Conference Theme:
Evidence-Based Teaching and Learning

Lilly Conference

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Conference Proceedings

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Preface to Conference Proceedings

This past February over 225 conference participants attended the Lily Conference on College and University Teaching in Newport Beach, CA. These individuals represented 96 institutions from 26 different states and 4 countries. The conference program offered five plenary presentations, 65 concurrent presentations; 10 round-table discussions and 12 poster presentations across the program.

Following a blind peer review process with college and university faculty as reviewers, 100% of the proposals were accepted. Presenters were given the opportunity to develop their scholarly work for publication in the conference proceedings.

The conference proceedings consist of three sections. The first section is comprised of expanded papers written by presenters who agreed to capture material presented in their sessions. These papers were peer reviewed following the conference prior to acceptance into this document. As with all conference participants, their conference presentations were also accepted following a blind, peer review process. The second section includes concurrent session abstracts, listing both the presenters and contributing authors. The final section a listing of Institutions represented by our presenters.

I am grateful to all of the individuals who presented their work at the Lilly Conference on College and University Teaching, Newport Beach 2014. Conference evaluations, supported by anecdotal comments, clearly noted the quality of the session presentations, both in content and delivery.

Of the many things that are needed to make a conference a success, conference presentations are by far the most important. This is certainly a group effort and I appreciate the willingness of the presenters to help make this important event possible.

Todd Zakrajsek, Conference Director

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Plenary Presenters

Stephen Brookfield
University of St. Thomas

Stephen is the John Ireland Endowed Chair at the University of St. Thomas. He has written, co-written or edited sixteen books on adult learning, teaching, critical thinking, discussion methods and critical theory, six of which have won the Cyril O. Houle World Award for Literature in Adult Education. Dr. Brookfield currently serves on the editorial boards of educational journals in Britain, Canada and Australia, as well as in the United States.

Presentation: Becoming a Skillful Teacher

Tara Gray
New Mexico State University

Tara serves as an associate professor of criminal justice and the founding director of the Teaching Academy at New Mexico State University. She has published three books, including Publish & Flourish: Become a Prolific Scholar. She has presented workshops to more than 5,000 scholars in the US and abroad. As a workshop presenter, Dr. Gray is "spirited, informative and entertaining—she's anything but gray!"

Presentation: Publish and Flourish! Become a Prolific Scholar

Diane Halpern
Minerva Schools at Keck Graduate Institute

Diane is the Dean of Social Sciences at Minerva Schools at Keck Graduate Institute. She is also a Professor at Claremont McKenna College and a past president of the American Psychological Association. Diane has published hundreds of articles and many books. Her most recent projects are the development of Operation ARA and the Halpern Critical Thinking Assessment.

Presentation: Teaching Critical Thinking for Transfer: The Why of Higher Education

Christy Price
Dalton State College

Christy is a professor of psychology and the founding director of the Center for Academic Excellence at Dalton State College. She is a nationally recognized authority on innovative teaching techniques to engage modern learners and was chosen by the Carnegie Foundation for the Advancement of Teaching as the Outstanding U.S. Professor for 2012 in the Baccalaureate Colleges category. As a recipient of an institutional foundation grant award, Dr. Price has studied teaching techniques that influence student motivation.

Presentation: Why Don't My Students Think I'm Groovy? The New "R"s for Engaging Millennial Learners

Todd Zakrajsek
International Teaching Learning Cooperative

Todd is an Associate Professor in the Department of Family Medicine and Executive Director of the Academy of Educators at UNC Chapel Hill. Todd served as a tenured associate professor of psychology at Southern Oregon University before directing three teaching centers over the past 15 years. Todd currently serves in leadership roles for several educational efforts, including board membership at Lenovo Computer and Microsoft. He has published and presented widely on the topic of effective teaching and on student learning.

Presentation: Joys and Challenges of the Greatest Profession

Dispositions and Applications for Classroom Management in Teacher Education: Facilitating a Community of Learners

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Educational Foundations and Curriculum
Central Washington University

Kimberlee Bartel
Career and Technical Education
Central Washington University

Abstract

This empirical study discerns whether candidates' dispositions and applications of classroom management strategies change after completing the university classroom management course, and whether their views are aligned with current research on effective techniques. A voluntary, confidential survey was offered to candidates completing the course over a period of one year. The preliminary results from the first part of the year confirm the benefits of creating effectual classroom management plans and identifying the basis for their future success as classroom teachers. This study substantiates the importance of a research-based course in teacher preparation programs with future implications for further study.

Literature Review

Teacher education programs introduce many effective classroom management strategies to prospective teachers. Effective teachers are good classroom managers and have positive expectations that their students will be successful (Wong & Wong, 2009). Teacher education programs introduce many effective management strategies to prospective teachers. Identification of classroom management style is important in order to promote more democratic, humanistic, and positive styles for interventionists (Chambers and Hardy, 2005). The most effective way to develop successful classroom management skills is to create one's own personalized plan using the most current and relevant information available (Charles, 2014). The significance of supporting teachers' professional growth and practice in implementing research-based practices to improve academic and behavioral outcomes for all learners has been demonstrated (Algozzine, Wang, & Violette, 2011; Darling-Hammond, Wei, Andrée, Richardson, & Orphanos, 2009; Emmer & Stough, 2001; Greenwood & Abbot, 2001; Horner, R. H., Sugai, G., Smolkowski, K., Eber, L., Nakasato, J., Todd, A. W., & Esperanza, J., 2009, Wong & Wong, 2009). Training in specific keystone strategies can provide teachers with the resources to prevent problem behavior and manage disruptions without the use of reactive consequences. Teachers can devote more time to instructional activities rather than on reactions to problem responses that rarely contribute to positive long-term outcomes (Ducharme & Shecter, 2011). Successful classroom management is "preventative rather than reactive"; thus it is important for educators to model, identify, and effectively teach desired classroom behavior (Emmer & Stough, 2001). Attention and nurturing should be given to all students (Sprick, Garrison, & Howard, 1998). Teacher candidates learn that to create a positive learning environment, they must construct a classroom in which learning consistently occurs (Young & West, 2008), and which is characterized by an apparent focus, high expectations, a warm environment, and predictable routines and consequences (Latham, 1998; Sprick et al, 1998; Young & West, 2008). Teacher praise can be a useful tool in achieving these essential objectives (Marchant & Anderson, 2012). Pre-service teachers rank highly classroom and behavior management in what makes an effective teacher (Minor, Onwuegbuzie, Witcher, & James, 2002; Lee, Tice, Collins, Brown, Smith, & Fox, 2012).

This research project focused upon the curriculum and materials used in one classroom management course. Candidates studied the development of modern discipline strategies based on the major researchers in the field and viewed various classroom videos of teachers demonstrating techniques. They developed several assignments based upon various interrelated topics, including their philosophy of management style, classroom environment, procedures, rules, consequences, and communicating with stakeholders. The assignments were integrated into a formal classroom management plan, which also included their reflection on meeting the course learning outcomes. The completed classroom management plan was a professional document written in APA manuscript format, bound and covered for future use during student teaching and employment interviews. Student verbal and written feedback during the course indicated their perceptions changed and the content learned was valuable after taking the course. This study further reinforces the application of concepts learned in the course when candidates are actually teaching in a classroom.

Methodology

The researchers received university Institutional Review Board approval to conduct educational research. An anonymous, online, ongoing survey was created and consisted of 27 questions. It was disseminated to the participants using their university email addresses through the web-based tool Qualtrics. The first six questions identified the participants' demographic information: gender, age, year graduated, teaching level (EL, MS, HS), current position, and number of teaching opportunities. The remaining 21 questions were based on understanding and applying the research-based strategies learned in the course in teaching situations as well as how their disposition towards management changed as a result of the course. The responses were recorded on a Likert-like scale from 1 = "Strongly Disagree" to 10 = "Strongly Agree" (see Appendix). Responses were downloaded, quantified, and aggregated by question. The survey will remain open until January 2015 to allow all participants an opportunity to complete their coursework and student teaching before completing the survey.

The required Classroom Management course at this university was taught by three different instructors during 2013, and they collaboratively revised the course's organizational content. The study participants were the 170 senior level teacher candidates who enrolled in this course during the four university quarters following the course restructuring. However, in the professional education program sequence, some of the candidates complete their student teaching the quarter after completing this course, and some still have coursework to complete. The researchers prefer that participants complete their student teaching before they participate in the survey; therefore, the researchers decided to wait one quarter after the participants completed the course to distribute the survey instrument. Therefore, 100 participants have received the survey invitation to date, and data collection and analysis are still in process. Most of the candidates also participate in practical experiences or work as substitute teachers giving them other opportunities to work with K-12 students as well as a basis for responding to the survey questions.

Results

The survey results suggest a strong positive connection between the Classroom Management course content learned and application of the strategies to classroom teaching (questions 7-10, 13-17, and 22-25). All respondents are reporting they applied the philosophical foundations developed and honed throughout the course into their final classroom management plan, agreeing the Wong (2009) textbook was valuable (questions 10, 16-17, and 22-24). They also are reporting the course was an integral component of the professional education program (question 26).

As shown in Table 1, respondents indicated the course concepts learned are valuable to their overall success as a teacher. The responses showed candidates felt some areas of the course were not as important as others in preparing them to successfully teach. Only about half of the respondents stated they gained confidence (question 11), their perceptions about student teaching changed significantly (question 12), and they

communicate effectively as a result of the completing the classroom management course (questions 18-21). Only 35% of the respondents stated the course content gave them insight for successfully completing the *edTPA (Teacher Performance Assessment)*, which is Washington's required performance based assessment for pre-service teachers and is completed during student teaching (question 27). The candidates completed an assignment during the course in which specific classroom management strategies learned were effectively implemented in each of the e*dTPA* Tasks. As previously stated, not all respondents have completed their student teaching; therefore, not all have completed the *edTPA*. The researchers expect the positive responses to increase as candidates who completed the course later in the year show the benefits of instructors' experience teaching the course and making slight modifications based on candidate feedback. Table 1 shows the percentage of respondents who selected a response of five or higher (on a scale of 1-10), with 10 being "Strongly Agree."

Table 1. Classroom management candidates selecting responses #5-10 on Likert Scale

Question	% Agree
7. Course provided useful techniques to use.	85
8. Strategies learned in the course are applied when instructing students.	85
9. Course changed perception about effectively managing a classroom.	70
10. Philosophical foundations of classroom management are applied when instructing students	100
11. Course helped in gaining confidence as a teacher.	50
12. Perceptions about student teaching changed significantly.	50
13. Course positively affected personal classroom management skills.	70
14. Course created confidence in ability to plan/implement instruction based on learner characteristics and context of school and community.	85
15. Charles textbook used in course was valuable.	85
16. Wong textbook used in course was valuable.	100
17. Philosophy of classroom management developed in course is applied.	100
18. Course prepared how to communicate effectively with students.	50
19. Course prepared how to communicate effectively with parents.	50
20. Course prepared how to communicate effectively with colleagues.	50
21. Course prepared how to communicate effectively with administrators.	50
22. Skills learned for the "first day of class" are applied to set the tone and the classroom environment.	100
23. Plan developed is applied for how to manage undesirable classroom behaviors.	100
24. Plan developed is applied for how to encourage positive classroom behaviors.	100
25. Video examples for implementing strategies helped develop personal behavior management plan.	70
26. Course was extremely important component of overall professional education program.	100
27. Course provided valuable insight for completing a successful edTPA.	35

Discussion

The preliminary findings clearly show a trend that respondents are reporting that they are effectively implementing the classroom management strategies learned in the classroom management course as they begin teaching in the classroom. Their disposition changed and their confidence increased as a result the curricular content covered, contributing to their overall success as a teacher. However, more data collection and analysis are needed to generalize these findings. The literature review discusses the importance of classroom management skills for beginning teachers, and many university teacher preparation programs require their candidates to learn and implement management strategies as part of their foundational coursework. The results of this study support such course requirements.

References

Algozzine, B., Wang, C., & Violette, A. S. (2011). Reexamining the relationship between academic achievement and social behavior. *Journal of Positive Behavior Interventions, 13*(1), 3-16.

Chambers, S. M. & Hardy, J. C. (2005). Length of time in student teaching: Effects on classroom control orientation and self-efficacy beliefs. *Educational Research Quarterly, 28*(3), 3-9.

Charles, C. M. (2014). *Building classroom discipline* (11th ed.). Boston, MA: Pearson Inc.

Darling-Hammond, L., Wei, R. C., Andrée, A., Richardson, N., & Orphanos, S. (2009). State of the profession: Study measures status of professional development. *Journal of Staff Development, 30*(2), 42-50.

Ducharme, J. M. & Shecter, C. (2011). Bridging the gap between clinical and classroom intervention: Keystone approaches for students with challenging behavior. *School Psychology Review, 40*(2), 257–274.

Emmer, E. T., & Stough, L. M. (2001). Classroom management: A critical part of educational psychology, with implications for teacher education. *Educational Psychologist, 36*(2), 103-112.

Greenwood, C. R., & Abbot, M. (2001).The research to practice gap in special education. *Teacher Education and Special Education, 24,* 276-289.

Horner, R. H., Sugai, G., Smolkowski, K., Eber, L., Nakasato, J., Todd, A. W., & Esperanza, J. (2009). A randomized, wait-list controlled effectiveness trial assessing school-wide positive behavior support in elementary schools. *Journal of Positive Behavior Interventions, 11*(3), 133-144.

Latham, G. I. (1998). *Keys to classroom management.* Logan, UT: P & T Ink.

Lee, J., Tice, K., Collins, D., Brown, A., Smith, C., Fox, J. (2012). Assessing student teaching experiences: Teacher candidates' perceptions of preparedness. *Educational Research Quarterly, 36*(2), 3-19.

Marchant, M. & Anderson, D. H. (Spring, 2012). Improving social and academic outcomes for all learners through the use of teacher praise. *Beyond Behavior*, 22-29

Minor, L., Onwuegbuzie, A. J., Witcher, A. E., & James, T. L. (2002). Preservice teachers' educational beliefs and their perceptions of characteristics of effective teachers. *The Journal of Educational Research, 96*(2), 116-127.

Sprick, R., Garrison, M., & Howard, L. M. (1998). *CHAMPs: A proactive and positive approach to classroom management.* Eugene, OR: Pacific Northwest Publishing

Wong, H. K., & Wong, R. T. (2009). *The first days of school: How to be an effective teacher.* Mountain View, CA: Harry K. Wong Publications, Inc.

Young, K. R., & West, R. P. (2008). *Building positive relationships and social skills: A nurturing pedagogy approach.* Provo, UT: Positive Behavior Support Initiative, Brigham Young University.

Appendix

CLASSROOM MANAGEMENT SURVEY

Please check the appropriate category for each of the questions below:

1. Gender: Male, Female
2. Age: 18-22, 23-27, 28-32, 33-37, 38-45, over 45
3. Year of Anticipated Graduation: 2013, 2014, 2015, 2016, 2017
4. Current Status: CWU student, Student Teacher, Certified Teacher Teaching, or Certified Teacher Not Teaching, None of These Options Apply to Me
5. Teaching Level: Pre-K, Elementary, Middle School, High School
6. Number of Teaching Opportunities or Positions: 1-5, 6-10, 11-15, more than 15, Not Applicable

For each of the following questions, please select the location on the spectrum that best represents your response. (Scale was provided under each question).

Strongly Disagree									Strongly Agree
1	2	3	4	5	6	7	8	9	10

7. The classroom management course provided useful techniques for me to use.
8. I apply the strategies learned in the course when instructing students.
9. This classroom management course changed my perception about effectively managing a classroom.
10. I apply the philosophical foundations of classroom management that were learned when instructing students.
11. This classroom management course helped me gain confidence as a teacher.
12. By completing this course, my perceptions about student teaching changed significantly.
13. This course positively affected my own classroom management skills.
14. Because of the content of this course I am confident in my ability to plan and implement instruction based on learner characteristics and the context of the school and community.
15. The research-based textbook used in this course, authored by Charles, was valuable to me.
16. The research-based textbook used in this course, authored by Wong, was valuable to me.
17. I apply the philosophy of classroom management that I developed in this course.
18. Because of this course, I am better prepared to communicate effectively with students.
19. Because of this course, I am better prepared to communicate effectively with parents.
20. Because of this course, I am better prepared to communicate effectively with colleagues.
21. Because of this course, I am better prepared to communicate effectively with administrators.
22. I apply the skills learned in this course for the "first day of class" to set the tone and classroom environment.
23. I apply the plan I developed in this course for how to manage undesirable classroom behaviors.
24. I apply the plan I developed in this course for how to encourage positive classroom behaviors.
25. The video examples for implementing classroom management strategies helped me develop my own classroom behavior management plan.
26. This course was an extremely important component of the overall professional education program.
27. This course provided valuable insight for completing a successful edTPA.

The W.I.P.E Rubric: Assessing Student Presentations of Mathematical Proofs

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Abstract

In many student-centered, inquiry-based undergraduate mathematics courses, students are required to give in-class presentations of mathematical proofs, which are solutions to theoretical exercises. The W.I.P.E. rubric is used to evaluate student presentations and written proofs of theoretical exercises. The W.I.P.E. rubric is based on several different assessment models, which emphasize proof writing and comprehension. The rubric was created to evaluate in-class presentations in undergraduate mathematics courses for math majors and beginning math graduate students.

Introduction

The National Mathematics Advisory Panel (2008) posits that strengthening America's pipeline of mathematicians, scientists, and engineers is critical to the nation's global competiveness, economic prosperity, domestic safety, and quality of life. Studies show that students who have engaged in active learning experiences have improved retention of information and critical thinking skills (President's Council of Advisors on Science and Technology, 2012). Among many teaching methods to engage students in active learning, Inquiry-Based Learning (IBL) is a student-centered method of teaching. As Schinck (2011) examined several studies on IBL, in particular in mathematics classrooms, she noted that classroom communities of inquiry encourage students to produce proofs by making global or intuitive observations about the mathematical concepts and transform these observations into formal, deductive reasoning. As Tall (1994) asserts about university students "If they are given opportunities to develop mathematical thinking processes, albeit with initially easier mathematics, they may develop attitudes to mathematics more in line with those preferred by mathematicians" (p.1).

Literature Review

Many students struggle with learning to become mathematical proof writers (Selden & Selden, 2003; Tall, 1991; Solomon, 2006). David Tall (1991) remarks that "students meeting new formal mathematical ideas for the first time may face difficulties in cognitive reconstruction to adapt to the new way of thinking and may need help in this transition phase" (p.7). Although students struggle with formalizing mathematical ideas, mathematicians and mathematics educators both agree that having students construct mathematical proof is not only essential in teaching students to communicate and explain mathematics, but also aids students in learning how to become better problem solvers (de Villiers, 1990; Larsen & Zandieh, 2008; Hanna 2000; Hanna & Barebeau, 2008). As IBL classrooms focus on mathematical discovery and problem solving, an IBL class is an ideal setting for students to learn to become mathematical proof writers. In a typical undergraduate proof-based math IBL class students construct arguments and proofs of theoretical exercises from a presentation script, which with a list of theoretical exercises selected by the instructor.

Methodology

To aid in the efficiency and uniformity of evaluating student presentations and written proofs of theoretical exercises, the W.I.P.E rubric was created. This rubric considers four categories involved with both written proofs and presentations of proofs: **W**ritten proof, **I**nteraction with peers, **P**roof functions, and **E**xplanation of proof. In the appendix the rubric is given. Below is an explanation of each category and the way in which presentations are evaluated related to each category.

Written Proof

In this category the student's written proof, which is typically completed before class, is assessed. Evaluation of the written proof is primarily based on the assessment model of Andrew (2009). Andrew's Proof Error Evaluation Tool (PEET) allows for efficiency and easy identification of errors related to structure and understanding of the proof. Particularly related to the PEET, the types of structural errors that are examined are errors in logical ordering of ideas and proof readability. Some errors of understanding that are assessed are not enough justification for arguments, aspects of the proof not addressed and forgotten conclusions. If a student receives a lot of feedback from their peers during their presentation, the presenter is allowed to rewrite their write-up and turn it by the beginning of the next class. Thus, the student benefits from both peer and self-assessment.

Interaction with Peers

After each presentation, students open the floor to their peers for discussion. During this time, presenters are given the chance to address any questions or refutations made by the class. In addition, the presenter can further justify and argue the statements made in his/her presentation. Typically, the group is careful in discussing and reviewing each proof for validity, as they know they are responsible for this material. In Proofs and Refutations, Lakatos (1976) outlines methods of mathematical discovery. Larsen and Zandieh (2008) restructured these methods of mathematical discovery from a pedagogical perspective. Below is a table from Larsen's and Zandieh's work summarizing their framework.

Type of activity	Focus of activity	Outcome of activity
Monster-barring	Counterexample & underlying definitions	Modification or clarification of an underlying definition
Exception-barring	Counterexample & conjecture	Modification of the conjecture
Proof-analysis	The proof, the counterexample, & the conjecture	Modification of the conjecture & sometimes a definition for a new proof-generated concept

The primary focus of this assessment category is how well the student appropriately addresses the concerns raised by their peers while engaging in monster-barring, exception-barring and/or proof-analysis activities. Students should engage in argumentation in a logical, sensible way, i.e. an argument that follows Toulmin's model (Toulmin, 2003). In the assessment of the students' interaction, related to the table above, the instructor has to determine what type of activity fits the refutation brought by the class. Then the instructor has to assess if the presenter responded with the appropriate activity outcome.

As the presenter's validation is usually the only source of truth for an argument, issues of persuasion versus conviction, detailed in Inglis and Mejia-Ramos' (2009) work, commonly arise during this interaction. In class, students naturally pick other peers who they view as "mathematical authorities." The class assumes arguments made by the student who is viewed as a "mathematical authority" are valid without dispute. By the end of the semester, this usually leads to limited interaction between the class and the presenter who is deemed the "mathematical authority."

Proof Functions
As given by Bell (1976) and then expanded by de Villeriers (1990), the functions of mathematical proof are: Verification, Explanation, Systemization, Discovery, and Communication. Evaluated in this category is how well the students address each of the five functions. The overall validity of the proof is evaluated in this category. The assessment in this category focuses on different aspects than the evaluation of the written proof since the evaluation of the written proof considers only structure and understanding. Also, the presenter can augment and adjust the written proof after receiving feedback from peers, which is not possible for the proof presented in-class.

Explanation of Proof
The main assessment factor that is evaluated here is how well the presenter displays their comprehension and understanding of the proof being presented through their explanation. Most of the evaluation process of this category has foundation in Yang and Lin's Reading Comprehension of Geometry Proof (RCGP) model, which includes four levels and five facets of proof comprehension (Yang & Li , 2008). Specifically, the presenter's explanation should demonstrate their understanding of basic knowledge required to prove the given statement. Then the student should be able to explain how they logically chain arguments and give a summary of the proof. If suitable, explanation about generalizing and applying ideas found in the proof should be given. Recently, Mejia-Ramos, Fuller, Weber, Rhoads, Samkoff (2012) have extended the Yang and Lin's model to further include additional local and holistic aspects of proof comprehension assessment.

Conclusion

As effectiveness of IBL courses on student learning have been shown in the literature, it is meaningful to have various assessment tools to facilitate this teaching structure (Kahle, Meece, & Scantlebury, 2000). The W.I.P.E. rubric incorporates assessment of not only the presentation of a student's mathematical proofs, but also encompasses evaluation of their written proof. It also allows for further analysis of student comprehension, mathematical communication, and problem-solving skills.

This rubric was created and refined after evaluating student presentations for several semesters since 2010. There was an average of 7-10 students, which allowed each student to present 5-8 proofs per semester. The student population for these courses included upper-level undergraduate math majors and beginning math graduate students.

References

Andrew, L. (2009). Creating a proof error evaluation tool for use in the grading of student-generated pProofs. *PRIMUS, 19(5)*, 447-462.

Bell, A. W. (1976). A study of pupils' proof-explanations in mathematical situations. *Educational Studies in Mathematics, 7(1),* 23-40.

de Villiers, M. (1990). The role and function of proof in mathematics. *Pythagoras, 23*, 17-24.

Hanna, G. (2000). Proof, explanation and exploration: An overview. *Educational Studies in Mathematics, 44*, 5-23.

Hanna, G. & Barbeau, E. (2008). Proofs as bearers of mathematical knowledge. *ZDM, 40*, 345-353.

Inglis, M., & Mejia-Ramos, J. P. (2009). The effect of authority on the persuasiveness of mathematical arguments. *Cognition and Instruction, 27*, 25-50.

Kahle, J. B., J. Meece, and K. Scantlebury. 2000. Urban African-American middle school science students: Does standards-based teaching make a difference? *Journal of Research in Science Teaching, 37 (9),* 1019-1041.

Lakatos, I. (1976). *Proofs and refutations*. Cambridge, MA: Cambridge University Press.

Larsen, S., & Zandieh, M. (2008). Proofs and refutations in the undergraduate mathematics classroom. *Educational Studies in Mathematics, 67(3),* 205-216.

Mejia-Ramos, J. P., Fuller, E., Weber, K., Rhoads, K., & Samkoff, A. (2012). An assessment model for proof comprehension in undergraduate mathematics. *Educational Studies in Mathematics, 79*(1), 3-18.

National Mathematics Advisory Panel (NMAP). (2008). *Foundations for Success: The Final Report of the National Mathematics Advisory Panel*. Washington, DC: Author.

President's Council of Advisors on Science and Technology (PCAST). (2012). *Engage to Excel: Producing One Million Additional College Graduates with Degrees in Science, Technology, Engineering, and Mathematics*. Author: Washington, DC.

Selden, A., & Selden, J. (2003). Validations of proofs considered as texts: Can undergraduates tell whether an argument proves a theorem? *Journal for Research in Mathematics Education, 34(1),* 4-36.

Schinck, A.G. (2011). Why Use IBL? The Road to Present Day Inquiry-Based Learning. Jan. 2011. Retrieved from http://www.inquirybasedlearning.org/AIBL/Why_Use_IBL.html.

Solomon, Y. (2006). Deficit or difference? The role of students' epistemologies of mathematics in their interactions with proof. *Educational Studies in Mathematics*, *61(3)*, 373-393.

Tall, D. (1991) The psychology of advanced mathematical thinking. In Tall D. O. (ed.), *Advanced Mathematical Thinking*, Kluwer: Holland, 3– 21.

Tall, D. (1994). Understanding the Processes of Advanced Mathematical Thinking. *Abstracts of Invited Talks*, *International Congress of Mathematicians, Zurich*, 1– 18.

Toulmin, S. E. (2003). *The uses of argument* (Updated ed.). New York: Cambridge University Press. (First published in 1958).

Yang, K.-L., & Lin, F.-L. (2008). A model of reading comprehension of geometry proof. *Educational Studies in Mathematics, 67*, 59-76.

Appendix

The W.I.P.E. Rubric

Date:
Name:

Written Proof _____ 5pts	Comments:		
Interaction _____ 6pts	Monster-barring (2 pts) Exception-barring (2 pts) Proof-analysis (2 pts)		Comments:
Proof function _____ 5pts	Explanation (1pt) Verification (1pt) Systemization (1pt) Discovery (1pt) Communication (1pt)		Comments:
Explanation _____ 6pts	Basic-knowledge (2 pts) Logical status (2 pts) Summarization (2 pts)		Comments:
Total: _____ 22pts			

Use of Computer Technology for Today's Teachers

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Abstract

The goal of this paper is to demonstrate that one can use computer technology to give detailed feedback to students. Grading is one of the most important forms of communication to the students regarding their progress in a course. Therefore, timely and substantive feedback is an essential learning tool. Constructive and comprehensive feedback can make a substantial difference in students learning. When a teacher uses a conventional grading technique, the comprehensive feedback on students' work may take more time then he or she can realistically allocate for grading papers. This paper presents a discussion on why grading is an important communication and how one can develop macros to improve grading efficiencies.

Introduction

Personal connection and accurate and timely communication is the key for today's teachers to both empower and motivate students. This often requires a reasonable level of understanding and user skills on computer technology, which is beyond the working knowledge of just office software. Because of the lack of knowledge about the full potential of various computer technologies, many teachers, and even business leaders, struggle to create an effective communication system for their students or people they manage or lead (Kiesler, Siegel, & McGuire, 1984). The reality of today's world requires them to pay attention to many areas or projects on the daily basis. Without a reasonable level of sophisticated software knowledge, staying organized with multiple projects is next to impossible (Newberry & Conrad, 2010).

Many teachers and business leaders work long hours, yet achieve less than what they need in order to stay ahead of their games. During that time, many of them make two assertions. First, because they are working hard and always busy, they may think that they are doing hard (difficult) work for the organization when, in fact, they are working diligently. Working diligently does not necessarily mean working on projects that can contribute significantly to the growth and sustainability of an organization. Working diligently may simply represent the lack of skills necessary for doing a task in the most efficient way. Hard (difficulty) work, on the other hand, means working on multiple important projects—projects that are vital for the organizations sustainability and growth—and successfully completing each of the tasks in a timely manner.

To increase efficiency some individuals create an alternate pathway to communication such as mass e-mails and generalized communications. Such communications, at best, produce less than expected results. Some teachers and business leaders are aware of the need for increasing efficiency and even return to school with a hope that higher education is the solution to their challenges.

In order to help teachers and future business leaders, the authors argue that the proper use of technology (e.g., hyperlinks, cell references, and macros) within a course prepares students for the future and makes learning more enjoyable. This paper proposes that teaching software applications can benefit both the teacher and students. It shows how timely, detailed, accurate, and individualized communications are possible for a teacher by using either software options built into office software or by using software readily available in the market.

Literature Review

The objective of the feedback to students' assignments should not be limited to pointing out what is right and what is wrong in an assignment. The feedback also needs to include explanations of why it is wrong and how to correct the underlying concept. This will help the students to store the information in their long-term memory for future retrieval. In that way, they can avoid the consequence of such misconception in some of the other assignments during the semester. In order to develop precise feedback, a teacher needs to remember the fact that the ease of retrieval of any information from a long-term memory largely depends on the way it is stored in the memory (Ormord, 1995). This means that a clear and constructive feedback can significantly contribute how a student encodes the lesson learned from feedback. On the other hand, it is disappointing to instructors when they provide detailed feedback to students, but students simply ignore those (Desrochers & Zell, 2012). Therefore, a part of a good teaching strategy is reflecting on the assignment guidelines and assignment feedback.

Often the students lose interest in doing his or her best in completing an assignment when the assignment expectations are unclear. To improve clarity, sometime teachers use rubrics. While the use of rubric is a good way to help students in gaining clarity on assignment, instructors can benefit for paying attention to make sure that the rubric itself reflects the learning objective of the assignment. To derive maximum benefit, Duke University Professor, Dan Ariely (2014) has a better strategy. He not only uses rubric but also posts sample graded papers for his students so that they can have a clear idea on what the assignment is all about. This strategy is very effective since a student scan see exactly what is an A, B, or C grade paper, and what he or she needs to do to earn appropriate grades in the paper. This helps the students to see where and why the posted graded papers lost points and write their papers with an expected outcome.

When the students learn a subject, they demonstrate the knowledge gained through homework, quizzes, and exams. Homework and quizzes are excellent opportunities for them, not only to reinforce that they are on a right track, but also for them to know their weak points so that they can refine those areas. Therefore, feedback on the areas that the students need to improve can be a great learning tool for them. Useful feedback helps students to know why something is incorrect, and how to correct it. The feedback such as, "read the chapter" or "read the book" are not affective feedbacks to students.

As an example, once, one of my friends complained saying that students do not read the feedback. I wanted to see one of his graded papers. To my surprise, I saw that he inserted same comment in 15 different places of the paper. There were other comments of similar nature. Those 15 comments where the same statement: "a run-on sentence." All the comments created an impression that there are many errors in the paper. In fact, there were only three or four types of errors in the entire paper. I proposed to him that it would be more effective to insert a detailed explanation of what a run-on sentence is and how to avoid it in writing. His response was that he covered that in the class. Even though he covered that in the class, it is important to recognize that attention has a diminishing gradient across time (Branden, 2001). Therefore, each student may not gain mastery on all the topics covered in a single class session. For that reason, many students can benefit from receiving detailed feedback, even though the teacher has covered those topics in class. In addition, it is more beneficial for a student to learn how to correct the same mistakes he or she made in multiple places, instead of simply to learn how many places he or she made those mistakes and not knowing how to correct those. Feedback is not only an assessment of students' learning but also a learning tool for the students.

An example of a constructive feedback in this particular case is as follows, "This is a run-on sentence! The other name of run-on sentence is a "fused sentence." This happened when anyone connects two complete sentences with one of the seven coordinating conventions without the use of a comma right before the conjunction that connected the sentences. For example, consider the following sentence: it was a rainy day and we really wanted to stay home. This is a fused sentence because "It was a rainy day." and "We really wanted to stay home." are complete sentences. In order to combine them in a single sentence with one of the coordinating conjunctions, you need to use a "comma" in front of the coordinating conjunction. The sentence structure will be as follows: It was a rainy day, and we really wanted to stay home."

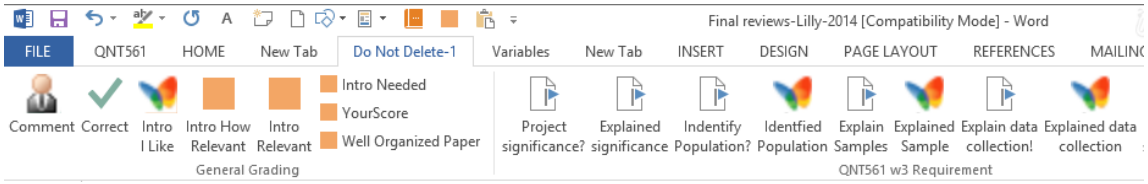
Labeling the errors is also a good strategy. Students can use those labels to identify quickly how many places they made the same mistake. The understanding that they made few mistakes but in multiple places can be reassuring to the students. With this new knowledge, they now can reevaluate their work and conclude that by correcting those few errors, they can significantly improve their future writings. Not only that, this type of feedback can help them create a ledger of errors along with the ways to avoid those. In this way, feedback can be an essential learning tool.

An effective feedback strategy is the one that can create maximum impact to the students learning. The strategy includes the feedback that the student can use as a study material. This type of feedback may take more time than a teacher realistically can afford. However, by using computer technology, one can increase grading efficiency to increase teacher's time surplus.

Method

The author's purpose is to demonstrate that just by using mouse clicks anyone can use macros to give detailed feedback to students' papers. One can easily create macros using Microsoft Office software. A macro is a set of computer instructions that one can save in a computer and run those instructions with a single mouse click on an icon placed in the Quick Access Toolbar or in the Ribbon of word processing software such as Word. MS Word comes with basic Tabs in the Ribbon. A user can increase or decrease the number of available Tabs in the Ribbon. A user can also create his or her personal Tab in the built in Ribbon. Figure 1 shows an example of the set of tab the author created as an example.

Figure 1. Icons in the Quick Access Toolbar above the Ribbon



Creating and using macros is relatively simple. However, one needs to take time to use the Quick Access Toolbar, the Ribbon, the Tabs, and the Icons in each Tab. There are many Icons in each Tab. The functionality of only a few of these Tabs will be necessary to write, save, and use macros. It is also useful to recognize that each Icon in a Tab belongs to a group. For example, in Figure 1, the "Do Not Delete-1" Tab is active, and it contains two clusters of Icons. These are "General Grading" and "QNT561 w3 Requirement" (see labels below each cluster in Figure 1). There are several Icons inside each cluster. Each of these Icons represents a macro, which will activate when the user places the mouse pointer on that Icon and clicks on the left mouse key once. Each Icon also has a short verbiage to help the user decide quickly which macro he or she likes to activate for a particular need. The author's purpose is to demonstrate that just by using mouse clicks anyone can use macros to give detailed feedback to students' papers.

To create, save, and use these macros, one needs to review two Tabs and two Icons. These are the Macros Icon in the VIEW Tab and in Quick Parts Icon in the INSERT Tab. Although the steps are straightforward, one has to have the discipline to create the set of comments that will be effective in particular situations. One can build, save, and have the Icons ready for use in following three steps.

Step 1. Saving Comments using the Quick Parts Icon. In a Word document, type the comments one would like to use repeatedly when providing feedback to students. Once the comment write up is complete, copy the paragraph and save it by choosing the Quick Parts Icon inside the INSERT Tab and choosing Save Selection to Quick Part Gallery option. Quick Part Gallery gives the option to save the paragraph in a permanent file with any particular name the user can choose. The user can fill out the name field and remember the name he or she gave to this paragraph. From the Quick Part Icon, one can quickly retrieve this paragraph. The user now created and saved the paragraph for repeated use.

Step 2. Writing Macros. To start creating the macro, first locate the Macro Icon from the VIEW Tab. The Macros Icon will give three choices – select the Record Macro option. Once the user selects the Record Macro button, the Record Macro provides an option to name the macro that can record the necessary steps to retrieve the desired paragraph when the user activates this macro. The Macro Name needs to be a single word and must be stored in "All documents (Normal.dotm)."

Step 3. Building Tabs and Icons. You can activate the option to customize the Ribbon by using the right-click of the mouse button anywhere on the Ribbon. By choosing Customize Ribbon with a left mouse key, one can activate the Word option. This will contain two windows: the "Choose option from popular commands" window to the left and "Customize the Ribbon" window to the right. At the bottom of the right window outside the frame, there are three option buttons: New Tab, New Group, and Rename. One click on the New Tab option will create a New Tab (custom) and a New Group (custom), and both the Tab and the Group will show in the window above after clicking "OK."

By highlighting the newly opened New Tab (custom) inside the frame and choosing the Rename option outside the frame, the Rename option will show up as a separate small window where one can type a name for the newly created Tab. By following the same set of steps, one can also change the name of the Group inside that newly created Tab. The Tab and the Group are now ready for Icons to run the newly created Macro.

Keeping the selection on the newly created Group one can change the option on the left Window from Popular Commands to Macro by using the drop down button of the title window. All Macros created by the user of this computer will show up in the left Window. By highlighting the newly created macro and using the button "Add>>," the selected Macro can be transferred to the Selected Group. The rename option is available to choose an appropriate Icon and the name of that Icon in the selected Group. After choosing the name and the Icon of the selected macro, the user must close the Word Option dialog window by choosing OK button. By closing this dialog box with any other way will result in the loss of everything in Step 3. The newly created tab with the selected Icon for the macro will show up in the Ribbon. A user can add or remove the existing tabs from the Ribbon by checking and unchecking the corresponding Tabs in the Custom ribbon Main tab by a right click on the Ribbon and choosing Customize Ribbon option.

Conclusion

A teacher uses homework, quizzes, and tests to gauge students' mastery of the learning materials. Clear, constructive, comprehensive, and timely feedback is one of the most useful tools. Teachers can significantly influence the learning experience of the student by providing comprehensive feedback to the student on his or her assignments. Such comprehensive feedback may require a disproportionate amount of time if the teacher uses the traditional grading method. However, consistent timely feedback is quite possible by using macros. Writing such a macro does not require any knowledge of computer language when the functions of Microsoft Office are used. Once written, saving those macros in Icons in a Tab makes it easy for future use. Three steps are necessary for this. First, write the comments in a text, such as in a word document and save those in Quick Parts gallery. Second, use the macro recorder to record the steps needed to insert those texts as comments in students' work, and third, create appropriate Tabs and Icons to run those macros with is a single mouse click. Once created, a teacher can use these macros repeatedly to grade papers for all future classes of the same subject. This practice cannot only save grading time, but also improve teaching efficiency and effectiveness.

References

Kiesler, S., Siegel, J., & McGuire, T. W. (1984). Social psychological aspects of computer-mediated communication. *American Psychologist*, *39*(10), 1123.

Newberry, R., & Conrad, D. (2010). Identification of outcome based business communication skills. *Allied Academies International Conference.Academy of Organizational Culture, Communications and Conflict Proceedings, 15*(2), 28-32. Retrieved from http://search.proquest.com/docview/807539416?accountid=458.

Ormord, J. E. (1995). *Human learning* (Rev. and updated). Englewood Cliff, NJ: Prentice-Hall.

Desrochers, C. G., & Zell, D. (2012). IDEA Item #17: Provided timely and frequent feedback on tests, reports, projects, etc., to help students improve. Manhattan, KS, The IDEA Center. Retrieved from http://ideaedu.org/research-and-papers/pod-idea-notes-instruction/idea-item-17-provided-timely-and-frequent-feedback

Ariely, D. (2014, March 03). Solve a problem. *Coursera*. Retrieved March 25, 2014, from https://class.coursera.org/behavioralecon-002/wiki/Sample_Essays

Branden, N. (2001). *The psychology of self-esteem: A revolutionary approach to self-understanding that launched a new era in modern psychology*. San Francisco, CA: Jossey-Bass.

Abstracts

In alphabetical order

Valuing the Students' Voice: Learning from our Students about our own Teaching

Judith Ableser - *Oakland University*

What can we learn from listening to our students? This interactive session will provide a research and experiential base for listening to and valuing our students' voices as an essential ingredient in reflecting on and improving our own teaching. We will explore methods beyond (or alternative to) traditional "student evaluations" that can enhance our own practice and engage partnerships in the scholarship of teaching and learning (SoTL). Participants will return to their own campuses with a range of effective methods for listening to and learning from students in order to enhance their own teaching.

Objectives:
Use research and evidence-based practices, to describe and outline how and why "engaging the student voice" can enhance their own teaching and positively impact the Scholarship of Teaching and Learning; analyze how the students' voice is represented through initiatives including course evaluations, formative student feedback, student forums, student and faculty partnerships in learning communities, SoTL and course design; reflect on strategies implemented in a Faculty Development Center that values and incorporates the student voice to enhance Teaching and Learning; and develop strategies to engage your students' voices in order to reflect on and enhance your own teaching, implement student-centered learning, curriculum development and/or the impact that students can have in a Faculty Development Centers' programs.

Faculty Members Professional Skills at Al-Imam Muhammad Ibn Saud Islamic University (IMISIU)

Galya Al Sulim - *Al-Imam Muhammad Ibn Saud Islamic University*

This poster lists professional competencies for the faculty members in educational specializations based on standards of total quality assurance. It also uses female students' perspectives to know about the extent of quality in the teaching performance of the faculty members at the College of Social Sciences at Al Imam University. One hundred twenty-two female graduate students from the College of Social science majoring in educational administration, curriculum and teaching methods, education principles, and Islamic education, participated in the study conducted in the second semester of the academic year 2011. The study addresses professional competencies associated with personal characteristics and human relations, knowledge in specialization, teaching delivery, motivating and assessment and reinforcement.

Objectives:
Improving the faculty member's teaching performance in the classroom; providing the faculty member with a kind of feedback that would enable him to diagnose the strengths and weaknesses in his teaching performance (Jame' 1993); providing administrators, including departments heads and deans of colleges, with the necessary information they need for making administrative decisions related to the faculty member's job duties; providing students with information that help them in the selection of courses and instructors; and creating a scientific research database about university teaching as one of the university functions.

Teaching, Technology and Us: Teaching in the 21st Century

Lynne Anderson and Mary Anne Weegar - *National University*

Advances in technology have drastically changed the way we interact with the world and each other. The digital age requires that we understand and are able to harness the power of technology to live and teach. Being able to use technology is no longer enough. Today's teachers need to be able to use technology to analyze, learn, and explore. Digital age skills are vital for preparing their students to work, live, and contribute to the social and civic fabric of their communities. Teaching in higher education is difficult, because the 21st Century commands teaching with technology while having been educated in another teaching paradigm. In a workshop format, participants will dissect the contrasting 20th and 21st Century classrooms. Participants will also formulate the shift in thinking required for taking technology as an intrusion in teaching to a level of excitement about learning and teaching.

Objectives:
Analyze differences in teaching and learning with technological advances; share the burden of becoming a 21st Century learner; and reframe their perspective on that burden to become a stimulating opportunity to learn and to teach.

University of Texas Pan America Quality Matters: Teaching Structured Online Humanities Courses

Tamer Balci - *University of Texas, Pan American*

This study examines the standardized online teaching program Quality Matters (QM) based on original data. Using data collected from online world history courses, which were designed and taught with QM standards, this presentation will exhibit key benefits and obstacles for instructors teaching humanities courses with QM. Participants will be able to learn strategies to deal with the potential obstacles of teaching with QM rubrics in humanities courses. Also, using the empirical data collected from Second Life Program chats, participants will comparatively learn strategies to make discussion board an effective learning tool.

Objectives:
Demonstrate in oral form the key benefits of using QM rubrics in humanities courses; identify main obstacles of teaching with QM rubrics in humanities courses; and demonstrate in written form the ways to deal with the potential obstacles of teaching with QM rubrics in humanities courses.

Humanity's 2050 Challenge: Using Authentic Challenge and Audience to Promote Social Responsibility and Ownership

Teresa Balser - *University of Florida*

Complex and adaptive challenges threaten human wellbeing and sustainability. However our graduates often lack capacity and/or commitment to address these challenges. We offered a new course where students are given ownership of their learning in confronting an authentic and complex challenge. Students address the problem of how to feed 9-11 billion people sustainably by 2050 and present their solutions to state industry leaders. This poster provides insight into the impact that real world challenge and authentic audience had on student work, attitude (social responsibility), and sense of ownership over the course and their own learning.

Objectives:
Define challenge learning and authentic audience; explain how the use of challenge and authenticity impacts student attitude in an undergraduate class; and imagine ways to apply the concepts presented in their own classroom teaching.

Teaching Strategies to Enhance Student Learning

Tim Becker and Gale Mazur - *Brandman University*

Over 20 years ago with support from a Lilly Endowment, seven principles of good teaching in undergraduate education were identified that when operationalized increase student engagement and learning. This presentation will update effective ways to implement the seven principles by examining effective teaching strategies in the traditional and online classroom environments that motivate students and enhance their learning. Session participants will have opportunities to assess alternative methodologies that encourage collaborative learning among instructors, students and their peers; promote active learning; achieve greater academic rigor and higher standards; and increase student responsibility for their own learning.

Objectives:
Understand the seven principles of good teaching in undergraduate education as identified by the research of Chickering and Gamson (1987); examine teaching strategies to operationalize each of the seven principles in traditional, blended and online classroom environments; and evaluate the impact of teaching strategies based on the seven principles to enhance student learning.

Creating Informal Intellectual Community: How Faculty, Students, and Administration Collaborated to Transform a Campus Culture

Suzie Benack - *Union College*

This presentation describes one college's attempt to transform its campus culture and enliven its informal intellectual community through the creation of the Minerva House Program, a student- and faculty-led system of seven Houses, to which all students and faculty belong. We examine how different campus constituencies came to recognize their shared dissatisfaction with the campus climate, describe the Minerva House Program, and report the results of implementing this program for ten years. We also discuss obstacles in working with different constituencies, provide instruments for assessing informal intellectual life, and draw general lessons from our experience that are transferable to other institutions.

Objectives:
Recognize ways faculty can contribute to an institution's informal intellectual community, as well as ways administrators can support faculty in making those contributions; understand a model of how different constituents in an institution (students, faculty, administration, Board of Trustees) can first identify common concerns about campus environment and then collaborate to make broad institutional change; become aware of obstacles to creating informal intellectual community that can originate from each constituency (students, faculty, Student Affairs, administration); and obtain a set of measures to assess informal intellectual climate at their home institutions.

Correlation of Patient Satisfaction Scores with Nurses' Attitudes

Suzette Bosveld - *Western University of Health Sciences*

The focus of the project was to determine if an educational intervention aimed at changing nurses' attitudes and knowledge impact their management of a patients pain and does this change impact the HCAHPS pain related satisfaction scores in this acute care setting? The instrument used to measure pre and post intervention change was the "Knowledge and Attitudes Survey Regarding Pain" (2008) by Ferrell and McCaffery. A paired t-test of pre and post survey scores and a formula to calculate percent change were utilized to evaluate the intervention. Evaluation of data revealed that knowledge levels did improve post intervention. However, knowledge alone was insufficient to positively affect satisfaction scores.

Objectives:
Understand the prevalence of acute and chronic pain and the subsequent financial burden placed on healthcare resources secondary to ineffective recognition, assessment, and treatment of pain states; understand the impact that pain management HCAHPS (patient satisfaction) scores have on reimbursement for care under the Value-Based Purchasing (VBP) Program; recognize that an education intervention aimed at increasing knowledge and attenuating negative biases related to the management of acute and chronic pain alone is not effective in increasing pain related patient satisfaction scores; and understand that the "internal culture" of an institution, as it relates to pain management, must change in order to effect consistent and long lasting change.

A Heutagogical Approach to Faculty Learning Communities (FLCs) Project

Tinukwa Boulder and Catherine Datte - *Gannon University*

Gannon University's Center for Excellence in Teaching and learning (CETL) like other academic departments with similar missions; strive to support faculty professional development and create a community of lifelong learners. CETLs objectives include optimizing opportunities for faculty to acquire new skills and developing interdisciplinary communities of learners among faculty. However, there are challenges that influence CETLs abilities to achieve this mission effectively and successfully. One approach to addressing these challenges is through developing and implementing faculty learning communities (FLCs). This proposal describes a heutagogical model of FLCs developed by CETL at GU and faculty experiences participating in FLCs.

Objectives:
Generate ideas for faculty learning communities (FLCs). *If possible participants should complete this objective prior to participating in the session*; identify the strengths, challenges and opportunities for creating a FLC; apply concepts of heutagogy approach to the FLC identified; identify resources that support FLCs; and identify ways to evaluate the FLC identified.

Plenary Presentation: Becoming a Skillful Teacher

Stephen Brookfield - *University of St. Thomas*

Skillful teachers attempt to find out how students experience learning and then use that information to make good pedagogic decisions. Without some knowledge of how our students are learning, the choices we make concerning how and what to teach are stabs in the dark. Teaching skillfully involves us deliberately placing ourselves in the role of student and reflecting on the experience of how we, and they, confront difficult and intimidating learning. In this presentation Stephen Brookfield will draw on his autobiography as both learner and teacher to show how this frames four core assumptions of skillful teaching: that good teaching constitutes whatever helps students learn, that the most effective teachers reflect critically on their assumptions, that the most important pedagogic knowledge we need is an awareness of how our students learn, and, that context changes everything.

How Do You Increase Students' Critical Thinking and How Do You Know You Succeeded?

Thomas Brothen - *University of Minnesota*

This presentation describes an intervention in an introductory psychology course to increase critical thinking (CT) ability in college students. CT was characterized as a finite set of specific skills and the intervention began with a textbook organized around them. The set of CT skills was also reinforced through a major component of the course—online chapter quizzes that always started with a CT question. Over three semesters, more than 3,000 students completed a pre/post test of CT. Statistical analyses revealed that improvement in CT ability was related to the course intervention more than to student ability, personality, or maturation.

Objectives:
Definition, measurement, and improvement of critical thinking.

"Is this going to be on the test?" Making Undergraduate Research Matter to Students

Summer Burke and Priscilla Finley - *University of Nevada, Las Vegas*

This presentation provides three different approaches that explain the research process to students, and makes it "all about me" for them. All three methods discussed were created for students in history, but can be applied to many academic fields. The presentation will include an interactive assessment of each participant's preferred research style and interests, and a discussion of two different research projects. One project was implemented at a research university, and another was created for a community college audience. The engaging presentation discusses how to make research interesting and relevant for undergraduate students.

Objectives:
Assess their own research interests based on learning styles and preferences; develop classroom activities for their own use incorporating learning assessments provided in this session; and identify opportunities for undergraduate research that will engage student learners.

Dispositions and Applications for Classroom Management: Facilitating a Community of Learners in Teacher Education

Jan Byers-Kirsch and Kimberlee Bartel - *Central Washington University*

This empirical study discerns whether candidates' dispositions and applications of classroom management strategies change after completing the university classroom management course prior to student teaching, and whether their views are aligned with current research on effective techniques. An online confidential survey was offered voluntarily to candidates completing the course over a period of one year. The results will confirm the benefits for them in creating effectual, personal plans and identifying the basis for their future success as classroom teachers. This study will substantiate the significance of a research based classroom management course in teacher preparation programs with future research implications.

Objectives:
Identify effective classroom management strategies for teachers; identify specific changes in candidates' dispositions and their ability to apply effective strategies learned in a classroom management course to become facilitators of a community of learners; and identify the instructional design used in a university teacher preparation program that promotes dispositions and effective applications for candidate success as classroom teachers.

Integrating Theory with Experiential Learning to Maximize Leadership Education in a Doctorate of Organizational Leadership Program

Tamerin Capellino and Len Hightower - *Brandman University*

The presentation will cover the integration of organizational leadership content delivery, in an online environment, with application of that knowledge in guided field based experiential learning coursework. Specific assignments focused on action research and implementation of change methodology will be described. The formation of program learning outcomes will also be shared and their grounding in research with actual senior managers and leaders across a range of industries and disciplines. The conceptual and scholarly foundation for experiential learning, management and leadership education and their intersection in program elements will be explored. Next steps in assessment and research of actual results and achievement of desired program and student outcomes will be outlined.

Objectives:
Participants will: learn about how an integrated approach to educating organizational leaders was created and is being implemented for a doctorate of organizational leadership program; learn about the results of qualitative research with leaders in various types of organizations on their perceived requirements for competence today and in the future for leaders in their field and how that information was used to guide the development of a doctorate in organizational leadership program; learn about specific program components focused on the utilization of experiential learning methods coupled with content acquisition and delivery; be given a brief review of previous research and theory related to experiential learning and training of managers and leaders and how the integrated approach is inspired and builds on that work; and be asked for their reaction and feedback to any and all elements presented including ideas on how to improve the effort or their conceptual concerns with teaching leadership.

Experiential Entrepreneurial Success in an Integrated Business Program

Sue Caple - *University of La Verne*

This presentation provides an overview of an integrated business program developed by a West-Coast College. Finance, management, and marketing courses were integrated into single 12-unit course and an experiential four-unit learning entity. An exploratory study was conducted by the professors teaching in the program concerning an outcome assessment of the program. The study concluded that this course enhanced students' understanding of entrepreneurship and how the disciplines were integrated in a business environment. The authors determined through content analysis of the students' comments that such integration had positive outcomes.

Objectives:
Understand the organization and objectives of an Integrated Business Program (IBP); increase knowledge on Learning Communities; understand the results of the IBP at this College; and discuss the integrated program/learning community concept with the audience.

Digital Storytelling, Student Learning, and Assessment

Joi Carr - *Pepperdine University*

This session is the second installment on Digital Storytelling as critical pedagogy. How can an instructor help facilitate transformative opportunities with reluctant students? Use technology; technology that students are familiar with and often use to tell their stories. Students would rather hide behind "objectivity" rather than participate in what hermetical scholar Hans-Georg Gadamer calls "real conversation." However, when students are given an opportunity to seemingly "play," they often engage in critical reflective discourse. Digital Storytelling is a new and cutting edge pedagogical strategy that can be used. Each participant will leave with practical instruction/tools toward developing and implementing this strategy.

Objectives:
Provide a best practices pedagogical model for instructors seeking to engage students in active learning and critical self-reflection, especially with difficult subject matter like issues related to diversity; rubrics to use for assessment; an A to Z guide on how to implement this pedagogy; and understand theoretical framework for this tool and assessment strategy.

Learning by Doing: How and Why Civic Engagement Improves Learning

Stephen Carroll - *Santa Clara University*

If we want students to remember what they learned in our classes past finals week; if we want to motivate lasting changes in the ways our students think, feel and act; if we want our students engaged in making our world a better place; few options are than better learning by doing. Service learning—especially as civic engagement—so often stimulates meaningful education because it necessarily enmeshes students in activities that best promote durable learning. Come explore how and why service learning is so effective. We'll also consider how evidence from a large, national study should shape best practices.

Objectives:
Recognize and understand some of the myths and misperceptions that inhibit students' ability to learn efficiently and effectively; acquire some ideas, techniques and resources that will better support student learning; understand how service learning leverages the primary ways that people learn to result in better learning outcomes; be motivated to add some service learning components to you classes.

Learning Facilitators: A New Model for Supporting Student Learning and Success

Stephen Carroll, Lauren Chin, Jessica Jong, Katrhyn McAuliffe, Xavier Moya and Allegra Thomas - *Santa Clara University*

Learning Facilitators are peer tutors who specialize in supporting student learning using the latest research from cognitive science, learning theory and neurobiology. They help students learn how to learn, develop effective study habits and become self-directed learners. Following a brief overview of the program, the learning facilitators will demonstrate some of their techniques, discuss their experiences and explain how the program works.

Objectives:
Recognize and understand some of the myths and misperceptions that inhibit students' ability to learn efficiently and effectively; acquire some ideas, techniques and resources that will help them better support student learning; be motivated to use learning facilitators to support student learning; and leave the session with resources and experiences that will allow them to integrate what they've learned into their teaching practices.

Employing What We Have Learned from the Faculty Learning Community Movement to Build and Sustain Effective FLCs Today

Milt Cox - *Miami University*

Faculty learning communities (FLCs) were initiated in 1979 and have now been implemented at many institutions, including two-year colleges, four year liberal arts colleges, comprehensive and research universities, and medical schools. FLC programs have been initiated by individual entrepreneurs, teaching and learning centers, and system-wide consortia. We will begin our session with an overview of FLCs and then consider some key items and numbers: 7 reasons why we initiated FLCs, 16 recommendations for building a successful FLC infrastructure, 12 decision points in the design and implementation of FLCs, and 7 important lessons we have learned.

Publishing the Scholarship of Teaching and Learning

Milt Cox and Gregg Wentzell - *Miami University*

Meet Milt Cox, Editor-in-Chief and Gregg Wentzell, Managing Editor of the Journal on Excellence in College Teaching to discuss the possibility of developing your Lilly Conference presentation or other teaching and learning project into a publication. Learn about the scholarly process for SoTL projects and the Journal's review process and acceptance criteria.

Connecting, Learning and Looking Ahead: The Impact of a STEM Learning Community Program at a Liberal Arts University

Erin Curran, Dayius Turvold, Melissa Loe, Mithra Marcus, and Kerri Carlson - *University of St. Thomas*

In 2010, a multidisciplinary committee at a liberal arts university initiated a STEM Learning Community Program. This program provides weekly, semi-structured opportunities for small groups of students taking courses in biology, chemistry, calculus, and statistics to collaborate on course-related activities. Program evaluation data suggest significant impacts on student learning as well as positive impacts on students' problem solving and teamwork abilities, sense of community, and overall study habits. The structure of the program, its impact on students, and its influence on teachers and teaching will be discussed. Additionally, several collaborative problem solving activities for introductory STEM courses will be shared.

Objectives:
Identify the hallmarks of peer-led team learning and collaborative learning; provide an overview of the history of collaborative learning in undergraduate STEM education; articulate both catalysts and barriers to collaborative learning in undergraduate STEM education; and design and implement collaborative learning activities with their students.

Course Introduction: Student-centered from the First Day of Class

Cathlin Davis - *California State University, Stanislaus*

I begin my Senior Seminar with students working together in a series of activities, each focusing on one component of a course assignment. These activities replace the "going over assignments" lecture often used to start the semester. This means that students spend the first weeks of class engaging with ideas, planning for the semester, and being active participants, better prepared for the high level of participation I expect throughout the semester. I will share how these activities have positive effects on course assignments which depend on collaboration between students and lead participants in designing possible activities for their own courses.

Objectives:
Learn ways to introduce course content through group activities, rather than instructor explanations; learn how and why I have designed activities for a specific class; and design one such activity for their own courses.

Creating Authentic and Significant Preparatory Assignments to Improve In-Class Participation, Learning, and Retention

Sierra Dawson and Jon Runyeon - *University of Oregon*

The goal of this workshop is to assist participants in the design of preparatory assignments for their students that are meaningful and authentic, as well as provide robust scaffolding for in-class participation, learning and retention. Participants will consider their current practices, identify the evidence to support authentic preparatory assignments, learn about the "External Brain" preparatory assignment, and produce a draft of a

significant preparatory assignment suitable for their classroom. The workshop will be participant-centered and dynamic, and include opportunities for feedback on the first draft of their own unique significant preparatory assignment.

Objectives:
Self-assess regarding the effectiveness of their current preparation assignments for students; list evidence-based reasons why student engagement with information prior to class time leads to improved learning, understanding and retention; describe for a colleague at their home Institution the "External Brain" preparatory assignment, including its purpose, use, guidelines, benefits and limitations; and produce a draft of a significant, authentic preparatory assignment that would support student learning, understanding and retention in a class they currently teach.

Busywork Versus Meaningful Work: What is the Difference?

Matt Delong - *Taylor University*

When students perceive class assignments to be busywork rather than meaningful work, they are likely to resent both the amount of work and their lack of learning. In a culture of student distraction and overload, it is vital that instructors know how to assign work that will lead to meaningful student learning. In this session, we will examine students' and instructors' differing perspectives on what busywork and meaningful work are. We will then draw on the work of Bean, Bain, Palmer and others to learn how to avoid busywork and instead how to motivate students with engaging and meaningful work.

Words Versus Numbers: Dealing with Qualitative Data

Jacqueline Dewar - *Loyola Marymount University*

Participants will gain basic knowledge about dealing with qualitative data and increased confidence in their ability to draw and justify conclusions from qualitative data. We examine the strengths and weaknesses of qualitative and quantitative data as evidence in scholarly studies of student learning. Two approaches to analyzing (coding) qualitative data are presented. Concepts such as "inter-rater reliability" and "predetermined" and "emergent" categories are described in simple terms. Participants will engage in coding a data set both individually and with a partner, and will be given options for which coding techniques to practice. Accessible resources will be provided for future reference.

Objectives:
Participants in the workshop will gain: Basic knowledge; accessible resources; increased confidence in their ability to draw and justify conclusions from qualitative data.

Based-Learning in an Online Diagnostic Skills Course in Graduate Social Work Education

Laura Dreuth Zeman and Jayme Swanke - *Southern Illinois University, Carbondale*

Professional education uses problem based learning (PBL) to prepare students to master complex skills. Few researchers have demonstrated the effectiveness of using PBL in online social work education. This paper outlines an online course in diagnostic assessment for graduate social work students and provides preliminary findings of the first year of the evaluation of that course. The study contributes to the field of teaching and learning in professional education by providing an understanding of learner use of online PBL to develop professional practice skill mastery.

Objectives:
Review problem based learning methods used to engage students in social work skill development; identify problem based learning strategies that may be used across disciplines for the purpose of peer review and critique; develop a problem based learning unit to teach peer review and critique.

Generational Impact of Historical Trauma on Teaching and Learning

Kathryn England Aytes - *California State University, Monterey Bay*

In today's global society faculty must understand the role of historical trauma, unresolved grief, and cultural decimation impacting individuals across generations. Mainstream education often challenges cultural identification and traditional values, resulting in cultural conflict and negation of the individual. This session guides mainstream faculty to better understand contemporary trauma in the context of historical, cumulative, and collective experiences of American Indians. Recommendations will be provided to prevent further reinforcement of historical trauma as a contemporary experience. Application of such strategies creates a more inclusive and empathetic classroom environment that benefits non-Indian students who themselves may be suffering forms of trauma resulting from the structural inequalities their families have experienced.

Objectives:
Develop awareness of historical trauma and its impact across generations; understand institutionalized trauma and historical trauma history; consider culturally competent classroom practices, including a support of historical and traditional resiliencies.

The W.I.P.E. Rubric: Assessing Student Presentations of Mathematical Proofs

Christina Eubanks-Turner - *Loyola Marymount University*

In many student-centered mathematics courses, students are required to give class presentations of mathematical proofs, which are solutions to theoretical exercises. In this session, an assessment rubric used to evaluate student presentations of theoretical exercises will be introduced. Then participants will analyze the evaluation categories of the rubric. As the rubric was created to evaluate in-class presentations in undergraduate mathematics courses, participants will discuss modifications of the rubric to evaluate presentations in courses in other disciplines.

Objectives:
Introduce the W.I.P.E. rubric and discuss how it is implemented; discuss successes and challenges of using the rubric; analyze the rubrics evaluation categories; and discuss how the rubric can be modified to strengthen assessment of student presentations in other disciplines.

Integrating Simulation of IOM Quality and Safety Core Competencies for Improving Safety in the Clinical Setting

Linda Flores and Patricia Shakhshir - *Western University of Health Sciences*

Institute of Medicine (IOM) and Quality and Safety Education for Nurses (QSEN) Institute empower nurse educators to create nursing students with knowledge, skills, and attitudes (KSA) to improve quality and safety in health care. Using simulation, students participated in a latent and active failure simulation. The following week, the students then identify and fix similar infractions found in their supervised clinical setting. Simulation is an effective method to teach patient centeredness, safety, evidence based practices, informatics, quality improvement, and team work. Applicability of QSEN based simulation exercises can be translated across all healthcare fields to make the workplace safer.

Objectives:
Identify Institute of Medicine (IOM) core competencies for quality and safety in health care; modify Quality and Safety education for nurses (QSEN) core competencies to be utilized in other health care fields; identify an IOM quality and safety competency to create a simulation scenario; create a simulation integrating one or more IOM quality and safety core competency; and verbalize how to create a blameless system or communication method to fix the safety infraction if the infraction is encountered in the health care system.

The Chemistry of Curiosity

Lou Foltz - *Warner Pacific College*

The construction of engaging lessons can be seen as the art of cognitive choreography. Neural research shows us eight distinct mental "dance steps" which may be selected to design student encounters with subject matter. And more importantly, recent research into autonomic emotional functions identifies seven unique affective "dance floors"; some of which should be constructed while others must be avoided.

Incorporating University Learning Goals into our Capstone Course: Developing Curricula and Challenges to Integration

Maria Fusaro and Ravisha Mathur - *San Jose State University*

After the recent development at our university of University Learning Goals (ULGs), our department embarked upon a project to integrate these goals into department curricula. One substantive place that ULGs (e.g., applied learning) can be infused is our capstone seminar. Of central concern to our faculty is enhancing our existing curricula to meet the standards of our discipline while aligning with the university goals and mission. In this session, we will elaborate on the curricula that we are developing in our capstone course in response to these broad ULGs, as well some challenges we have faced thus far.

Objectives:
Discuss the department-level process to integrate ULGs into curricula and the challenges in doing so; discuss the impact of the capstone course for our curricula and describe the benefits and drawbacks of these capstone courses in meeting university-based goals; and identify practical evidence-based activities that connect theory to practice, but that also address significant integrative content required in a policy/advocacy course.

A Department-Level Approach to Identifying and Adapting to Undergraduates' Changing Career Interests and Needs

Maria Fusaro and Ravisha Mathur - *San Jose State University*

Our department is engaged in a project to enhance instruction across courses and to increase our relevance to the career interests of our undergraduate population. We will describe our ongoing efforts to infuse more High-Impact Practices (HIPs) into new and existing courses, and focus on how activities within one new course will further support career development. While the motivation to enhance instruction is unquestioned, the role of academic faculty in undergraduate career development is a matter of debate. In this session, we invite participants to debate the place of career development within their academic courses.

Objectives:
Discuss methods for addressing students' career development needs within the context of academic coursework; discuss challenges and opportunities unique to department-level initiatives for addressing students' development as professionals; and identify dimensions of career development (e.g., verbal communication skills) that can be effectively linked to course learning objectives and activities (e.g., collaborative projects).

Closing the Gap: Learner-centered Teaching and Motivational Techniques for Increasing the Success of Struggling Students

Kathleen Gabriele- *California State University, Chico*

Colleges have many diverse students, with increasing numbers of struggling students. The graduation gap remains among various student groups (i.e., first-generation, students of color, and traditional students). Professors can make a difference in "closing the gap" without lowering their standards. By using learner-centered pedagogy and motivational strategies (including "tough-mindedness"), we can help all students become engaged and improve their performance. Hence, peripheral students will have more than a merge chance of success in college.

Utilizing Purpose-Driven Classroom Assessment Techniques as a Means to Improve Student Learning

Cynthia Glenn - *Keiser University*

It is possible to create a safe learning environment that encourages students to take academic risks by providing dignity and relevance as a means to motivate learners, and by utilizing the "5 Fs" of teaching—friendly, "funky," fun, fast, and focused—in a classroom setting. The best way to assess whether or not a concept has been understood is to provide opportunities for students to give authentic feedback to their instructors on a regular basis. These three exercises provide quick and easy-to-use classroom assessments that are engaging and relevant to monitor student learning, efficiently and accurately reflecting students' knowledge base.

Objectives:
Creating a safe learning environment that encourages students to take academic risks by providing dignity and relevance as a means to motivate learners; utilizing the "5 Fs" of teaching--friendly, "funky," fun, fast, and focused--in a classroom setting; and learning 3 quick and easy-to-use classroom assessment techniques that are engaging and relevant to monitor student learning, efficiently and accurately reflecting students' knowledge base.

Comparing Content Knowledge Change in Online Problem-Based Learning Versus Traditional Instruction

Kathleen Gould - *Towson University*

Problem Based Learning (PBL) has been implemented to bridge the gap between theoretical knowledge and practical application. PBL, a student centered instructional strategy, potentially provides for active and collaborative learning in the online environment. Current research is inconclusive regarding the effect of online PBL on content knowledge change. Furthermore student self-directed learning readiness (SDLR) and motivation may affect student success in PBL and online learning environments. This presentation will present findings from a study that explored changes in student content knowledge after participation in an online PBL module and the relationships between student SDLR and motivation with content knowledge change.

Objectives:
State the principle steps involved in Problem Based Learning; demonstrate an understanding of student attributes of self-directed learning readiness and motivation as it relates to PBL and online learning; and gain an understanding of the effectiveness of online PBL versus traditional instruction on content knowledge change.

From Academic Freedom to Political Power: Redefining Tenure in the 21st Century

Daniel Grassian - *Fairleigh Dickinson University*

This presentation explores recent challenges and developments in the tenure process at American colleges and universities. It presents specific ways the tenure process can be modified to encourage and maintain productivity and excellence at the pre- and post-tenure levels. In addition, the paper argues that tenure should be viewed more as a means to achieve political power as opposed to primarily a means of safeguarding academic freedom.

Objectives:
To gain a better understanding of the ways in which tenure has changed at American universities and colleges in recent years; to examine ways faculty can thrive with or without tenure; to consider ways that the tenure process itself can be improved and made more just; and to consider alternative reasons for tenure beyond safeguarding academic freedom.

Plenary Presentation: Publish and Flourish! Become a Prolific Scholar

Tara Gray - *New Mexico State University*

Many scholarly writers are educated at the School of Hard Knocks, but it's not the only school, or even the best. Much is known about how to become a better, more prolific scholar and anybody can. Even when you can't work harder, there are important ways to work smarter. Research points to specific steps scholars can take to become better, more prolific scholars, including:

- Write daily for 15-30 minutes
- Organize around key or topic sentences
- Solicit the right feedback from the right colleagues
- Previous participants who took these steps increased their scholarly productivity by a factor of three.

Principles of Practices for Faculty Learning Communities: The CSUF Experience

Andrea Guillaume and Susan Gaitan - *California University, Fullerton*

Faculty Learning Communities (FLCs) bring together faculty from across disciplines to explore, over time, an issue of interest to all members. FLCs can provide powerful collaborative professional development for innovative teaching. In this session, CSUF Faculty Development Center personnel—an Academic Technology Consultant and a Faculty Coordinator—describe the literature guiding the development of FLCs. We share principles of practice from three years of experience in running teaching-related FLCs for face-to-face, blended, and online courses. We provide support as participants begin planning teaching-related FLCs for their own contexts.

Objectives:
Describe the literature guiding development of Faculty Learning Communities (FLC); list promising practices for FLCs based on CSUF experiences; and begin planning for an FLC appropriate for their own contexts.

Plenary Presentation: Teaching Critical Thinking for Transfer: The Why of Higher Education

Diane Halpern - *Minerva Schools at Keck Graduate Institute*

The data are clear: we can teach critical thinking skills so that they generalize across domains and last long into the future. Our primary goal as instructors is not anything that happens in our classrooms or on our campuses. The sole reason we have universities and other formal settings for learning is the belief that whatever is learned

in these buildings will be applied in some other setting at a later time when we are not present, such as at work, home, or in the community. We will discuss how to teach critical thinking for transfer and how to assess if we have been successful.

Sharing Learning and Teaching Experiences: An Australian Perspective on Evidence-Based Practice

Natasha Hard - *University of Southern Queensland*

Effectively disseminating the outcomes and experiences of funded learning and teaching projects is a challenge in any learning context. The development and dissemination of 11 Good Practice reports commissioned by the Australian Learning and Teaching Council (ALTC) and the Australian Government's Office for Learning and Teaching (OLT) between 2004 and 2011 illustrate this issue. The reports, written by topic experts' collated funded learning and teaching projects, providing findings and recommendations back to the sector. Whilst offering great potential to influence practice through the evidence-based findings, dissemination issues highlighted the problematic nature of sharing learning experiences in a dispersed educational environment.

Objectives:
Enhanced awareness and engagement with the key complexities of effectively disseminating learning and teaching project outcomes and experiences; working understanding of the ALTC/OLT Good Practice Reports and how they may be used to inform and improve practice; enhanced understanding and awareness of the Australian higher education context; improved awareness of approaches to disseminating learning and teaching experiences and supporting evidence-based practice.

The Eight Characteristics of the Excellent University Instructor

Breck Harris and Jim Bryan - *Fresno Pacific University*

In this workshop session, the presenters will reflect on their 40 years plus of combined teaching experience with college students to share their top eight characteristics of the excellent college teacher. The presenters will demonstrate the use of passion in a group exercise to enhance the teaching experience.

Objectives:
Outline 8 characteristics of excellent instruction; briefly discuss results of research related to these eight characteristics of excellent instruction; and demonstrate the use of passion in a experiential exercise.

Linking Space and Pedagogy

Pamela Harwood - *Ball State University*

This session looks at the interactive learning setting as an appropriate space of creative collaborative learning. I am looking at learning space design, particularly focusing on the form and manipulation of physical space concerning learning in five different levels of knowledge sharing, development and creation. In looking at these five knowledge environments, I am assessing how a singular, node chair classroom can be outfitted to accommodate each of these differing forms of knowledge exchange in a project based, collaborative, active learning setting. I will illustrate the successes and failures of the space in each learning environment through photo documentation and teacher and student reflections. The differing ways that the room is adapted, its degree of flexibility, its ease in exchange, are all factors that will be a part of its success. A series of learning setting principles with sketches, photos, sizes, settings and furnishings, and space and pedagogy needs are shared as the outcome of this research of the node chair, interactive learning classroom. As a research community, we seek to build a body of knowledge that elevates the inhabitable environment of learning to something that is not only beautiful or merely functional, but that also adapts to the complex needs of an ever-changing landscape of learning.

Objectives:
We must examine critically both the distinctive characteristics of learning and teaching in higher education pedagogy AND what it is that matters about the design of its material and virtual space; through a discussion of five archetypal attributes for knowledge environments, we will look at the different physical spaces in which learning takes place and assess their relative effectiveness; learning in contemporary educational theory is shown to be a transitional or liminal journey where students negotiate 'thresholds' or 'sticking places' to knowledge creation; space is not so much a setting for learning as one of the many mechanisms through which learning can be articulated; and architectural space must be understood as neither deterministic nor neutral, but as always in interaction with the practices that take place in it and with the perceptions and experiences of its inhabitants.

Spirituality and Teaching: Is It New Age or Science?

Oren Hertz - *Johnson & Wales University*

The purpose of this study is to explore non-religious based spirituality and its connection to elevated teaching in higher education. Spirituality, inspired by Ralph Waldo Emerson, is how "We see the world piece by piece, as the sun, the moon, the animal, the tree; but the whole, of these are shining parts, is the soul." (Hardman, 2012). Assumptions and personal experiences will be backed by current research to find a different way to approach teaching in higher education, assuming old methodologies and approach to teaching may be outdated and irrelevant with the emerging data and the science behind spirituality.

Objectives:
Identify the connection between non-religion affiliation spirituality and teaching in higher education; discover emerging science of spirituality and its connection to teaching; and understand how spirituality can enhance the learning experience and cultivate an elevated learning environment in higher education.

Theory to Practice in the Visual Arts Programs

Arnold Holland - *California State University, Fullerton*

The presentation will illuminate the responses of visual arts faculty involved in negotiating the demands of instructing and preparing students for success within multifaceted visual arts teaching and learning missions. Through in-depth phenomenological interviews, faculty members shared their perspectives on matters surrounding theory to practice in teaching foundational level courses. The research revealed faculty's overall impressions of teaching, their preferences for learning materials, and their views of the outside forces that influence students.

Objectives:
Better understand the need to decrease the theory to practice gaps in college visual arts programs; gain an enhanced awareness of course and curriculum alignment; and clearly balance between transfer opportunities and the mission of higher education.

Empowering Your Community: 10 Do's and Don'ts of Service Learning Partnerships

Nicholas Holton - *Kirtland Community College*

If you want to initiate and nurture high performing community partnerships for your service learning program, or if you are just looking for ways to strengthen existing collaborations, then come to this dynamic interactive session prepared to share with what works and what doesn't. Learn how to turn an idea into a national award winning partnership.

Engaging Students In STEM Course

Nicholas Holton & Amanda Brindley - *Kirtland Community College and University of California, Irvine*

Sometimes it seems as if STEM classes are the last to include new engaging pedagogies. Come to this dynamic presentation to learn and share how classes, large and small, from the large university to the small community college have engaged students in the sciences and math.

Objectives:
Provide ten easy ways to engage students now; show ways to engage students in the STEM disciplines; show how to engage students in large lecture courses; and harvest best practices from the conference participants.

Unleashing Collaborative Learning through Technology: A Study of Tablet-Mediated Student Learning in Two STEM Courses

Cassandra Horii and Julius Su - *California Institute of Technology*

Increasing student engagement in college-level STEM courses is a shared goal on many campuses. As faculty seek ways to accomplish this goal, new evidence-based methods for collaborative learning are needed. We present a study of tablet-mediated collaborative learning in two mixed undergraduate/graduate courses: computer science and genetics. Student data from a novel tablet app and a survey reveal patterns of student collaboration and interaction, during and outside of class. Session participants will have a hands-on opportunity to experience tablet-mediated collaborative learning similar to that implemented in the study.

Objectives:
Recognize research findings from the study of tablet-mediated collaborative learning in two STEM courses; evaluate applicability of collaborative learning methods used in the STEM courses to their own teaching or campus contexts; and create an in-session concept map of insights, take-aways, and further questions using a tablet-mediated collaborative learning activity.

Bridging the Gap: How to Assist All Learners while Keeping Standards High

Tonya Huff, Jami Brown, Estrella Romera, Veasna Chiek, and Amber Casolari - *Riverside City College*

A significant issue faced by faculty members is the challenge of keeping classroom standards high while assisting students who have widely varied levels of preparation. This session will describe four alternatives to the traditional lecture that engages students, maintains high standards, and can be easily adapted for use in almost any course. Based on strategies that have worked at Riverside Community College, the presenters will describe a "contest" approach to teaching and learning, pedagogical alternatives to the lecture derived from a community of learners, pitfalls to avoid when "flipping" the classroom, and how to form effective teams for group learning approaches.

GHQ2: Using Non-Traditional Strategies to Engage Non-Traditional Learners

Raymond Hurst - *Brandman University*

Using the principles of adult learning theory, the GHQ2 model offers attendees an energizing, hands-on series of learning activities that deepen conceptual understanding and student engagement. This is a follow up to last year's workshop. Originally developed at the University of California, Riverside and further refined through ongoing research and application, the GHQ2 model engages adult learners in meaningful, inquiry-based classroom activities that deepen learning and student understanding in blended learning environments.

Objectives:
Increase understanding of Inquiry Based instructional strategies; improve Androgogical skills; and deepen knowledge of best practices for blended learning environments.

Engaged Learning for Moral Reasoning and Moral Growth in Humanities Courses

Sheilah Jones - *Loyola Marymount University*

In a highly interactive session, I will present a model for a college project that integrates research, writing, media presentation, and classroom participation to enhance students' moral reasoning and growth. These pedagogical methods combine many of the challenges listed in the National Survey of Student Engagement (NSSE) as effective in increasing student learning. Participants will walk away with proven techniques to apply to their own courses, sample lesson plans and essay prompts, and an annotated bibliography for future reference.

Objectives, participants will leave with tools for:
Designing research and writing projects that help students develop moral reasoning; combining research, writing, media presentation, and participation to help students achieve moral growth; and writing essay exams through which students can assess their individual moral growth as a result of engagement in a humanities course.

Developing a Global Learning Continuum for Non-Traditional Adult Learners

Carolyn Kelly Ottman - *Milwaukee School of Engineering*

Friedman proposes a "flat world" where global acumen is critical to success. Yet, how do we prepare non-traditional adult learners when family and work responsibilities create barriers to study abroad programs and prohibit them from these traditional transformative experiential learning opportunities. The focus of this presentation/discussion is on developing a continuum of learning strategies to prepare adult learners for a global world. Readings, personal interviews, sharing ethnic meals, short term travel and international service projects provide points on the continuum. Although multiple strategies will be presented, interaction with participants will promote further development, as well as critique of the continuum.

Objectives:
Explore and collaboratively further develop a continuum of strategies to promote global acumen for non-traditional adult learners; obtain a progressive outline of strategies, while collaboratively generating new strategies through discussions and additive idea writing; discuss the value and possibilities of threshold learning related to a global learning continuum; participants will be given a brief overview of threshold concepts, while highlighting two specific strategies at opposite ends of the continuum; create a community of like minded educators to discuss and further explore possibilities around the topic of global learning for adult learners; and participants will be encouraged to exchange contact information for further collaboration.

Revitalizing Student Curiosity in the University Classroom

Frank Kowalski and Susan Kowalski - *Colorado School of Mines*

Evidence shows that curiosity is a powerful motivator of learning. Although the ability to ask meaningful and productive questions is often nurtured in early childhood and elementary education, too often in the classrooms in higher education it is only the instructor who poses questions, leaving students little practice in cultivating their curiosity. We describe and demonstrate an intervention strategy to help students become more fluent in meaningful questioning over time; evidence supporting the efficacy of this intervention is also presented. Session participants also develop and share applications of this intervention to be used in their own teaching environments.

Objectives:
Through evidence, regard curiosity as a powerful motivator of learning; become familiar with different categories of curiosity (as reflected in questions); experience generating questions of various categories in response to a promp; and contribute to the session examples of how they could increase students' fluency in curiosity in their own teaching environments.

Revealing Student Thinking with Digital Ink

Susan Kowalski - *Colorado School of Mines*

Wouldn't teaching be easier if you could just glimpse into your students' minds during the learning process? Much evidence supports the use of real-time formative assessment to accomplish this, but it is often cumbersome and burdensome to implement. With pen-enabled mobile technology (iPads, Tablets, Androids 4.0+), however, students can reveal their thinking instantaneously when you probe their understanding with open-format questions. In this session, you will experience (as a student) and learn how to use (as an instructor) free, browser-based software that facilitates the collection, sorting, and archiving of real-time formative assessment. Please bring your own device if possible.

Objectives:
Review the evidence-based advantages of real-time formative assessment during the learning process; use mobile devices and free, browser-based software (InkSurvey) to respond to open-format questions posed by the presenters; become familiar with some of the research supporting the use of this pedagogical model to enhance learning; be prepared to use digital ink in their own classes to reveal student thinking.

What Happens When Students Take the Driver's Seat in Focus Groups? Faculty Members' Lessons Learned

Jennifer Lehmbeck, Mary Brown, Sue Jackson, and Matt Flint - *Utah Valley University*

There is an increased emphasis on experiential learning and student engagement in higher education. Partnering with students in focus group research is one way to engage students outside of the classroom. Involving students in research introduces them to the challenges of the research process and also provides them with an opportunity to gain knowledge from real world experiences. This presentation will focus on meeting the students' needs when preparing them to facilitate focus groups.

Objectives:
Understand the similarities and differences between focus groups for classroom projects and focus groups in research studies; gain the resources to train students to successfully facilitate focus groups in course projects; and learn how to prepare student researchers to successfully facilitate focus groups in research studies.

Helping Students Develop the Ability of Communicating Mathematics Ideas in College Classroom

Su Liang - *California State University, San Bernardino*

Often heard the comment from students is that "I know how to do it, but I don't know how to explain." This phenomenon also happens for the students who will be teachers in the future. Communicating mathematics ideas in oral and written was not always considered important in mathematics classroom instructions because mathematics is so often involved in symbols and talking about mathematics is not necessarily natural for students. Consequently, it is necessary for teachers to provide students the opportunities to develop these skills. By offering them opportunities to practice, we can help them improve their oral and written communication skills while learning mathematics.

Objectives:
Deeper learning; effective communication; and learn to how to learn.

Teaching Service Learning: Understanding Student Challenges and Improving Impact

Helen Lim - *California Lutheran University*

Though the rewards of service learning are great, service learning courses can be full of challenges. Instructors who teach service learning, especially for the first time, may find it daunting, particularly in implementing a new teaching strategy and in forming community partnerships. Students who enroll in service learning courses also face challenges that impact their experiences and successes. This presentation explores some of the challenges of teaching service learning from a student-centered perspective, and how navigating these challenges may impede or improve student-learning experiences and outcomes.

Objectives:
Discuss the core elements of service learning; share about the challenges and strategies in implementing service learning; highlight the challenges from the student-perspective; and discuss how understanding and adapting to student challenges can help improve student experiences and learning outcomes without compromising the rigors of service learning.

Service Learning in Museums and Archives

Thomas Long - *California State University, San Bernardino*

This presentation will cover the most effective service learning internship projects and programs from the California State University San Bernardino service learning experiences in History, Museum Studies and Archival Practices. The presentation will cover methodology of pre-internship pedagogy, effective service learning experiences and outcomes assessment methodology.

Objectives:
Practical, project based service learning internships; effective outcomes assessment for service learning internships; and meeting the needs of both the students and the internship sites.

Faculty Voice and Online Professional Learning Communities

Linda Maier and Michael Shepard - *St. Martin's University and Goucher College*

Online learning is opening up new opportunities for students to access higher education. This rapidly growing area is moving faster than the research that is needed to affirm effective instructional teaching practices in a new setting. This session presents the results of a survey from 328 higher education faculty and uses their voice to describe their perspective on professional learning communities. Presenters will share their diverse experiences with specific examples on building faculty communities and how this benefits student success. This interactive session provides new insight into the perceptions of online teaching faculty along with recommendations for community building strategies.

Objectives:
Identify the latest research regarding community building and professional learning communities (PLC) among online teaching faculty in higher education; recognize what online teaching faculty indicate they want in PLCs; understand strategies to further community among online teachers; generate ideas to increase community support for online teaching faculty; and replicate successful PLC strategies on their own campuses.

Impact of Service Learning in Higher Education

Oraib Mango, Carrera Allred, and Vanessa Marin - *California State University, San Bernardino*

Service learning can have an impact on students' academic learning, civic engagement, interpersonal skills and self-awareness. In this session, the presenters (including students) will discuss their engagement in a community service project comprised of teaching at a local high school. The presenters will discuss the implementation of the project and the use of wikis and guided journals as tools to record students' reflections on their service learning experience and its impact on their academic, social and personal growth.

Objectives, participants will learn:
Why service learning is significant in higher ed; how service learning can be implemented within a course at the university level; and how to augment the potential benefits of service learning to increase student learning and critical reflection.

Deeper, More Authentic Learning: Faculty and Student Video Evidence

Vivienne McClendon and Nipoli Kamdar - *CSU, The Maritime Academy*

This session describes authentic learning techniques to extend student abilities in critical thinking, discrimination and crossover skills. Effectiveness is measured in a variety of ways. Surveys and student scores provide quantitative data supporting the use of authentic strategies. Videos illustrate student and faculty perceptions in such courses as information literacy, economics, and circuits engineering. The presenters will provide brief examples of data collected and short videos of student and instructor comments on implementation of authentic learning modules.

Objectives:
Understand and articulate a variety of instructional methods to provide more authentic learning opportunities for the classroom; articulate the benefits of authentic learning to extend students learning outcomes; and list a number of assessment measures to capture evidence of student learning using authentic projects.

Teaching With The Learning Cycle in Economics and Business

Matthew Metzgar - *University of North Carolina, Charlotte*

The learning cycle has become a dominant method of instruction in inquiry-based science. However, this method does not appear as well-known in other disciplines. The learning cycle provides a universal framework for how people develop reasoning skills. While top-down content teaching may produce adequate test scores, it does not necessarily develop reasoning skills. By taking students through all parts of the learning cycle, they can both learn content and improve reasoning skills. This session will explain the learning cycle and give examples of related assignments and activities.

Objectives:
Acquire basic knowledge about the learning cycle; understand how the learning cycle can be applied across disciplines; and learn how to integrate various assignments into a learning cycle framework.

Use of Computer Technology for Today's Teachers

Mohammed Miah - *University of Phoenix*

Many of us work long hours; yet, achieve less than desired. Two reasons for this inefficiency include: failing to distinguish "working hard" from "hard work" and using ineffective methods of communication (Reese, 2009-10). This session will present computer applications, such as hyperlink, cell reference, and macros within the university level course contents. I will discuss macros, cell reference, and hyperlinks. In addition, learn how timely, detailed, accurate, and individualized communications are possible by using software options built into

office software or by using software readily available in the market. Finally, it presents a mathematical model to estimate the man-hours saved by using the proposed applications.

Objectives:
How to use electronic grading for the students papers; how to write Macros to develop frequently used comments; how to develop and use Hyperlinks to locate important materials quickly.

Evidence-Based Approaches for Implementing Effective Team-Based Learning Strategies

Jennifer Mills and Kay Tronsen - *Moody Bible Institute*

Research on Team-based Learning (TBL) evidences that students can experience higher-level cognitive functioning (based upon Bloom's Taxonomy), increased information retention, and heightened engagement using these high-impact educational practices. This session will begin with an overview of cognitive development theories that empirically support TBL, then demonstrate effective methods of intentional design using interactive case-studies and structured peer discussions. Participants will collaboratively consider best practices for implementing these strategies in multiple disciplines and can expect to gain practical evidence-based strategies of interest to those at any stage in the implementation of TBL that they can adapt and use immediately, as well as resources and references for further engagement.

Objectives:
To analyze proven strategies for implementing successful Team-Based Learning; to provide participants with the opportunity to participate in Team-Based Learning; and to promote engagement with various models of learner-centered pedagogy.

Creating Intentional Dialogue: Utilizing Engaged Learning Strategies to Promote Critical Thinking

Karen Moroz and Angie Nippert - *Hamline University, Concordia University, St. Paul*

As educators continue to discover more about an instructor's role in ensuring student comprehension of content, engaged learning strategies become an essential tool. Applying these engaged strategies allows implicit thinking to become more explicit, better preparing students to reach the learning outcomes that have been identified by the instructor. Ultimately, by participating in engaged learning strategies that foster intentional dialogue, students discover the relevancy of learning while seeing the content through the perspective of others. An additional benefit of intentional dialogue is that it allows students and instructors to formatively assess student comprehension.

Objectives:
Better understand how intentional dialogue enhances student understanding of content; participate in engaged learning strategies that foster intentional dialogue; brainstorm ways to utilize intentional dialogue, through the use of engaged learning strategies, in their own classroom and discipline; and understand how intentional dialogue allows both students and instructors to formatively assess understanding.

Studio Learning: Montessori Methods for Engaged Learning in the Higher Education Classroom

Jo Munroe, Alice DiCerto, and Melissa Stoddard - *Tacoma Community College*

The presenters explore the connections between studio learning techniques and the Montessori method and suggest that many of the promising practices currently suggested in higher education are similar to, if not based on, those suggested by Maria Montessori for forwarding learning in small children. The three presenters give practical, actionable ways to design classroom and program activities based on the most basic pillars

of the Montessori method, and they present an overview of teaching team and inquiry-based learning that moves students from concrete to abstract and uses frequent low-stakes assignments and feedback to increase engagement and mastery.

Objectives:
Explain how and why it is important to move students from concrete to abstract reasoning in the discipline based on the literature; identify the place of peer review, cooperative learning techniques, short demonstration lectures, shared cases and scenarios and struggling with messy problems in constructing and assessing mastery; and transfer and apply some guided inquiry techniques that use frequent, low-stakes assignments to create and sustain the deeper learning that leads to mastery.

Facilitating Inquiry-Based Learning through Contemplative Practices

Patricia Owen-Smith - *Oxford College of Emory University*

This presentation is focused on inquiry-based learning, a pedagogy that is currently framing many general education programs in higher education today. While this type of pedagogy is compelling, it is nevertheless difficult to implement for many of us given the developmental stage of our undergraduates and their lack of preparation for inquiry. I will argue that the burgeoning empirical evidence surrounding specific contemplative practices such as silence, reflection, journaling, etc. provides substantive support for the construction of an effective inquiry based classroom. Participants will be given the opportunity to construct a syllabus and assignments that will incorporate contemplative practices into an inquiry based course.

Objectives:
Define inquiry-based learning and explore the strengths and hurdles; define contemplative practices and their role in scaffolding the inquiry based learning; and provide evidence for the role of contemplative practices in teaching and learning particularly in the inquiry-based classroom.

Class Participation Policies: How to Avoid Ambiguity, Mixed Signals, and Unintended Consequences

Lolita Paff - *Pennsylvania State University, Berks*

A clear and effective class participation policy requires consideration of several key issues. First, an understanding of the learning theories and evidence of the role of student talk in learning. Second, identification of the learning outcomes the policy is designed to facilitate. Third, an understanding of student perceptions about class participation, and last the means by which participation and interaction will be assessed. In this interactive session, we will work through those four issues through brief presentations, pair-and-share analysis of sample class participation policies, review of data, and large group discussion of participation assessment.

Objectives:
Learn about the literature supporting the role of discussion and interaction in learning; discuss participation policy and learning goal congruence; and identify and discuss the strengths and weaknesses of sample participation policies.

Data Collection Demystified: Simple Strategies for Integrating Assessment Tools into Your Teaching

Deborah Periman - *University of Alaska, Anchorage*

This session is directed toward faculty whose expertise lies in areas other than quantitative data analysis. This is data collection for the rest of us! Engage in a collaborative discussion of the newest and/or easiest strategies for

using online tools to collect assessment data on your students' progress toward course or program outcomes. Explore strategies for incorporating assessment and data collection into your normal teaching routine without significantly adding to your workload. Participants are encouraged to bring laptops or tablets for hands-on work.

Objectives:
Reflect upon their individual goals for improving assessment of student learning and/or progress toward program outcomes; examine strategies for integrating assessment activities into their regular teaching practices; review online options for collecting and compiling data; and acquire/share tips and tricks for reducing time spent on data collection.

Pathways to Promotion for Midcareer Faculty: A Faculty Learning Community Model

Gretchen Peterson - *California State University, Los Angeles*

One of the key themes identified by Baldwin, DeZure, Shaw, and Moretto (2008) in their study of midcareer faculty was the perceived neglect of this group of faculty. After being tenured, mid-career faculty are generally "cut loose" and "left to their own devices." To address this issue, this project provided support to associate professors on the pathway to promotion to full professor through facilitation of a faculty learning community. All members of this midcareer learning community ultimately produced professional/scholarly activities appropriate to their disciplines that will support their promotions. Details of the structure of this successful FLC will be presented.

Objectives:
Understand the challenges that midcareer faculty face as they work towards promotion to full professor; understand how midcareer faculty can be supported as they work towards promotion; and understand how a faculty learning community to support midcareer faculty can be structured.

Critical Assessment and Meaningful Feedback: One Way Does Not Fit All

Lori Poole - *Colorado State University, Global Campus*

Do you think there is only one way to provide feedback to students? Are you tired of seeing the same errors assignment to assignment, even though you may have addressed mistakes in previous feedback? Providing timely and detailed feedback on student assignments is imperative in any teaching situation, particularly in the online class environment. Drawing on faculty training at CSU-Global Campus, this presentation will present and discuss the theoretical concepts behind assessing with impact, the power of properly utilized rubrics, and ways to incorporate effective, meaningful feedback in your teaching efforts.

Objectives:
Apply educational theory into discussions and grading feedback; identify successful achievement of critical thinking skills in student work; examine weaknesses in grading resulting in grade inflation; and implement consistent grading standards based on course objectives and improve feedback to students.

Working with First-Generation and Adult Learners

Lori Poole - *Colorado State University, Global Campus*

First generation college students face unique challenges. These non-traditional, adult college students are generally described as older undergraduates whose parents did not attend college, and when they do enroll in classes they attend part-time and/or work full-time while attending university. Often the educational background and experience of many instructors have not prepared them for working with this growing student population. Based on current research and faculty discussions and training at CSU-Global Campus, best practices and innovative ways to engage and collaborate with this underserved student population will be addressed and discussed in this interactive session.

Objectives:
Learn how to detect students who are first-generation learners in our courses in order to provide more targeted intervention; discuss and uncover tools and resources to make our efforts more collaborative between student support, academic advisers, and others on campus; and construct ways to make our practices more encouraging and supportive in ways that explicitly promote persistence for our adult students.

Plenary Presentation: Why Don't My Students Think I'm Groovy? The New "R"s for Engaging Millennial Learners

Christy Price - *Dalton State College*

What factors influence student motivation and desire to learn? Obviously there are some influences beyond the professor's control, but research in educational psychology suggests one thing we can do to increase student engagement is to create learning environments that are in some ways linked to, and supportive of, the current student culture. During this engaging and often humorous address we will briefly review the literature and apply the findings of the presenter's research regarding Millennial learners. Millennials' ideal learning environments, their preferences regarding assessments, their perceptions regarding the characteristics of the ideal professor, and their ideal institutional practices will be revealed.

What, Why, and Where: Teaching about Evidence-Based Practices (EBPs) in Early Childhood

Cammy Purper - *California Baptist University*

The use of Evidence-Based Practices (EBPs) in the Early Childhood Classroom is important, but not enough is known about them. Visit and learn what EBPs are, why they are important, and discover some excellent resources for introducing EBPs to your students.

Objectives:
Define EBPs; explain the importance of teaching students about EBPs; and list several web resources for learning and teaching about EBPs.

Library Information Literacy Instruction in an Online Environment: A Measure of Effectiveness

Joseph Rawson and Julie Harding - *University of Maryland University College*

This study looks at the effectiveness of asynchronous online library instruction through the examination and categorization of responses by students to a required online library database searching exercise as well as the comparison of grades in student projects in classes with and without library instruction.

Objectives:
Create and integrate online information literacy exercises into their online classrooms; evaluate student responses to the exercise on a graded scale; learn ways of assessing whether the online information exercise literacy aided in increasing student success in classroom projects.

Implementing Effective Team-Based Learning: Practical Ideas on How to Engage Students in the Learning Process

Joseph Ritter and Libby Scheiern - *Principia College*

When we move beyond simple group work to a more foundational team-based strategy, incredible results can occur. Students take more ownership, take responsibility for the learning process, and learn to reflect metacognitively. Setting up engaging projects allows students to be creative and to find meaning and relevance

in their shared role as a teacher-learner. Not only do they learn content, they also learn communication, teamwork, and life skills, including improved self-knowledge. In this interactive workshop, we will design team-based activities that can be adapted to your educational setting.

Objectives, participants will leave with tools for:
Define and give examples of team-based learning—learning that results from cooperative and transformative instructional strategies, engages students actively in the learning process, and promotes significant learning; describe methods of team-based learning that include: development of a community of learners through team skill and group bonding/formation methods; analysis of group process skills; and structure of activities and projects; and identify the four principles associated with team-based learning.

Rethinking Latin: A Pedagogical Approach Addressing the Needs of Millennial Students

Scott Rubarth and Marcus Vu - *Rollins College and Florida Virtual School*

Can Latin survive and thrive in the 21st century? Today's millennial students struggle more than ever with tradition grammatical-analytical approaches used in Latin instruction. In this presentation two Latin instructors, one a seasoned Classics professor at a traditional liberal arts college, the other a younger Millennial-age instructor at a leading online K-12 institution, examine and evaluate the scholarship and emerging pedagogical practices that address the needs of Millennial students, focusing on the use of the flipped or inverted classroom, holistic language strategies, and cooperative learning, both on and off-line.

Objectives:
Participants will be: exposed to contrasting generational views regarding pedagogical challenges of Latin for Millennial student; able to identify effective strategies for the inverted classroom in language instruction; able to identify cooperative techniques that can be used both in the traditional classroom and the virtual classroom; and able to understand how to employ wholistic language-learning techniques to scaffold the grammatical skills required in mastering Latin syntax.

Maximizing Collaboration and Active Learning in Faculty Development

Holly Schmies and Tim Wright - *University of Wisconsin, Stevens Point*

Faculty development practices are necessary in higher education but often times take a back seat to the other responsibilities faculty must attend to. However, programs such as lesson study and a teaching partner program within a state-wide public university system have helped to limit the barriers to faculty development due to the collaborative nature and active participation of faculty. The purpose of this presentation is to share these collaborative ideas for faculty development and promote the scholarship of teaching and learning. The goal is to create discussion for implementation, evaluation and administrative support for these programs.

Objectives:
Understand the importance of collaboration and active learning to maximize faculty development; and explore the use of Lesson Study as a successful tool for faculty development within all disciplines.

Learning through Laughter

Alan Seidman - *Johnson & Wales University*

Who doesn't enjoy a college classroom where the teacher is funny and the students are actively engaged? In many ways, the Millennial generation of today almost expects to be entertained. The problem is, however, many faculty members are not the comedic type. Not to fear, help is here. This session will provide three different techniques all instructors can use with which to add a bit of levity to their classes. No matter the subject matter, or the class size, these techniques will stimulate thinking and make learning fun.

Objectives:
Understand how using humor in the classroom can engage students and improve learning; discuss the many different ways humor can be used in the college classroom; and present and describe three distinct ways all faculty (the funny and the not-so funny) can use humor to promote student thinking.

Globalization: What Has Been Taught Versus What Should Have Been Taught

David E. Smith - *National University*

Detailed presentation of the concept of globalization. Group beak outs, to allow individuals to share their views. Coming together, where groups share their conclusions from the group discussions.

Objectives:
Understanding the concept of globalization; and using the concept of globalization in the classroom.

Creating Community in the Online Learning Environment: A Place-Based Approach

Sheila Steinburg - *Brandman University*

This poster addresses a major challenge to online learners-creating community by considering place-based factors and influences. Creating community in the online learning environment comes from fostering engagement with other students, the material and the professor. Multiple media and forms of communication should be utilized as a means to establish creative and thoughtful two-way engagement. Understanding your students and their access to and preferences for certain technologies is key to fostering successful engagement.

A Competency-Based Evaluation of Two Web-Based Social Work Practice Course

Jayme Swank & Laura Dreuth Zeman - *Southern Illinois University, Edwardsville*

The evaluation sought to determine whether there were differences between traditional and non-traditional learners who completed an online social work practice class. Researchers used quiz scores and survey data to create a picture of learning patterns across traditional and nontraditional students. Both groups of learners, traditional and nontraditional, demonstrated important correlations between quiz scores within the competency areas of basic agency skills, clinical knowledge application, and advanced practice skills application. Analysis of the data found unique patterns within the two groups demonstrating relationships between quiz scores.

Objectives:
Compare and contrast the online learning approaches of traditional and nontraditional students; identify learning competencies and determine how these competencies can be translated into an online learning environment; identify ways to meet the learning needs of traditional and nontraditional students in an online learning environment.

Digging for Gold: Finding Our Way to a Culture of Writing

Kay Tronsen - *Moody Bible Institute, Spokane*

What happens when two writing teachers strive to change the writing-as-duty culture at their small college? We developed a four-step strategy with the end goal of influencing and slowly changing our colleagues' valuing of writing through Writing-Across-the-Curriculum strategies like writing to learn, based on the well-known scholarship of Fulwiler, Parker and Goodkin, and others. We will discuss the challenges of unearthing

connections and maximizing them in order to foster a learning community that recognizes writing as one of its core values. We will share our process, our insights and our challenges, and invite discussion.

Objectives:
Assess different methods for changing organizational culture; generate possible strategies for changing organizational culture within the context of small colleges; and point out Writing Across the Curriculum strategies that apply to small-college settings.

The Teacher as Student: Online Faculty Development for Online Educators

Rosemary Tyrrell - *Fashion Institute of Design and Merchandising*

The rising tide of online courses has fueled debate over quality. Teaching online requires a different set of skills than teaching face-to-face, yet most instructors of online courses receive minimal preparation before teaching their first course. My study explored the needs of online faculty for professional training and development. Online instructors experienced the program as students in a four-week new faculty orientation course. Findings showed that 100% of the faculty surveyed and interviewed felt they had received insufficient training before teaching online. This session will explore methods for creating an online faculty orientation course.

Objectives:
Discover methods for establishing an online faculty orientation course that meets the needs of online faculty; create a strategy for improving online teaching through effective faculty development; incorporate best practices to create faculty development for online educators; and organize and outline modules for faculty development for online educators.

What isn't Working? Using Course and Program Assessments for Instructional Improvement

Amy Vinlove - *University of Alaska, Fairbanks*

What can we learn about the courses we teach and the programs we work in by examining the experiences of the students who do not experience success? How can we gather data from our own courses or programs to look for trends and to strengthen our future practices? This session will present and give participants hands-on experience with a framework developed for examining course and program assessments to learn more about our students' successes and struggles. Participants will be provided with strategies to use both collaboratively and individually to critically examine student learning outcomes for the purposes of improving instruction.

Objectives:
Participants will understand that a careful analysis of student assessments can provide valuable information that will lead to new ideas for instructional improvement; participants will learn a series of steps to purposefully examine course assessment data in order to find patterns reflecting student understanding of course material or lack of understanding. Analyzing these patterns can lead to ideas for improving instruction; participants will see examples of the use of course and program assessment data for program improvement in the field of teacher preparation.

Engaging Students with Video Scribing: Academic Entertainment or Animated Education?

Christol Williams - *Midwestern University*

Video scribing, a highly-acclaimed and engaging marketing tool in the business sector, is an information delivery method well-suited for teaching foundation concepts in many disciplines. Its' instructional worth has not been explored in the literature. One pilot study revealed that integrating a video scribe into the educational process has invaluable potential to improve the learner's experience. This interactive session invites all participants to view a video scribe series and to bring their smart phones, laptops and/or iPads for engaging

audience response participation. The academic value of an engaging video scribe, its educational implications and video-instruction support resources are explored.

Objectives:
Discuss the educational benefits and limitations of a video scribe after viewing one; identify at least 4 components of high-quality, effective video scribe creation; generate 3 educational topics that may be well-suited for video scribe instruction; and receive hand-outs on resources describing how to create a video scribe for classroom instruction.

Continuous Reflection: Promoting and Recognizing Personal Growth

Robert Wolffe and Heljä Antola Crowe - *Bradley University*

Reflective thinking, experiences, activities and intentional emphasis on metacognition lead to positive impacts on awareness of one's growth and learning as a professional teacher. A capstone portfolio process in a cohort of Master's degree students in STEM K-8 teachers (N=20) was used to reflect about personal growth. Analysis of portfolio data and artifacts demonstrated increased awareness of teachers' learning in content and professional knowledge. Growth was noted in areas of strategies to improve student learning, teachers' notions of the importance of reflective practice, their role as a teacher, dedication to life-long learning and their confidence in being a professional educator.

Objectives:
To enumerate and explain benefits gained by having students reflect upon their learning experiences; to describe strategies that can be used in courses and across program plans to incorporate a variety of reflective approaches; and to identify changes they can make to their current course or programs to better take advantage of the benefits of reflective practices.

Want to Teach More Effectively? B.F. Skinner Is Your BFF

Jan Worth Nelson - *University of Michigan, Flint*

Harvard psychologist B.F. Skinner's infamous theory of behavior modification was denounced 50 years ago as "a fascist, manipulative vehicle for government control." But his ideas are making a comeback. Might reclaiming Skinner make us better teachers? Our students better learners? A review of Skinner's basic premises suggests a resounding yes: pedagogy centered in skillful reinforcement practices makes refreshing good sense in enlivening course design and increasing the likelihood that our students will learn.

Enriching Undergraduate Level Courses to Meet the Needs of Graduate Students

Tim Wright and Holly Schmies - *University of Wisconsin, Stevens Point*

Universities typically offer undergraduate courses that give credit toward both undergraduate and graduate degrees. Because these courses are attended by graduate and undergraduate students concurrently, instructors required to meet the needs of both types of students. These dual-credit courses typically have a greater number of undergraduate students, which may lead to faculty placing more emphasis on undergraduate needs versus the needs of the graduate student. The purpose of this presentation is to share qualitative data gathered from faculty at a mid-size Midwestern university on thoughts and opinions for how to meet the needs of graduate students in their undergraduate classes. Also discussed is the importance of collaboration and involving the graduate students in course creation and course enrichment through their experiential knowledge. The goal of the presentation is to help faculty envision various ways to address the advanced needs of a graduate student in a predominantly undergraduate environment.

Objectives:
View qualitative data gathered from faculty on how to teach graduate and undergraduate students concurrently; understand of how to involve graduate students in undergraduate courses by allowing them to share their practical experiences with the undergraduate students in class; create a usable guide for implementing graduate student knowledge and experiences in undergraduate classes in which they are enrolled; value graduate level students for their potential to enrich undergraduate learning, while at the same time, learning and being challenged within the same course.

Plenary Presentation: Teaching: Joys and Challenges of the Greatest Profession

Todd Zakrajsek - *University of North Carolina, Chapel Hill*

Teaching in higher education is in many ways a gift. Having the opportunity to mold future societies is an amazing experience. That said, this profession also comes with a multitude of challenges. In this session we will explore teaching as a "profession," looking both at why teaching is exceptionally important to everyone and how research on teaching can help all of us to be better at educating others. This session is designed to encourage attendees to think about education, the role of the teacher, and the role of the student in new and fundamentally different ways.

Objectives:
List at least three current student behavioral patterns and beliefs that make teaching challenging; identify three distinctive abilities that illustrate the skills of great teachers; and differentiate "professional" teaching from "novice" teaching.

Managing Student Internships Online: Incorporating Ethics and Professionalism via Electronic Delivery

Kevin Zeiler - *Metropolitan State University, Denver*

Track student hours, receive timely feedback from students and preceptors and monitor student learning as it applies to ethical and professional responsibility. The key to managing an online internship is the faculty's ability to use a multitude of tools to monitor all aspects of learning and keeping the student engaged.

Objectives:
Measure student internship progress; tackle issues surrounding distance internship programs; and identify techniques that will assist with electronic course delivery.

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