts has been a matter of debate, and whether CLT, originally based in a Western context, still offers the most valid paradigm is open to question (Jarvis & Atsilarat, 2004). Another criticism is that CLT itself neglects one key aspect of language teaching- the context. Therefore, the message CLT gives to teachers is: CLT is the way to do it, no matter where you are, no matter what the context (Bax, 2003, p. 281).

In this paper, the researcher will present a study the purpose of which was to explore how effective CLT is in the context of EFL learners of English at an intensive English program. The researcher aimed to explore participant instructorsperceptions of the contributions and drawbacks of CLT, the difficulties they face while implementing the CLT principles, and their perceptions of the appropriacy of CLT in EFL contexts in terms of some items such as studentsneeds and learning styles, goals and objectives, educational system, etc. Additionally, how their perceptions overlap and differ from the participants in the previous studies was also examined.

The researcher made use of both qualitative and quantitative data collection methods. A questionnaire was used to get the participants perceptions, and classroom observations were conducted with the guidance of a checklist with a view to exploring how the participants actually apply the principles of CLT to their classes. The results indicate that 92% of the participants asserted that if implemented effectively, CLT is a useful approach, but it is not appropriate to the traditional Turkish educational system.

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Co-constructing Positive Feedback Using Appreciative Inquiry

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Objectives:

- To discuss the use of feedback in the classroom
- To discuss the impact of positive and negative feedback on student learning and performance improvement
- To have participants experience co-constructing positive feedback using Appreciative Inquiry
- To explore the potential use of Appreciative Inquiry in the classroom

Summary:
Whether you are an instructor appraising students after a presentation, a manager conducting annual performance evaluations or a parent teaching a child household chores better understanding of the feedback process is useful in facilitating others' learning and performance improvement. Unfortunately many of us learn how to give feedback modeled on our own experience with receiving feedback; work performance evaluation systems where the focus is often on deficient finding. In a deficient finding system, the person being evaluated hears the negative, i.e. this is what you did wrong; rather than the positive, i.e. this is what you did right. In addition, Seashore (1984) submits feedback is often more about the giver – how they see the world, what they are feeling, what they deem important – than about the receiver. In this way, feedback rarely is useful to the receiver because the giver's struggles with projection, inaccuracy, or incompleteness flaw the information provided. A person being evaluated in a negative way or with irrelevant or distorted data experiences a "sense of failure" often accompanied by feelings of anxiety and defensiveness (Argyris, 1991); both feelings prevent learning and change. Being defensive results in denial, cover-up, and hostility, conditions not often associated with learning. In the defensive state, learners may not learn, so called zero learning (Romme & van

Witteloostuijn, 1999) or merely engage in single loop learning (Argyris & Schon, 1978) where mistakes are corrected, possibly as an act of compliance, but movement toward the performance improvement of double looping learning (Argyris & Schon, 1978) where root causes and underlying systems are inspected and changed is unlikely.

Schein (2002) posits that there are two kinds of anxiety associated with learning: learning anxiety and survival anxiety. Learning anxiety comes from the fear of looking stupid if we do not understand something or cannot perform a new skill. Schein (2002) contents learning anxiety creates a resistance to change that can block learning; and, that none of us would ever try something new unless we experienced the second form of anxiety: survival anxiety – the realization that in order to make it, you're going to have to change (p. 6). That would mean survival anxiety (SA) must be greater than learning anxiety (LA) for learning (L) to occur, or written as a formula SA > LA = L. While that exact formula may be in disagreement among educators there is probably agreement that a certain amount of anxiety is necessary to create the right excitement and energy for learning, while too much of what Schein calls learning anxiety may stifle learning by paralyzing even the hardiest learner.

Given the natural anxiety associated with learning, managers, teachers, and parents are faced with a choice of how to proceed when giving feedback to improve performance: they can increase the survival anxiety or lessen the learning anxiety. Increasing the survival anxiety in the work world may mean using negative feedback to suggest to employees that continuing such actions without change may result in: transfers, discipline, loss of bonus pay, layoffs, or even termination, while in the classroom it may result in: poor grades, discipline, or prevention from registering for upper level courses – all threats that force people to change and learn or suffer the consequences.

We offer Cooperrider & Srivastva's (1990) Appreciative Inquiry approach as a methodology for focusing on co-constructing positive feedback to lessen learning anxiety. The Appreciative Inquiry approach is one in which feedback is co-constructed through story creation and telling, and focused on positive experiences – skills, feelings, and behaviors – rather than on the negatives. The Appreciative Inquiry approach is based on the following five principles:

1. The Principle of Constructionism: We create our reality in the language we use, stories we tell, and meaning we make of our experiences. We co-create these realities with our families, our organizations, and our friends. If we want to change, change the conversation.
2. The Principle of Simultaneity: Inquiry is intervention; the questions we ask suggests the answers we find. Change the questions, change the answers
3. The Poetic Principle: Organizations are social systems, collections of humans, they are not machines. To understand the human experience means eliciting stories that appreciate and acknowledge the full range of emotions, thoughts, and behaviors.
4. The Anticipatory Principle: The future imagined is the future created; anticipating a positive future becomes a self-fulfilling prophecy. Imagine a bright future; create a bright future.
5. The Positive Principle: Focusing on the positives about what is right – the solutions – rather than on the negatives about what is wrong – the problems – creates more energy and inspiration for answers.

By utilizing a co-constructed Appreciative Inquiry approach that accentuates the positives the person is more likely to feel safe, cared for, understood, appreciated, valued and supported in making changes and learning. The co-constructed feedback helps create a safe and positive environment for individuals to experiment with unlearning old behaviors and/or learning new behaviors. A learner in a safe environment is more willing to correct mistakes in single loop learning and perhaps even willing to move toward double loop learning (Argyris & Schon, 1978) to inspect underlying systemic problems that are causing the errors in the first place.

The Appreciative Inquiry approach uses 4 steps called the 4-Ds: Discovery; Dreaming; Design; and Destiny. The first step of Discovery is inquiring to appreciate or value the best of "what is" working, right, or positive in the person or organization. The second step of Dreaming is inquiring to envision "what might be" as a preferred future vision, purpose or state. The third step of Design is inquiring by co-constructing through dialogue "what should be" in terms of principles that shape the person or organization. The last step of Destiny is inquiring about "what can be" to sustain how that person or organization will take action toward accomplishment.

The facilitators of this session will use an abbreviated version of the Appreciative Inquiry approach to actively engage participants in the process of positivity; co-constructing feedback that is useful in lessening learning anxiety and facilitating learning and performance improvement. In addition, participants will explore the applicability of using the Appreciative Inquiry in the classroom

Audience

This workshop should be of interest to instructors at all levels and in all disciplines.

Workshop Format

This interactive workshop is designed to allow participants to discuss the topic of feedback, and experience and learn how to co-construct positive feedback using Appreciative Inquiry.

- 5 minutes: Presenters will introduce the topic of feedback and Appreciative Inquiry.
- 10 minutes: Presenter will lead a brief discussion about participantsexperience giving and receivingpositive and negativefeedback.
- 5 minutes: Participants will be asked to reflect on a time they had their best positive feedbackexperiencewho, what, where, when, and results.
- 15 minutes: Participants in triads will share their stories of their positive feedback experiences.
- 10 minutes: Participants in triads will report a brief summary of their learning from sharing their stories
- 5 minutes: Presenters will briefly explore how co-constructing positive feedback using Appreciative Inquiry can be used in the classroom.

Development and Integration of Learning Portfolios Across a Curriculum

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Summary:
The purpose of this pedagogical research was to enhance the depth and breadth of students learning across a sequence of courses spanning four semesters through the development and use of portfolios. Using Schön's Model of Technical Rationality as a framework, 1 basic science coursework provided a foundation upon which applied clinical sciences inclusive of affective and psychomotor skills were built. Consistent with the Clinical Learning Spiral curricular model 2 students engaged in an active, reflective learning process, evolving from simple to complex and related to knowledge and professional growth. Classroom and experiential learning activities were blended to provide a broad learning experience for students. Students integrated these learning portfolios into examinations, classroom and hands-on learning activities. Portfolio contents were revised as students gained more knowledge and experience through this sequence of coursework.

Faculty has met annually to review the effectiveness of these course portfolios in attaining established course learning objectives. Student performance on assessments and their feedback on utility of the instructional activities and assignments provide data for triangulation. Student feedback was solicited annually via survey that included a 5 point Likert scale, as well as the opportunity for open ended comments. Quantitative data analysis indicated that 100% of students from two cohorts agreed that the portfolios helped them learn material in foundational coursework. The agreement for the utility of the portfolios in subsequent courses ranged from 64% - 83% across these cohorts.

Completion of these portfolios allowed students the opportunity to look forward to see how foundational material would be integrated with subsequent higher level coursework. For the students in the higher level courses, these portfolios served as a resource as they grappled with more complex material. Effective utility of the portfolios was best achieved when faculty were explicit about how students could best use the portfolios for newer learning activities.

In conclusion, these portfolios provided a foundation that facilitated student to student collaborative interaction for solving complex clinical dilemmas. Faculty across the courses used the portfolios to identify, plan and assess attainment of instructional and course objectives. Faculty review attainment of course objectives and revise annually. Development of this learning

portfolio has met the goal of enhancing students acquisition and retention of knowledge across an integrated curriculum.

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Invite your students to design the exam!:
A model for collaboratively designing course assessments.

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Setting:
Imagine walking into the first day of class, ready to go over the course syllabus, and having absolutely no idea how you were going to assess the students for the course grade. This is what the author has done for four semesters now in his Innovative Approaches to Schooling class. Instead of choosing the examination format beforehand, the instructor drew the students into thinking about how they might best demonstrate their learning. The instructor and the student then collaborative decided upon testing conditions, together. They democratically discussed possible assessment formats, evaluated their effectiveness with regard to the course outcomes, agreed upon the best option, developed a detailed analytic rubric for that option and then "field tested" the rubric by grading student samples. All along the way, the students were actively determining the parameters and evaluation criteria for the measure of their own learning.

Aim and Audience:
The aim of this interactive teaching session is to share the author's blueprint for implementing such a process and then to have the session participants, themselves, engage in a miniature version of the same. This conference session has been specifically designed to draw in any instructor, regardless of discipline. The session content will appeal to any instructor who is curious about how sharing authority regarding exams are created and graded might benefit student learning and student self-efficacy.

Description and Activities:
The session will begin with the author sharing a few illustrative stories about what happens when students are invited into the decision-making process. One semester, for instance, the class consensus was to offer three different formats all at once: a portfolio assessment, a short answer test and a scenario essay format that the student could choose from. The introductory stories will be followed by a compact explanation of the steps for successfully navigating the decision-making process, including the specific activities the author found most effective. The balance of the session will be spent having the participants try out the process as a class: evaluating, deliberating and choosing an assessment format for an actual (though simplified) learning task. If there is time, the participants will also be engaged in developing the criteria and descriptors for an analytic rubric.

Background:
 For several years now, my students have told me how helpful it is to have: an extensive assignment description (including the learning objective), an exemplary model from a prior class and a detailed analytic rubric for their class assignments. However, even with these materials, the students were only passively involved in the demonstration and evaluation of their own learning.

Inspired by the model of Democratic Education (Greenberg, 1995; Neill, 1960), I decided to run an experiment in collaborative assessment design. Democratic Education posits that the most effective and meaningful learning happens when the learner is given the freedom and responsibility for pursing their own learning. Is the same manner, I wanted to engage the class in what the examinations be and how they would be graded. Loosely following Wiggins and McTighe's (2006) Understanding by Design model, we collaboratively chose an assessment format that matched the course outcomes and then designed an analytic rubric to guide the evaluation process. All relevant documents were then publically posted for everyones benefit. Over the past four semesters this has lead to deepened student engagement, improved student performance, and more than a few surprises.

It is not uncommon for instructors to give student some element of choice in their own assessment, for example, allowing them to choose which questions to respond to or whether the exam would be in-class or take-home. By contrast, I wanted to student to co-determine the structural aspects of the assessment. In doing so, they would be well prepared for the test and would have a sense of ownership in the testing conditions. Students' performances on the examinations are improved because they are very clear about the means and goal of the assessment and student self-efficacy is strengthened because they were given responsibility for choosing the testing conditions.

My hope is that the session participants will not only see how they might engage students and improve learning by making them part of the assessment discussion, but also how powerful student-centered learning becomes when one invites them to be decision-makers in the design of their education.

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Applying services marketing concepts in higher education teaching

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Presentation Objectives:
- Introduce the importance of applying services marketing concepts in teaching as an innovative and effective teaching approach
- Describe the relationship between the students and the educators based on services marketing concepts
- Analyze the major factors influencing educational service experience
- Describe the components of student satisfaction
- Develop an understanding of the model of educational service quality
- Recognize the importance of student retention
- Identify the effective tactics to help education organizations retain students
- Share and discuss the teaching and learning experiences among the session participants

Audience:
Educators, students and administrators interested in applying services marketing concepts in teaching

Activities:
PowerPoint presentation. Participants will be presented a detailed review for services marketing concepts, and a detailed description why and how services marketing concepts are applied in higher education teaching. The presentation will include an open discussion and sharing of teaching and learning experiences. Handouts will also be distributed to the participants.

Presentation Description
Teaching in higher education is a service. Kotler and Levy (1969), Kotler and Fox (1985), Conway Mackay, and Yorke (1994) and Kyle (2005) described and suggested the marketing concept in higher education and the idea of the students as customers in the purchase of higher education programs and services. Educators in the educational organizations are service providers (King 1993; Hoffman et al., 2005). The major differences between goods and services are attributed to four characteristics - intangibility, inseparability, heterogeneity, and perishability. Both the students and the educators must get involved and interact while education services are produced and consumed simultaneously (HoffmanZeithaml, Parasuaraman, and Berry, 1985; Hoffman and Bateson, 2002). Applying services marketing in teaching allows the

higher educators to think deeply about and respond appropriately and accurately to the goals of both the students and the educational originations. Improved education quality, student satisfaction and student retention are considered three fundamental elements of services marketing concepts applied within a higher educational institute (Kotler and Fox, 1985; Hoffman etc. 2005). The result of the present research provides the evidence that applying services marketing concepts in teaching is an innovative and effective approach in higher education.

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Technology and 21st Century Students:
Future Trends in Post-secondary Education

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Objectives:
After attending this session, attendees will:
1) Be able to summarize the most current literature regarding changes in college-age student populations in regards to learning and technology,
2) Be aware of specific emerging technologies that have unique potential for pedagogical practice,
3) Understand ways in which evolving trends in web-based mash-up technologies support and compliment the learning styles of today's (and tomorrow's) undergraduates.

Audience:
This session is intended for all faculty, staff, students, and administrators who have an interest in undergraduate education, instructional technology, and the future of higher education.

Description:

Around the turn of the century, a flurry of interest emerged concerning the then current generation of college students and the implications that ubiquitous access to technology might be having on their learning styles and ultimately their cognition (e.g., Arafeh & Levin, 2002; Duderstadt, 2000; Frand, 2000; Howe & Strauss, 2000; Oblinger, 2003; Prensky, 2001a; Prensky, 2001b). While there was very little research data at the time to support these suppositions, the "digital natives" conception of students gained traction.

As this decade comes to a close, a new round of intense debate regarding students and technology has emerged. Within the last year, a surprising number of books and studies have been published, many grounded in empirical data, which explore the theories and ideas posited ten year earlier (e.g., Bauerlein, 2008; Jackson & McKibben, 2008; Palfrey & Gasser, 2008; Small & Vorgan, 2008; Tapscott, 2008; Twenge, 2007). While these publications take a decidedly positive or negative view toward students and their relationship to technology, one thing they agree upon is that students are arriving on our campuses with new skill sets, new learning preferences, and new social aptitudes.

In parallel to these observations regarding students is the accelerated emergence of "cloud"-based, Web 2.0 collaboration applications which have the potential to change the way instructional technology is used in higher education and shift the roles of institutional information technology units. Innovative forms of "mashed-up" social networking are surfacing that are enabled by this new functionality and the increased mobility provided by convergence devices such as the iPhone. Faculty and administrators are in the midst of examining the

pedagogical and pragmatic implications of these changes and capabilities, and this session will provide an overview of the conversation as well as engage in it with attendees.

This session will be fully interactive, and activities will include think/pair/share and ultimately group discussion. Initial questions will be posed that will frame key issues and require participants to share their experiences and perceptions regarding trends in student populations and changes in technology in higher education. With this foundation, an overview of the most recent findings regarding students will be provided. This will include 2009 data concerning teen computer usage from a number of sources including the Pew Internet and American Life Project. Key Web 2.0 applications will be demonstrated to highlight new pedagogical opportunities offered by concepts such as geo-tagging, collective intelligence and the personal web. Connections between these technologies and what we know about students will be collaboratively discussed with an eye toward prognosticating future trends in higher education.

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What Students Learn is dependent on what they already know: Stimulating and guiding the development of mental models

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Summary:
"What students learn is a function of what they already know" (Holland, Holyoak, Nisbett, & Thagard, 1986, p. 228). The paradox of this statement is that there are circumstances in which students dont know much and so, tracking the logic of the statement, they don't learn much. When there is nothing to stand on, how are students to ever get a foot in the door and take the subsequent steps toward gaining mastery of knowledge and even mastery in practice?

When students come into a graduate program in organizational leadership directly from undergraduate studies and have no work experience, they have reported that their graduate studies make no real sense. For example, one young woman commented, "I read the text and do the case studies, but I've never seen these things, so I don't know what I'm really learning." The information their courses cover has descriptive power, but doesn't achieve relevance: they can grasp the description of what goes on, but nothing is explained.

It is entirely possible that knowledge gained in the absence of experience will remain disembodied until a personal framework is developed to which the knowledge can be attached. For the inexperienced student, when content is learned "in the context of 'student as student'" (Glover, Ronning, & Bruning, 1990, p. 23), instead of student as novice, they may not see the relationship between what is being learned and what happens in organizational settings. If they know at least something, they can learn on top of that or change their mind. If they have no background work context, there is no framework to which the learning can adhere.

In order to overcome the absence of prior knowledge, a Guided Field Experience has been instituted in an Organizational Leadership masters program. The intention is to stimulate greater preparedness for academic success and relevant learning for students in this professional preparation program.

The thesis of this poster presentation is that there is a pre-novice stage during which a student can engage in the cognitive task of induction, through which new mental models are developed, Development of mental models is enabled through transformational learning (Cranton, 1994; Mezirow, 1991). There are cognitive processes and there are learning processes involved in the transition from pre-novice to novice.

A cognitive map (Novak, 1998) will be used to represent an explanation of how these processes interact as students develop new models and frames of reference.

The poster reflects innovation in regard to student learning in three areas.   The first is program design, with the institution of a Guided Field Experience. The second is the use of two different academic fields as theoretical underpinnings for the program change. The third is the use of a concept map to aid in discussion of the central content issues that are the subject of the presentation.

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Bridging Classroom and Workplace Knowledge:
A Client Based Approach Using a Team Consulting Model

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Objectives:
The purpose of this interactive teaching session is to present a model for bridging classroom and workplace knowledge. Specifically, it is designed to:

(1) Describe the client based and team consulting approaches to learning.
(2) Discuss the applicability of client/team based pedagogy to other academic disciplines.
(3) Provide conference participants with client/team based learning and assessment strategies.

Audience:
 Post secondary educators across all disciplines.

Activities:
During this interactive teaching session, the following activities will be conducted:

(1) Presenter will demonstrate the client based/team consulting model via PowerPoint presentation.
(2) Participants will engage into group brainstorming to identify potential (discipline specific) client-based course projects.
(3) Presenter will reveal strategies for creating student team (consulting) roles and identifying clients.
(4) Session will conclude with interactive discussions on possible assessment methods.

Description: Client based pedagogy is a form of experiential learning that promotes strategic thinking, applied learning, and team building (Lopez & Lee, 2005; Hansen, 2006). Unlike service learning, which emphasizes social activism, the client based learning approach focuses on helping students to understand and respond effectively to actual clients and their organizational contexts (Kreth, 2005). In addition, it provides students with problem-solving and critical thinking skills necessary to meet organizational challenges in an increasingly complex environment (Miller-Millesen & Mould, 2007). To address problems, students often form team collaborations to arrive at an appropriate solution for the client (Rassuli & Manzer, 2005). Typically used in technical and business courses, the literature reveals gaps in research concerning the applicability of this framework to other academic disciplines (Blakeslee, 2001; Riggert, et al., 2006).

In a nonprofit curriculum, service learning is frequently used to approach classroom and workplace collaborations (Cushman, 2002; Munger, 2002). However, this interactive session will describe the implementation of the client based approach in a nonprofit fundraising course. This

elective course was a cross listed course that included undergraduate and graduate students. In light of the states current budget crisis, students were required to address immediate fiscal issues within a nonprofit agency located in the Los Angeles metropolitan area. The nonprofit agency was selected on the basis of criteria aligned with course learning goals and objectives. The instructor created consulting job descriptions in order to recruit and select students for appropriate leadership roles and mini-team assignments. Using a team consulting model, students worked collaboratively to develop a fund development plan for the nonprofit agency.

The overall goal of this interactive session is to present the client based/team consulting model for bridging classroom and workplace knowledge. Specifically, this session is designed to demonstrate the applicability of client based pedagogy to various academic disciplines. Participants will engage in group brainstorming to identify potential (discipline specific) client-based course projects and the presenter will reveal strategies for creating consulting roles and identifying potential clients. Interactive discussions will conclude with possible assessment methods.

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Getting it Write: Using Authentic Writing to Promote Critical Thinking and Improve Writing Skills

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Objectives:
1. Workshop participants will become familiar with authentic writing/projects/assessments.
2. Workshop participants will engage in interactive and authentic lessons that encourage critical thinking.
3. Workshop participants will create a lesson possibility for their students using authentic writing.

Audience:
This workshop is intended for those who want their students to develop critical thinking skills while at the same time focusing on improving their studentswriting skills.

Activities:
This workshop will begin with an overview of authentic learning tasks and their role in the development of higher level and critical thinking skills. Participants will then review an authentic writing task that was incorporated between college students and elementary students to promote learning for both parties. The participants will then break into groups and participate in various activities that involve authentic learning and critical thinking. Participants will then discuss how authentic learning can be utilized in their classrooms to promote their own learning objectives, while at the same time promoting critical thinking.

Summary:
As Graves, Calkins and others note, emphasis has been placed on teachers providing students with activities that "occur naturally in day to day living rather than activities that are fabricated" (Austin, 2000). These authentic activities stimulate curiosity, creativity, and critical thinking. In addition, "Open-ended tasks provide appropriate challenges, choices, some student control over learning, opportunities to collaborate with others and to construct meaning through reading and writing" (Turner & Paris, 1995).

Text is all around us and it is entwined in our daily routines. What types of text did you see or create today: a shopping list, cereal box, newspaper, text message, or blog? Everyday experiences provide many opportunities to engage in authentic and meaningful writing activities.

Learn how to bring these activities into your lessons and take daily routines to dazzling new heights.

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**A Comparison of Student Understanding of Inheritance Patterns and Perceptions
of Science in Traditional, Face-to-Face, Versus Online Biology Courses**

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Summary:
This study examined whether the method of teaching patterns of inheritance in a biology course, differs in affective (learner's emotions towards learning experiences) and cognitive (person's intellectual abilities) learning as well as state motivation (willingness to learn). This study proposed that there is no differences between traditional Face-to-Face (FTF) and Online courses in student learning and attitudes of Patterns of Inheritance. This proposal stems from several comprehensive studies which maintain that comparisons of FTF and Online largely demonstrate no significant difference in achievement (Phipps & Morisotis, 1999; Russel, 1999).

Pre- and Post-quizzes and attitudinal surveys were given to students in FTF and Online courses. The quizzes measured achievement in a particular are of biology referred to as "Patterns of Inheritance." The surveys asked students to respond to attitudes towards science and genetics. In addition, data was collected on the student's perception of the class they were in as well as their effort level.

Results showed that FTF students achieved significantly better on the quiz scores compared to the online students. Attitudes towards the courses were similar, regardless of teaching mode, and were positive to the respective courses.

The results indicate a difference in achievement which is contrary to most studies that compare the FTF and Online modes of instruction. Several factors could contribute to differences in achievement but the author argues that some of these factors cannot be held constant for the sake of controlling variation. While limitations of the study are discussed, this study reveals several factors that should be considered before comparison studies, such as these, should be conducted.

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