

Conference Theme:  
Evidence-Based Teaching and Learning



# Lilly Conference

COLLEGE AND UNIVERSITY  
TEACHING AND LEARNING

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*Conference Proceedings*

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**ITLC** | INTERNATIONAL TEACHING  
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## Preface to Conference Proceedings

This fall 375 conference participants attended the Lilly Conference on College and University Teaching in Traverse City, Michigan. These individuals came from 91 different institutions, 28 states, and 3 countries. During the conference participants noted many opportunities to have meaningful conversations about issues related to teaching and learning.

The proposal submission process was very competitive this year. Following a blind peer review process with college and university faculty as reviewers, 60% of the proposals were accepted. Presenters were given the opportunity to develop their scholarly work for publication in the conference proceedings. Following a blind peer review, 80% of the manuscripts were accepted for the 2013 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, Traverse City, Michigan 2013. 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

### Phyllis Blumberg

University of the Sciences

Phyllis Blumberg is the Director of the Teaching and Learning Center, University of the Sciences. A Research Professor in Education and a Professor of Psychology, her interests in education are curriculum development, how to use learner-centered teaching approaches, educational leadership, faculty development, innovation in education and problem-based learning.

*Presentation: Do You Want to Teach More Effectively? Then "Grow" Your Teaching*

### Milt Cox

Miami University

Milt Cox is Associate Director of the Center for the Enhancement of Learning, Teaching, and University Assessment at Miami University, Ohio, where he founded and directs the annual Lilly Conference on College Teaching. He is also the founder and Editor-in-Chief of the Journal on Excellence in College Teaching and the Learning Communities Journal and is co-editor of the book, Building Faculty Learning Communities.

*Presentation: Why Students Behave the Way They Do: An Instructor's Guide to Cognitive Development*

### Keith Whittington

Rochester Institute of Technology

Keith Whittington is an Associate Professor of Information Technology at the Rochester Institute of Technology who believes it is critical for a teacher to actively engage students in the learning process in order to maximize student learning. He transformed the way computer programming courses were taught, significantly increasing student retention, grades, and satisfaction and received an NSF grant to further support his work.

*Presentation: Simple Activities Designed to Engage Learners in the Classroom while Maximizing Student Learning and Satisfaction*

### 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 SOU 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: Critical Challenges in Teaching and Learning: What Teachers Will Likely Face and How to Meet those Challenges Head On*



# Characteristics of Effective Collaborative Practices in a Student Teaching Classroom: Perspectives of University Field Coordinators

**Douglas Busman, Linda McCrea, Kris Cortez**

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## Introduction

Effective collaborative skills are an essential competency identified within the Interstate New Teacher Assessment Standards Consortium (InTASC) standards for teacher preparation. Research is readily available that explores expectations for collaboration from the viewpoint of the cooperating teacher and the student teacher but the expectations of the university supervisor are less well-documented. This study examines the expectations of the university supervisors regarding how they view collaboration between the cooperating teacher and the student teacher within the student teaching experience. Utilizing InTASC competencies as the investigative framework, this paper identifies three themes incorporating a range of practices that foster effective collaborative practices in the student teaching classroom.

## Literature Review

Student teaching is pivotal as the primary opportunity for pre-service teachers to link the theory and practice as taught in teacher preparation courses to a demonstration of learning in “real life” practice as found in the PK-12 classroom (Levine, 2011). As Darling-Hammond (2006) suggests, “It is impossible to teach people how to teach powerfully by asking them to imagine what they have never seen or to suggest they do the opposite of what they have observed in the class room” (p. 308). To ensure that teaching and learning remains evidenced based, teacher educators must continually examine their assumptions, values, and practices; the relationship between these variables; and their commitment to the highest-quality teacher preparation (Sumsion & Patterson, 2004).

This study sought to identify the perceptions of university supervisors (hired by the university to supervise the student teaching experience) regarding collaboration between cooperating teachers and student teachers within the student teaching experience. University supervisors are uniquely positioned to know both the behaviors, beliefs and needs of the cooperating teacher and the student teacher (Levine, 2011).

## Role of Collaboration in Teacher Preparation

Collaboration is here to stay, and university supervisors have a role to play given their positions as mediators between schools and university faculties of education (Hulme, Baumfield, & Payne, 2009). The critical importance of collaboration in teacher preparation has recently been articulated in Standard #10 — *Leadership and Collaboration* of the Model Core Teaching Standards — recently developed by the Interstate Teacher Assessment and Support Consortium (InTASC). The standard states: “The teacher seeks appropriate leadership roles and opportunities to take responsibility for student learning, to collaborate with learners, families, colleagues, other school professionals, and community members to ensure learner growth, and to advance the profession” (*Council of Chief State School Officers [CCSSO], 2011, p. 19*). Under this standard, a core competency in teaching is being able to collaborate in decision making — whether for developing a common purpose and goals or for developing, monitoring, and adjusting instruction “for each student’s learning” (CCSSO, 2011, p. 19).



The inclusion of collaboration within the InTASC standards supports the notion that the need for teachers to collaborate is growing (Hindin, Morocco, Mott, & Aguilar, 2007). This need for collaboration is fueled by the belief that collaboration is one of the necessary components of the professional growth needed to develop the innovative approaches to learning that are needed to close the achievement gap in student learning (Wackerhausen, 2009). As a specific example, the Individuals with Disabilities Education Improvement Act of 2004 has mandated that special education teachers and general education teachers collaborate to develop programs that include all students in the mastery of the highest learning standards (Conderman & Johnston-Rodriguez, 2009). General education teachers who utilize strategies acquired in collaboration with special education teachers benefit in multiple areas of instruction, including pedagogy, classroom management, curricula, and assessment (Brownell, Adams, Sindelar, Waldron, & Vanhover, 2006).

## Methodology

For this qualitative study, data were collected in three phases from university supervisors. The first phase utilized a focus group. The second phase consisted of follow-up structured written interviews. Then a final round of surveys was used to determine the coding structure for analyzing alignment of the data collected with InTASC standards.

### Phase One: Focus Group

Voluntary participants for a focus group were recruited from a convenience sample consisting of university supervisors associated with the college of education of a large public university. The university supervisors were primarily adjunct faculty who were retired elementary teachers. Fourteen participants were recruited using e-mail invitations and personal interactions during professional development training, seminars, or university supervisor meetings. Focus group participants were asked questions related to the student teaching experience and their expectations for students and cooperating teachers.

### Phase Two: Structured Interviews

The structured written interviews that followed the focus group were conducted with the same 14 participants. Results for the focus group and the structured written interviews were transcribed using QSR's NVivo software (NVivo, 2006). To develop the coding used in the data analysis, each of the 14 participants was administered an online survey rating 26 InTASC indicators. These indicators were identified by the research investigators based on their alignment with research questions investigating collaborative practices in a student teaching classroom. A four-point Likert scale was utilized for the survey; response choices included "very important," "important," "somewhat important," and "not important." The university supervisors rated each indicator according to their perceived importance to the collaborative nature necessary within the student teaching environment. Survey results from the university supervisors were then analyzed. Nine indicators were identified as being "very important" according to 80% of the supervisors' responses, with 0% indicating disagreement. Transcripts were then independently coded by the two primary researchers (L.M. and D.B.) and a research assistant. The researchers adhered to a single code process to avoid cross-coding content. Multiple meetings prior to coding established a common understanding and definition for each indicator. Coding results were analyzed using QSR's NVivo software, and content coding agreement was found to be above 80% for all researchers. Seventeen indicators were ultimately excluded from the coding framework for lower degrees of agreement. The researchers reviewed the focus group transcript and coded supervisor responses according to the subjects' alignment with the nine indicators identified as very important to collaborative practices. The nine InTASC standards-based indicators listed in Figure One were utilized as the coding criteria.



## Figure One: InTASC Standards-Based Indicators

- 3a. The teacher collaborates with learners, families, and colleagues to build a safe, positive learning climate of openness, mutual respect, support, and inquiry.
- 3c. The teacher collaborates with learners and colleagues to develop shared values and expectations for respectful interactions, rigorous academic discussions, and individual and group responsibility for quality work.
- 3j. The teacher knows how to help learners work productively and cooperatively with each other to achieve learning goals.
- 3k. The teacher knows how to collaborate with learners to establish and monitor elements of a safe and productive learning environment including norms, expectations, routines, and organizational structures.
- 6s. The teacher is committed to providing timely and effective descriptive feedback to learners on their progress.
- 7a. The teacher individually and collaboratively selects and creates learning experiences that are appropriate for curriculum goals and content standards, and are relevant to learners.
- 7m. The teacher knows when and how to access resources and collaborate with others to support student learning (e.g., special educators, related service providers, language learner specialists, librarians, media specialists, community organizations).
- 10n. The teacher knows how to work with other adults and has developed skills in collaborative interaction appropriate for both face-to-face and virtual contexts.
- 10r. The teacher takes initiative to grow and develop with colleagues through interactions that enhance practice and support student learning.

## Results

A brief explanation of monitoring of student teachers on the part of the university supervisor provides a context through which to view the results. Monitoring begins when the university supervisor is assigned to the student teacher and arrives in the actual classroom shortly after the beginning of the semester. The university supervisor is most often an adjunct or affiliate member of the college of education's faculty, although tenure and tenure track faculty also serve as supervisors. All of the university supervisors have previous classroom and/or administrative experience with a minimum requirement of a master's degree. Monitoring responsibilities include observing the student teacher's performance and conferring on a regular basis with the cooperating teacher as well as with the student teacher regarding the experience. The university supervisor is responsible for official evaluation of the student teacher using recommendations from the cooperating teacher, seminar requirements, and the college of education's expectations.

NVivo software analysis of coding agreement and intersection codes revealed three themes from which the researchers extracted practices and expectations that supervisors perceived to be important in establishing a collaborative environment within the student teaching experience. These themes were *learning environments*, *assessment practices*, and *professional dispositions*.

The theme of *learning environments* is defined as "environments that support individual and collaborative learning, and that encourage positive social interaction, active engagement in learning, and self-motivation" (Council of Chief State School Officers [CCSSO], 2011, p. 8). Learning environments are characterized by university supervisors with statements such as the student teacher is "... treated as an equal, as a team teacher, as someone who is going to be trusted just like everyone else who is going to be in charge of this classroom and not as a peon."





The theme of *assessment practices* is defined as “using multiple methods of assessment to engage learners in their own growth, to monitor learner progress and to guide the teacher’s and learner’s decision making” (Council of Chief State School Officers [CCSSO], 2011, p. 9). Assessment is characterized by supervisor statements such as “There has to be a conversation that says ‘yes, you are doing extraordinarily well and here are your potential growth areas.’ And keep an eye on those areas.”

The theme of *professional dispositions* is defined as “habits of professional action and moral commitments that underlie the performances and play a key role in how teachers do, in fact, act in practice” (Council of Chief State School Officers [CCSSO], 2011, p. 6). Professional dispositions are characterized by university supervisors with statements such as “Somebody who will accept the ST [student teacher] for what they bring to the situation.”

The three themes of *learning environments*, *assessment practices*, and *professional dispositions* provide an organizational framework for the nine indicators identified (stated in figure 1) that the university supervisors identified as very important to collaborative practices in the student teaching classroom.

## Discussion

The findings of this study add clarity to what university supervisors view as very important to collaborative practices in the student teaching classroom. This clarity provides key information in considering potential changes to the student teaching experience that will continue to make it more collaborative in nature. As a follow up to this study, and a previous study regarding expectations for cooperating teachers, the college is developing a pilot program with a cooperating district to assess the role of collaborative practices in the development of a co-teaching model for student teaching. In addition to data gathered from the proposed pilot program, the findings related to university supervisors collected in this study will be followed by research to gain additional insights into the expectations that the cooperating teacher and the student teacher hold for the development of collaborative practices as part of the student teaching experience. When all of the studies are completed and the results analyzed, the final framework for the development of collaborative practices in the student teaching classroom will be developed. The framework will be shared with the university supervisors, student teachers, and cooperating teachers associated with the researchers’ college of education and will become both an expectation for practice and a part of the curriculum in student teaching seminars.





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# Title

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### Abstract

This document explores the characteristics of active learning classrooms, the digital generation, computer literacy, information literacy, technological literacy, and explores experiential learning using Web 2.0 Internet tools. Recent events associated with learning and teaching indicate a paradigm shift in the education arena. The alignment of educational initiatives with student needs is a key ingredient for success amidst change. The first segment of the document informs on the learning objectives summarized above. The second segment presents the experiential segment of the document that informs on Web 2.0 tools, and it serves as a demonstration for conference session participants.

### Introduction

According to Kuhn (1996), at any moment an institution may face the consequences of a paradigm shift that changes everything. Kuhn elaborated on the status quo as the concept of normal space. Kuhn's view was that normal space transformed the current reality after a significant discovery or a scientific revolution had taken place. The scientific revolution puts in place a new paradigm to explain the current reality. Normal space was an attempt of the paradigm to explain concepts previously unexplained and to verify the paradigm itself. When new unresolved events surface and remain in normal space, crises result.

The crises exist because the current paradigm's inadequacies do not explain the events. This misalignment can be a problem if educational initiatives do not match workplace needs. The characteristics Kuhn (1996) asserts as conditions for a paradigm shift may match some of the current issues in academia and in the education arena. The shift in the change from education using a command and control type scenario of the past to a current environment seeking engagement, active communication, and more collaboration may engage the latest generation of students on the scene, the Digital Generation (Shelly, Gunter, & Gunter, 2012).

### Literature Review

Change is constant (Heracles, 200 BC). Change is evident in the evolving nature of each new generation, and according to Brandt (2003) there were significant differences between the generations known as the Baby Boomers, Generation X, Generation Y, and the newest generation to arrive on the scene, the Millennial Generation also termed the Digital Generation. Each of the foregoing generations may be in the workplace trying simultaneously to resolve different value systems and trying to work together. There are workplace, learning, and teaching consequences.

Students who are members of the Digital Generation function in a different world compared to the world of previous generations. Students of the Digital Generation have enormous resources to access information, new tools for communication and collaboration, and they prefer to multitask (Shelly, Gunter, & Gunter, 2012) rather than work in isolation. The logistics of the numbers is astounding and the impact of the change was alluded to by Negroponte (2010).



Pawliw-Fry (2008) asserts a need to cope with the different management and leadership challenges to ensure success with the Greatest Generation, the Baby Boomers, Generation X, Generation Y, and the Millennial Generation. Pawliw-Fry (2008) states that even more important than the difference in values will be the difference of generational styles in the workplace. Coping in the classroom may resolve itself similarly to coping in the workplace.

One way to cope is through the use of active learning classrooms. A YouTube video, *Inside Active Learning Classrooms* (University of Minnesota, 2010), addresses many of the attributes of the active learning classroom, and provides background to generate session participant discussion points. The active learning classroom at the University of Minnesota included the following (University of Minnesota, 2010).

- Open concept space called a concept lab with round tables that seated eight students
- Active learning classroom furniture with wheels on the chairs, computers for each student, and the capability to project team projects to large screens throughout the classroom
- Projectors under the control of the facilitator making one person's screen viewable on all of the screens throughout the classroom simultaneously
- A class atmosphere characterized by involvement, energy, friendliness, openness, and in the words of one student, an "amazing" atmosphere

The Kirtland Community College (KCC) course, Technology in Education, CIS 240, was a class designed to demonstrate methods K-20 teachers could adopt to facilitate teaching and learning with the Digital Generation. The active learning classroom, teaching with teams, and elements of flipped classroom methods, enhanced student involvement. Figure 1 below depicts one of the active learning classroom at KCC that hosted the KCC CIS 240 class.

In addition, this document supports the Lilly Conference 40 minute-long presentation entitled Engineering Student Involvement. The three separate events were linked together and synergistically affected one another. The CIS 240 class was a working demonstration of concepts to build more engaged students through the adoption of active learning classrooms, flipped classroom methods, and student-centered initiatives. The Lilly Conference presentation, organized in two separate 20-minute segments, addressed the following objectives. In a manner similar to the CIS 240 class addressing similar topics.

1. To familiarize conference participants with characteristics of the active learning classroom
2. To familiarize conference participants with characteristics of the digital generation
3. To familiarize conference participants with characteristics of computer literacy, information literacy, and technological literacy
4. To facilitate hands-on, experiential learning using Web 2.0 tools



Figure 1.



An active learning classroom at KCC during CIS 240 course class session. The classroom features a net book bank, multiple video screens, multiple screen projectors, movable chairs on wheels, and a classroom built in accordance with an open concept space. *Copyright 2013 by E. Frazier.*

The first segment comprised of lecture, video, and experiential venues, explored and informed on the above session learning objectives. The CIS 240 class taught during the winter 2012 semester was the model for the Lilly presentation session. The second 20-minute segment, the experiential part of the presentation, examined Web 2.0 tools applicable to an active learning classroom environment and served as an experiential classroom demonstration for session participants.

The presentation and the CIS 240, (also designated as EDU 240), familiarized students, current and future educators, with assorted technology that encompassed the following topics (Shelly, Gunter, & Gunter, 2012).

- Computer technology
- Information technology
- Integration technology
- Digital media technology
- Practical application
- Characteristics of the digital student





Figure 2.

# Engineering Student Involvement (ESI)

Dr. Gene Frazier, Computer Information Systems Instructor, Kirtland Community College

## Introduction

Active learning classrooms, the digital generation, computer literacy, information literacy, technological literacy, influence the efficacy of teaching and learning.

## Project Overview

Lecture, video, and experiential venues will examine and inform the efficacy of teaching and learning. The experiential segment examines Web 2.0 tools applicable to an active learning classroom environment and serves as a demonstration for session participants.

## Objectives

**Objectives for review:**

- Digital generation
- Active learning classrooms
- Computer literacy, information literacy, and technological literacy
- Experiential learning exercise

## Methodology

## Student Driven

## Conclusion

Web 2.0 facilitates an active learning classroom environment and creates an experiential initiative for session participants.

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KIRTLAND

The key components of the KCC CIC 240 class to facilitate student engagement conducted in an active learning classroom. Copyright 2013 by E. Frazier.

## Methodology

Course content included integrating technology into curriculum, use of the National Educational Technology Standards, and use of the Web 2.0 websites as educational tools. The Lilly Conference presentation followed the same model as each KCC CIS 240 class, though, drastically truncated in time. The second 20-minute segment was the experiential part of the presentation. The second segment examined Web 2.0 tools, as denoted in Table 1 below. The tools facilitated use of an active learning classroom environment, and served as an active learning classroom demonstration.



**Table 1.** Web 2.0 tool exercise sites used in the experiential demonstration.

1. Hands-on Webliography Exercise	
1.0.1.	Active Presenter - <a href="http://atomisystems.com/activepresenter/free-edition/">http://atomisystems.com/activepresenter/free-edition/</a>
1.0.2.	Animoto - <a href="http://animoto.com/blog/fun/knock-em-dead-with-animoto/">http://animoto.com/blog/fun/knock-em-dead-with-animoto/</a>
1.0.3.	ArcGIS - <a href="http://www.esri.com/software/arcgis">http://www.esri.com/software/arcgis</a>
1.0.4.	Blogger - <a href="https://accounts.google.com/ServiceLogin?service=blogger&amp;passive=1209600&amp;continue=http://www.blogger.com/home&amp;followup=http://www.blogger.com/home&amp;ltmpl=start#s01">https://accounts.google.com/ServiceLogin?service=blogger&amp;passive=1209600&amp;continue=http://www.blogger.com/home&amp;followup=http://www.blogger.com/home&amp;ltmpl=start#s01</a>
1.0.5.	Delicious - <a href="https://delicious.com/">https://delicious.com/</a>
1.0.6.	Edmoto - <a href="http://www.edmodo.com/">http://www.edmodo.com/</a>
1.0.7.	GoSkyWatch - <a href="http://www.gosoftworks.com/GoSkyWatch/GoSkyWatch.html">http://www.gosoftworks.com/GoSkyWatch/GoSkyWatch.html</a>
1.0.8.	Google - <a href="http://www.google.com/">http://www.google.com/</a>
1.0.9.	Google Calendar - <a href="https://accounts.google.com/ServiceLogin?service=cl&amp;passive=1209600&amp;continue=https://www.google.com/calendar/render&amp;followup=https://www.google.com/calendar/render&amp;sc=1">https://accounts.google.com/ServiceLogin?service=cl&amp;passive=1209600&amp;continue=https://www.google.com/calendar/render&amp;followup=https://www.google.com/calendar/render&amp;sc=1</a>
1.0.10.	Google Mail - <a href="https://accounts.google.com/ServiceLogin?service=mail&amp;passive=true&amp;rm=false&amp;continue=http%3A%2F%2Fmail.google.com%2Fmail%2F%3Fui%3Dhtml%26zy%3DI&amp;bsv=llya694le36z&amp;sc=1&amp;ltmpl=default&amp;ltmplcache=2">https://accounts.google.com/ServiceLogin?service=mail&amp;passive=true&amp;rm=false&amp;continue=http%3A%2F%2Fmail.google.com%2Fmail%2F%3Fui%3Dhtml%26zy%3DI&amp;bsv=llya694le36z&amp;sc=1&amp;ltmpl=default&amp;ltmplcache=2</a>
1.0.11.	How to Build a Computer from Scratch: The Complete Guide - <a href="http://lifehacker.com/5828747/how-to-build-a-computer-from-scratch-the-complete-guide">http://lifehacker.com/5828747/how-to-build-a-computer-from-scratch-the-complete-guide</a>
1.0.12.	K-12 Tech Tools: Computer Science - <a href="http://edutechdatabase.wikispaces.com/Computer+Science">http://edutechdatabase.wikispaces.com/Computer+Science</a>
1.0.13.	K-12 Tech Tools: Home - <a href="http://edutechdatabase.wikispaces.com/">http://edutechdatabase.wikispaces.com/</a>
1.0.14.	MyAccess - <a href="http://www.myaccess.com/myaccess/do/log">http://www.myaccess.com/myaccess/do/log</a>
1.0.15.	Poll Everywhere - <a href="http://digitalteach.me/2010/12/13/using-poll-everywhere-in-the-classroom/">http://digitalteach.me/2010/12/13/using-poll-everywhere-in-the-classroom/</a>
1.0.16.	Prezi - <a href="http://prezi.com/">http://prezi.com/</a>
1.0.17.	Quick Screen Share - <a href="http://quickscreenshare.com/">http://quickscreenshare.com/</a>
1.0.18.	Screenr - <a href="http://www.screenr.com/">http://www.screenr.com/</a>
1.0.19.	Xtranormal - <a href="http://www.xtranormal.com/">http://www.xtranormal.com/</a>
1.0.20.	YouTube for Schools - <a href="http://www.youtube.com/school">http://www.youtube.com/school</a>

Each class contained several short lectures, usually no longer than 15 minutes in length that occurred within the context of a once-a-week three-hour class session. Resource information, tutorials, and questions were the revolving topics of the 15-minute sessions. Individuals and teams used assigned computer laboratory time to complete projects. Individuals and teams presented material when ready with teams that constantly changed membership size that varied from two individuals to the entire class as a single team.



## Conclusion

In conclusion, this document refers to events that may be the harbingers of a paradigm shift in academia. Generational changes, characteristics of the Digital Generation, the desire to work in teams instead of as individuals indicate a significant change in environment. Different values of the generations suggest the requirement of different techniques to gain and maintain engagement. The command and control techniques of the past are not working.

The above document is a theoretical discussion. Numbers and measurement may be beneficial to augment anecdotal reflection. If it is difficult to measure a concept, it may be difficult to manage the concept. The next step, after this theoretical reflection, is to measure different predictor variables between classes taught in a traditional manner and those taught with flipped methods and active learning classroom accoutrements and techniques. A research proposal to investigate the differences is currently under review by the KCC Institutional Review Board (IRB).

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# Blended Learning: Pedagogy across Learning Platforms

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## Abstract

This study is designed to identify best practice pedagogy regarding student engagement, to assist faculty in using blended learning, and to bridge the transition for instructors from the traditional classroom setting to the online classroom. This study is a result of a *Faculty Learning Community* (FLC) at Central Michigan University, whose main focus was to discuss building community and to increase student engagement by applying best practices in the blended learning environment. Participants in the FLC presented effective traditional teaching practices and how they work in the online environment, examples of available tools, and vignettes of application.

**Keywords:** Blended Learning, e-learning, online instruction, effective instruction

## Blended Learning: Pedagogy across Learning Platforms

As more diverse students enter higher education, professors are under increasing pressure to adapt their pedagogy to meet the needs of 21<sup>st</sup> century learners. Instructors at colleges and universities can no longer hold onto “past practices that are incongruent with the needs and demands of a knowledge society” (Garrison & Vaughan, 2008, p. ix). Boettcher (2011) explained, “If content is not digital, it is as if it does not exist for students” (p. 5). Understanding these new technologies, how students are best served through this new educational approach, and how instructors can incorporate tried and true pedagogy from the face-to-face environment is the topic of this collaborative research study.

## Literature Review

Garrison and Vaughan (2008) described blended learning as the thoughtful fusion of face-to-face and online learning experiences. They opined that when face -to-face oral communication and online written communication are optimally integrated, the strengths of each blend into a learning experience that is congruent with the context and intent of the educational enterprise. Bourne and Seaman (2005) concurred, reporting that blended learning combines the best attributes of face-to-face and online learning. According to Garrison and Vaughan (2008):

Blended learning is more than enhancing lectures. It represents the transformation of how we approach teaching and learning. It is a complete rethinking and redesign of the learning experience. Blended learning is a coherent design approach that openly assesses and integrates the strengths of face-to-face and online learning to address worthwhile educational goals. (p. x)



Palloff and Pratt (2005) argued that interactive and collaborative learning experiences are more congruent with achieving higher-order learning outcomes. Online discussion forums are one of the best ways to facilitate interaction and learning in the blended classroom, in part due to their ability to promote constructivist, critical thinking, and higher-order thinking (Muilenburg & Berge, 2002). Deep and meaningful learning experiences are best supported by actively engaged learners (Kuh, Kinzie, Schuh, Whitt, & Associates, 2005). Discussions can be designed to effectively provide an open question and answer forum, encourage critical or creative thinking, reinforce procedural processes, achieve social interaction and community building, validate experiences, and support students in their own reflections and inquiry (Painter, Coffin, & Hewings, 2003).

Condie and Livingston (2007) claimed that blended learning should improve both face-to-face and online instruction. They further contended that a blended learning model uses technology to support rather than replace instructional best practices. Consequently, blended learning is more about teaching than it is about technical expertise.

## Methodology

Through a year-long Faculty Learning Community (FLC) at Central Michigan University (CMU), a group of professors and graduate assistants engaged in critical dialogue and studied traditional face-to-face instructional best practices seeking to link and to apply them to the online instructional environment. Each FLC member implemented blended learning strategies while teaching, examined literature and course syllabi, and reflected on the endeavor as data collection and analysis. The application of document analysis through collaborative research guided this grounded theory study (Bowen, 2009).

## Findings

The key finding from this study is that instructors can transfer effective pedagogy from the traditional classroom to the online learning environment. Additionally, in order to bridge learning platforms, an appropriate level of technical and developmental support from the college or university is essential for both the teacher and the learner. The FLC members drew their research from both theory and practice, taking a critical look at effective teaching strategies. The themes that emerged throughout the study focused on *building community*, and *instructional design*. Through this study, the FLC members generated a guide that outlines methods and presents information that supports the utility of these methods for addressing specific teaching strategies (See Appendix A). Researchers' vignettes of application add to the richness of this collaborative qualitative study.

### Building Community

Human interaction is the bedrock of effective instruction. From large classroom activities to working one-on-one with individuals, students crave the intimacy, connection, and energy that come from the student-instructor relationship. Jankens reflected:

*Although technology can be intimidating, staying up-to-date, getting the proper training, and practicing before I went live with students provided me with the skills and knowledge necessary to be a proficient user of the technology. Not only did this allow me to focus my time and energy on my students, it made me a more efficient and effective instructor. This ultimately integrated a more human touch to the online experience.*

Blended learning is a custom approach that applies a mix of teaching and learning delivery options to teach, support, and sustain the skills needed for optimal learning performance in building community. FLC member



Matthew Johnson commented:

*Admittedly, as a newcomer to online teaching, I was among the cacophony of doubters who believed that online teaching could never replicate the face-to-face experience, especially related to building a sense of community in the classroom. I quickly realized that my conceptualizations of community were place-based, and that this myopic view was limiting and contrary to my belief that community can occur beyond the bounds of physical space.*

Cross and Parker (2004) cited creating personal connection with learners as one of the ten actions that promote trust in the learning environment. To enhance both informal and formal communication, social networks can be utilized in varied learning environments. In studying these networks, FLC member Elizabeth VanDeusen found:

*Social media facilitates student engagement as well as timeliness of response and instructor access. Reminders can be posted about upcoming assignments and students' questions can be quickly clarified. In addition, it allows for the aggregation of course artifacts beyond the required assignments of the syllabus. Twitter enables scholars, instructors, and students to communicate informally on shared interests.*

### Instructional Design

Effective instructors use diverse resources to plan and structure engaging learning opportunities, monitor student progress formatively, adapt instruction as needed, and evaluate learning using multiple sources of evidence. Vygotsky (1962) noted that concepts are not words, but rather organized and intricate knowledge clusters. This profound constructivist instructional standard validates the necessity to not only teach individual concepts, but also to provide opportunities for students to learn and apply concepts within discussion, debate, case studies, problem-solving, and analyses that combine concepts and principles within a context. The opportunity to offer multiple learning experiences in a non-time sensitive format has proven beneficial for FLC member, Margaret Partlo:

*By taking the element of time out of the classroom, students learn at their convenience in asynchronous classrooms. I have found asynchronous environments very useful when used sparingly because the nature of my course is highly technical and course outcomes drive the learning. In contrast, synchronous instruction allows me to create a wide variety of learning experiences that can be effectively used to meet course objectives. These non-traditional methods are producing measurable results similar to in-person learning.*

Muileinberg and Berge (2002) recommended that instructors pose stimulating questions, brainstorm answers, make comparison of ideas and themes, and fuse the questions to the curriculum. These questioning strategies promote higher-order, constructivist thinking in online discussions and can be particularly employed through the case study and debate. Two FLC members illustrate this point through their use of case study and debate:

*Umpstead: Case studies are an important part of teaching the law because every day courts resolve disputes between litigants. These disputes and their resolutions form the basis of case law in this country. I also use case studies to illustrate relevant legal principles and demonstrate how courts resolve legal disputes.*

*Ampaw: Debate provides the opportunity for students to research a topic and argue the pros and cons as well as the advantages and disadvantages of an issue. This strategy exposes students to both sides of an issue and requires them to analyze key concepts in order to be able to determine their own position. Students learn to argue in writing which is an essential skill in research, another asset as an instructional strategy.*

Prawat and Floden (1994) contended that in order to implement constructivist lesson design, the instructor must shift from the traditional lecture model to one which is much more complex, interactive, and evolving. Marshall noted that the flipped classroom model is one example of this shift.



*Marshall: Professors most frequently use lecture to deliver information despite acknowledging that lecture disconnects students because they are not actively engaged in the learning process. In a flipped classroom, students come to class with an understanding of the information. Discussion can be more lively and purposeful, with time spent further developing ideas, not reviewing content.*

Students are regularly required to clarify their learning through presentations. In an effort to make student thinking and learning visible, we ask students to create, talk, write, explain, analyze, judge, report, and synthesize.

*Harris: Facing the challenge of learning how to use technology proves critical to success and should not interfere with the students' clarification of their learning. Utilizing technology in creative and innovative ways provides students and instructors with new challenges and opportunities.*

## Discussion

The work of our Faculty Learning Community has defined blended learning in higher education, offered strategies for implementation and most importantly, linked blended learning with effective instruction. We contend that effective instructors design coursework to ensure positive academic, higher-order learning outcomes for all students. Finally, effective instructors use diverse resources to plan and structure engaging learning opportunities, monitor student progress formatively, adapt instruction as needed, and evaluate learning using multiple sources of evidence. We maintain that these instructional best practices are made all the more remarkable in the blended learning platform.



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## APPENDIX A



## EFFECTIVE PEDAGOGY ACROSS LEARNING PLATFORMS RESOURCE GUIDE

			Online Implementation		Tools and Resources	
			Synchronous	A-Synchronous	Free	Purchase
BUILDING COMMUNITY	<b>Face-to-Face Implementation</b>	<b>Considerations</b>				
	“Getting to know you” activities during class Before/after class informal conversations Community agreements Faculty personal	Decide which activities to build rapport that you want to replicate in an online environment  Decide if you want to build rapport synchronously or	Short biographical PowerPoints about each student Online office hours before/after class Online discussion about community agreements	Blog posts or threaded discussion posts about each student Threaded discussion board for community agreements Email or threaded discussions for	Synchronous: Wimba (included in Blackboard) Google Hangout (Maximum of 9 users) Skype (25 maximum for audio only, 2 maximum for video) Blackboard chat (no	Synchronous: Skype (10 maximum for premium account, which \$9.99 per month)
CASE STUDY		Students work as individuals or in groups. Case materials presented in written or video format before students come into synchronous setting. Give pre-assignment, so students have done initial analysis and research before class begins. Use group room feature to allow students to discuss	An asynchronous environment is good for case studies because of the reading/video watching required to complete. Steps for completion: (1) Read & analyze the case; (2) Answer 1-3 poll questions about it; (3) Respond spontaneously to a posed question via video; (4) Watch & rate classmates' video responses; (5) Discuss	Case studies may also be done with an asynchronous/synchronous blended environment by following these steps: (1) Read & analyze the case; (2) Respond to a posed question in a wiki or discussion board; (3) Review classmates' responses; (4) Discuss responses in a synchronous class; (5) Reflect and	Content-Related: Yale Program on Non-Profit Organizations, <a href="http://ponpo.som.yale.edu/publ.html">http://ponpo.som.yale.edu/publ.html</a> NBC News, Education Nation, <a href="http://www.educationation.com">http://www.educationation.com</a> University of Alabama, Technology Education, <a href="http://www.bamaed.com">http://www.bamaed.com</a>	Content-Related: Institute for the Study of Diplomacy, Georgetown University <a href="http://www.guid.org">http://www.guid.org</a> Evans School of Public Affairs, Electronic Hallway <a href="http://hallway.evans.washington.edu">http://hallway.evans.washington.edu</a> Journal of Case Studies in
		Case studies are scenarios, usually based upon actual events that are used as a tool for analysis and discussion. Case studies encourage students to apply their knowledge and problem solving skills. The studies need sufficient detail to allow for				



			Online Implementation		Tools and Resources	
	Face-to-Face Implementation	Considerations	Synchronous	A-Synchronous	Free	Purchase
COMMUNICATION	In traditional classrooms, communication may take the form of interaction during class activities, question & answer structures, interaction before	Sense of Community Allows for frequent updates Communicate shared interests Fosters student engagement. Aggregation of course artifacts Personal information stream Portable	Course specific stream Live tweeting during an event Back-channeling during live classes	Communication between class sessions Personally curated news feed of current topics of interest to stay current in the field Instagram, Pinterest Communication about assignments, projects (primarily visual posts) Q & A about assignments, projects	Twitter Facebook Edmodo Google Blogger, Orkut Tumblr	Many purchased learning management systems (such as Blackboard) include a type of micro-blogging feature
DATA ANALYSIS/ TECHNICAL TRAINING	Traditionally done in the face to face setting, data analysis and technical training are quickly moving into a variety of online formats. Considered cost prohibitive, other methods appear to obtain similar	Outcomes rely heavily on well directed, task specific objectives. Planning requires significant subject matter expertise, time to create learning pathways, and technology integration. The classroom learning environment focuses on guidance	Synchronous instruction can be accomplished using a variety of teaching methods. Individual activities, usually prompted by an instructional tutorial, provide necessary information for students to later apply. Group instruction or presentations are used to	Software tutorials with build-in checks for understanding via quiz, test or mini-project formats are most commonly used in asynchronous teaching/learning environments. This format provides goal specific instruction where students are	Data analysis and technical training can be very specific, however, many free tutorials and virtual environments are offered online. In addition, many universities offer asynchronous training modules to improve skills	It depends on what you are working on. Most software packages provide a free 30-day download. If it's good, you will have to pay for it such as SPSS or NVivo.
DEBATE	Used in face to face classroom to have students research a topic and argue the pro/cons, advantages/disadvantages etc. of an issue. Often used to expose students to	Choose a great debatable topic. Have students research the topic ahead of time. The debate works when students are involved in the topic. Provide initial resources to guide the	Synchronous debate works in a virtual classroom. This can be via Wimba, WebEx, Skype, Adobe Connect, and Google Hangout. Skype, Adobe Connect and Google Hangout allow participants to see each other which is excellent.	Encourage students to be creative and add materials over a time-frame with opportunities to comment, build upon, and assess peers' work. Essential is continual involvement by	Wiki, Skype, Google Hangout, Adobe Connect, Wimba	





			Online Implementation		Tools and Resources	
	Face-to-Face Implementation	Considerations	Synchronous	A-Synchronous	Free	Purchase
LECTURE	Lecture is the most frequently used method to deliver information. Most faculty find this familiar teaching strategy the easiest way to transmit a great deal of information in a short period of time.	Active engagement equals enhanced learning. Lecture rarely actively engages students in the learning process. Lecture, in small spurts, can be an effective delivery tool. 10-20 minute lectures should be interspersed with other activities.	10-20 minute synchronous lectures can be facilitated via Wimba, WebEx, Skype, Adobe Connect, and Google Hangout. Intersperse within the lecture, quick, one minute activities that reinforce student learning. Activities can involve having students share what was learned at their presentations.	A-synchronous (or pre-recorded) lectures are an effective way to flip an online classroom. Students listen to pre-recorded video or voice recordings at convenient times, and then complete related assignments at their own pace.	Synchronous: Wimba (included in Blackboard) Google Hangout (Maximum of 9 users) Skype (25 maximum for audio only, 2 maximum for video) A-Synchronous: PowerPoint, Prezi, SlideRocket, Knoodle, and Google Docs can help you and your students to create and share engaging and interactive presentations.	Synchronous: Skype, WebEx A-Synchronous: Panopto, WebEx
PRESENTATION	Often students use power point or Prezi presentations in their face-to-face courses, often straying off topic and extending beyond the time limits of the presentation.	The experience with editing is profound for students whether in face-to-face or in online learning environments. Embedding new technologies, or nuances of established technologies, can be challenging.	Student presentations are archived and peer reviewed. Students must review at least four other presentations and submit a peer review for each. The reviews are considered in the final assessment. Additionally, the reviewer must submit a peer review for each. The reviews are considered in the final assessment.	Student presentations are archived and peer reviewed. Students must review at least four other presentations and submit a peer review for each. The reviews are considered in the final assessment.	Tools such as PowerPoint, Prezi, SlideRocket, Knoodle, and Google Docs can help you and your students to create and share engaging and interactive presentations.	Knoodle, Prezi Pro, GoAnimate, Corel Presentation, Power Presenter
SMALL GROUP ACTIVITY	A teaching strategy that is often used in a traditional face-to-face classroom setting is to facilitate small group activities. These activities may include a reading assignment, discussion,	Specify the activity objectives and anticipated outcomes. Make the task challenging. Plan group dynamics (size, distribution, time, location). Provide adequate guidance.	Synchronous implementation requires internet based applications with multiple access. Wimba (in Blackboard) allows a small group activity during a live online class session. The instructor assigns students to a virtual group, and distributes them within the group.	Although audio/video applications work well for small group activities, teachers are still able to facilitate group activities in an asynchronous or "off-line" setting. In this manner, the instructor must be very clear on the intended outcomes of the activity.	Synchronous: Wimba (included in Blackboard) Skype A-Synchronous: Word (track Changes function) Wikis (free versions include: bpwiki, wikispaces), Google, Docs, DropBox, Edmodo,	Synchronous: Go-To-Meeting Moodle A-Synchronous: Basecamp *There are hundreds of free and purchased applications and websites that provide



# The Jigsaw: An Old Game As A New Method Of Interactive Learning

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## Abstract

This article describes benefits of a cooperative learning environment, the process entailed, and the outcomes. The purpose of the research was to analyze a specific teaching technique and its impact on graduate student learning. Students research specific aspects of the course content and design annotations. During Phase II, students meet in predetermined expert groups to further refine and synthesize the material. The expert group presents and discusses the material with other Jigsaw groups. Ultimately, the students guide their peers in the learning process. The results indicate a higher level of subject matter comprehension, greater student engagement, and improved test scores

## Introduction

Finding a means by which to encourage and hold students accountable for reading course materials, as well as determining their level of comprehension, continues to challenge faculty. The Jigsaw method of instruction creates an environment in which the students become the subject matter experts and thereby ensure others in the class comprehend the course readings. The best way to master pedagogy is to teach it to another individual. In essence, think of each student in a classroom as a piece of the living jigsaw puzzle. As each piece becomes knowledgeable and shares this knowledge with others, the pieces of the puzzle begin to connect. When everyone grasps the concept through cooperative learning, the puzzle is whole. It is exciting, fun, and challenging for students from a wide range of backgrounds and levels of familiarity with the core subject matter at hand. Each student is essential for the success of the whole, thereby solidifying the effectiveness of the strategy. (Aronson, 2013) At the conclusion of the learning, teaching, and review processes students complete an individual and/or group quiz to assess their level of comprehension of the subject matter.

## Literature Review

The jigsaw strategy was developed by Elliot Aronson in 1971, with the concept of forming home groups to feed out to expert and research groups. (Aronson, 2013) "The jigsaw classroom is a cooperative learning technique with a three-decade track record of successfully reducing racial conflict and increasing positive educational outcomes." (Aronson, 2013, p. 1) While the jigsaw technique has been comprehensively reviewed and supported in the literature (Aronson & Patnoe, 2011; Carroll, 1986; Clark, 1994; & Wood & Dixon, 2011), little attention has been given to the application of this technique in the graduate level of education. There is evidence of application at the undergraduate level of higher education by Goodsell et al. in 1992 (Wood & Dixon, 2011). "As researchers and academics have come to address the teaching and learning of graduate skills, there has been and still is a clear polarization, between the embedding and integration of graduate skills in the curriculum." (Barrier, 2004, as cited in Wood & Dixon, 2011) Documentation of this method of instruction incorporated within the sport management environment was not evident.



Benefits of this methodology include the efficiency in which one may learn a large quantity of material. The process involves cooperation, listening, interaction, and even a certain level of empathy for others needs, as everyone in a group must work cooperatively. (Aronson, 2013) Furthermore, testing students individually and as a group allows for a mixture of evaluation techniques and fosters extended cooperative learning beyond the traditional process of testing knowledge of a subject matter.

The review of literature provided evidence of a blending of the jigsaw process with the case study process. (Wood & Dixon, 2011) Evidence of successful implementation of the process across disciplines emerged. Perkins and Saris (2001) successfully implemented the strategy in undergraduate statistics courses. Tarhan and Sesen (2012) documented success when incorporating the jigsaw strategy in first-year undergraduate chemistry courses. As Webb (1992) indicated, students find that teaching others is one of the best ways to learn course material.

## Methodology

The jigsaw process is a teaching strategy which places great emphasis on cooperation and sharing responsibilities within a group (Schreyer Institute, 2007). The process involves a series of phases in which learning is individual, group, and shared formats. The methodology to follow is specific for graduate level students and/or upper division undergraduate students with a strong base of knowledge in their respective field of study. In Phase I, divide a class into theoretically four equal parts, or groups of four to six individuals, depending on the size of the class and the level of the students. This becomes the base or home group. In a graduate level course the students may be assigned a topic in which they are responsible for researching text chapters, peer-reviewed journals, and professional literature for content related to the assigned topic. Whereas in a lower level undergraduate course it may be appropriate to divide the content within one chapter of a course text for the readings. In the traditional jigsaw method, each person within a base group is assigned a different reading; while each of the base groups is reading the same collection of materials. Once the base group has reviewed each of their individual assigned readings, everyone moves to an expert group for Phase II of the process. In the alternative graduate level jigsaw process, the base group is the expert group and composed of individuals who research the same subject matter. Each person individually searches for peer-reviewed journal articles and chapters within texts which they duplicate then summarize and create an annotated bibliography. Individually, each person returns to their expert group with materials ready to present and discuss in light of similar findings by peer group members. In addition, every individual student submits a copy of their materials and report as a portion of their individual course grade.

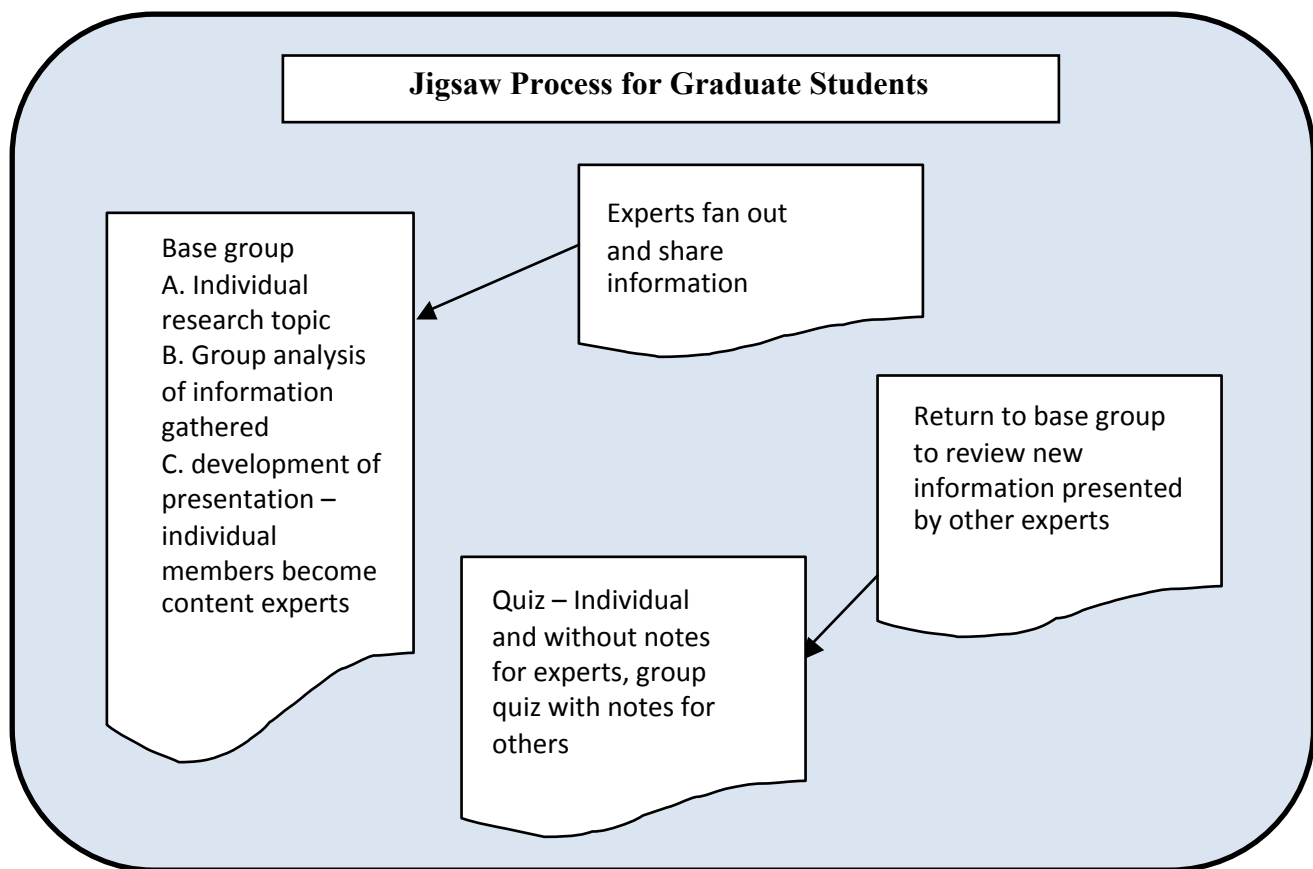
For Phase II, students must analyze all of the collected materials and create a unified paper. Their responsibility is to further study the material and develop a presentation to share with the other groups in the course. Since each member of the expert group will branch out individually to share their knowledge with others, it is important for every member of the expert group to be sure they rehearse and develop a strong understanding of the material and the key concepts to be presented. The expert group becomes responsible for ensuring each member of their group is up to speed and prepared to present.

During Phase III, the experts fan out to newly formed interest groups and teach the material to the group. Each interest group may be larger than the Phase I groups, in order to ensure everyone is in a learning group for the presentations. The discussion leaders may use their notes and resources while leading the discussion of the material, but a formal presentation with PowerPoint slides, etc is not the intent.

Phase IV is the conclusion of the process. After the experts present the material, everyone returns to their base group for further discussion of the topic. A base group may request an expert to come to their group and clarify or expand on the information discussed. To ensure comprehension of the subject matter, the base groups complete a group quiz in which they may access their notes, which the expert group must complete the



quiz individually and without notes. In the end, a class with seven groups of four students (28 total) will have seven topics in which they complete six group quizzes and one individual quiz.



### Conclusion

It is rewarding when students take ownership of their learning. Within a given semester, students repeated the jigsaw process and continually demonstrated increased confidence and comfort with the process. Furthermore, the enthusiasm for the technique continued throughout the course. Observations of student engagement showed a high level of involvement and energy arising from within the various expert groups. During the sharing of information, the leaders displayed increasing levels of confidence by referring less frequently to their notes and answering questions with confidence. Through the analysis of student grades across multiple semesters and a review of the course evaluations and comments, the success of this teaching strategy is clearly evident. Over 95% of the students' grades improved. Individual comments were analyzed according to the level of support for the jigsaw method of instruction. Nearly every student (99%) indicated they strongly agree or agree with this methodology of instruction for a graduate level course.



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# Beyond the Binder: Digital portfolios as PLAR for Graduate Admission

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## Abstract

Little is known about how adults establish undergraduate degree equivalency through prior learning assessment recognition (PLAR) for graduate school admission; less is known about e-portfolios for this purpose. This research gathers the views of students who create e-portfolios for admission to graduate school at different points in the process using interviews and the e-portfolios, themselves. The findings of this small study provide a window into the metacognitive processes of these specific adult learners and evidence of transformative thinking. The findings also help to explain why e-portfolios for PLAR have some predictive validity for degree completion when accompanied by supportive elements.

## Introduction

The use of e-portfolios in post-secondary contexts is a relatively innovative form of assessment gaining limited currency with adult educators (Brown, 2011). Digital portfolios have the potential to allow adult learners to showcase their accumulated experiences in life, work, and education for academic recognition in a multimedia format that encourages reflection and connections (Brown, 2011). Documentation of learning can be applied for credit recognition - Klein-Collins (2012), in describing the American context, defines prior learning assessment (PLA) as “a term used to describe the process by which an individual’s experiential learning is assessed and evaluated for purposes of granting college credit, certification, or advanced standing toward further education or training” (p. 9). She identifies four recognition mechanisms for PLA: standardized exams, challenge exams, equivalent programs in the other sectors (e.g., military) and individual assessment through portfolios (Klein-Collins, 2012).

Little is known, however, about the use of prior learning assessment recognition, or PLAR for purposes of qualifying for admission to Canadian graduate programs. This study endeavours to begin to fill that gap through understandings gained through interviews with a cohort of adult applicants to one graduate program at one Canadian university. The applicants used e-portfolios to establish PLAR equivalency to an undergraduate degree.

A review of the literature indicates three key issues of e-portfolio development. First, there is limited uptake of portfolios in university settings (Kennedy, 2003; Wihak, 2006). Secondly, the creation of the e-portfolio for PLAR has potential for learning for adult students beyond simply credit documentation (Brown, 2011; Conrad, 2008). Third, the use of PLAR has some predictive validity for retention and completion (Klein-Collins, 2010; Wihak, 2006).





While PLAR has been in use for decades in Canadian education (Belanger & Mount, 1998; Kennedy, 2003), there has not been a significant uptake of portfolio assessment for purposes of establishing equivalency to an undergraduate degree in Canada. According to Kennedy (2003) the use of PLAR in universities in Canada faces challenges such as resistance based on perceived loss of credibility of the degree, and the lack of formal policies to support PLAR. A Canadian Council on Learning report (Wihak, 2006) also finds that formal PLAR policies are more evident at the Canadian community college level than universities, and PLAR in universities is employed more for credit challenges than degree recognition. There is evidence that one Ontario university admits non-standard graduate students using a combination of PLAR and academics, but no formal report on this program was found (Kennedy, 2003). A formal PLAR policy has been in effect for secondary school credit recognition in Ontario since 2001 (Ministry of Education, Ontario, 2001) and three provinces: British Columbia, Quebec and Ontario are reported to offer PLAR to adults at the secondary school level ([www.cicic.ca](http://www.cicic.ca)).

Conrad (2008) argues a significant distinction between providing PLAR documentation for credit challenges compared to the creation of a portfolio for PLAR, because the preparation of the portfolio “gives learners the opportunity to build new knowledge on the foundation of their prior knowledge” (p. 141). She acknowledges that portfolios for PLAR can generate controversy in the university culture, but finds that the pedagogical strength of the portfolio process itself can respond to those concerned with the integrity of the credential. She states,

*It is in the process of preparing a portfolio...that learners can most fully exercise the scope and latitude of their prior knowledge. In so doing, learners' cognitive engagement with their learning histories gives rise to new knowledge – of self, of self situated within the trajectory of growth, and of self situated within the profession. (Conrad, 2008, p.142)*

Brown (2011) similarly finds that e-portfolios as showcases for experiential learning have not been recognized among educators of adults. She sees that the strength of the e-portfolio is that it allows adult learners to articulate their experiential learning and equate it with knowledge in the academy; digital technologies help learners to demonstrate these connections in multiple ways. Digital technologies allow the student to organize the portfolio using hyperlinks for example. She finds that adult learners can take advantage of portfolio design to enable them to reflect on their life experiences and make their learning from work and life experience more explicit. Significantly, she finds that PLAR portfolios can be transformative in that they *document* the learning for earning the course credit but also *generate* new learning through the use of technology (Brown, 2011).

A third key finding in the literature is that PLA has been linked to persistence and degree completion. Klein-Collins (2010) in a study which included 48 North American post-secondary institutions finds that 43% of the PLA students persisted to earn a bachelor's degree compared to 15% of non-PLA students. Similar findings with respect to persistence have been found for secondary school students in the Canadian context (Wihak, 2006).

In summary then, e-portfolios have the potential to help adult students connect their work and life experience to the academy in a manner that supports the development of new learning, and in ways that help them to communicate more effectively to their audience. PLAR processes also can have predictive validity, and appear to influence student persistence to degree completion. The study which is described here investigates the presence of these elements in the development of e-portfolios for PLAR through the voices of five adult students in a graduate school setting engaged in this process.

## Methodology

A cohort of students who had applied to a graduate school using a combination of academic and workplace experience learning were contacted and asked if they would consent to participate in a one-hour interview regarding their PLAR e-portfolio development. Five of the seven students consented and were interviewed by a professor who was not the faculty advisor for the PLAR e-portfolio development. Questions in the interview





focused on the process of the e-portfolio development, with specific reference to the actual online portfolios, as well as the structures that impeded or supported portfolio development. The interviews were transcribed and were sent back to the participants for verification. The transcripts were then analyzed by two researchers using blind review and coded for emergent themes (Cresswell, 2013).

The research team, in particular, sought confirmation that the e-portfolios both documented and generated learning. Following blind review, the research team met and compared analyses and key findings and sought to interpret the data, returning to the literature on adult learning to aid in this process (e.g., Cranton, 1994; Lafortune, 2009).

## Findings

While there were some interesting and unanticipated findings from this study, the research team selected four re-occurring elements that appeared to present a continuum of outcomes for the participants. These are framed as tensions in Table 1 (below) and described below.

**Table 1. Tensions in the Data Findings**

Technology as Enabler	← →	Technology as a barrier
Structured	← →	Open
Group process	← →	Individual
Theoretical	← →	Practical

The e-portfolios created by the participants in this study were web-based with platforms selected by each participant. Those familiar with website development indicated that there was no stress associated with building the website, but one participant found the technology aspect intimidating until a connection was made with a peer tech mentor. The participants indicated that they wanted to choose their page designs (as opposed to using a common e-template).

Overall, the participants saw multiple benefits to the use of technology for showcasing their work, and some described it as “enabling.” They used web-links, hyper-text, animations, audio and video clips, and many other affordances of the technology to create their e-portfolios. In the post-design interviews, many of the participants indicated that the technology allowed them to anticipate the needs of the viewer of the portfolio, and they appreciated for example, the technology affordance that allowed them to create a first impression overview screen and give their viewers the option of viewing more if they were interested.

A second tension in the findings was the degree of structure provided by the advisor. The participants were challenged with how to organize the portfolio. Participants indicated that early on in the process they were expecting that there would be more structure within which they would work. The university advisor suggested that they choose three broad, overarching concepts as organizers for the portfolio, such as: learning, cognition, assessment, technology for example, but select these concepts individually. Participants reported that it took a significant amount of time, up to three weeks in some cases, to decide on these concepts that would become their containers or organizers for the artifacts. Most of the participants indicated that they found the work of designing a concept map, sharing it and getting formative feedback from the advisor and other participants was a helpful scaffolding activity for this aspect of the design.

Another area of tension between structure and individual choice was the requirement that the portfolio would be based on self- and peer-assessment. The participants struggled initially with whether or not they could present their work and life experience as equivalent to learning in the academy. One participant said that if she had known she would be doing a PLAR portfolio, she would have “lived her life a little bit more thoughtfully and documented it better.” To enable this equivalency matching, the university advisor provided



a list of competencies or outcomes of a baccalaureate degree. Each of the participants used these competencies as outcomes and assessed their previous education, work experience, and life experience relative to these competencies. They concluded that it was not as difficult as they had anticipated establishing that they had met the undergraduate degree competencies. Several were surprised at the strength of their experience in meeting the competencies.

A third finding was that the participants searched for a balance between supporting each other as a group and working individually. Because this was the first cohort to create e-portfolios, as a group they had made a commitment to create e-portfolios that would provide support for other applicants in subsequent years. At the same time, they wanted the freedom to design their portfolio for their individual needs so that they could re-purpose the portfolios later for personal and professional reasons. They decided to work individually and meet weekly or bi-weekly to show progress and obtain feedback from the group. Comments from the interviews indicated that, for the most part, the participants found this to be a satisfactory compromise between group and individual work, but not every participant wanted this much autonomy.

A final tension that emerged was the theory-practice continuum. Initially the university advisor introduced the applicants to five articles on portfolio design from multiple disciplines, such as e-portfolios for librarians in Croatia (Machala, 2009). Feedback from most but not all of the participants on this aspect was positive, as they found it provided an overall sense of the theory behind portfolio development and its connection to reflective practice. One of the participants reported that this was not helpful to the process.

The interview data indicated that the e-portfolio for PLAR development was as much a process of *learning* as it was a process of *documentation*. The portfolio process helped one participant articulate a teaching philosophy which included the value of experiential learning. Later when this participant reflected on the e-portfolio process, he found that he could still articulate the undergraduate competencies and they “were quite vivid” even in retrospect, because of the experience of creating the PLAR e-portfolio. Multiple participants indicated also that, for them, the value of the portfolio was that it helped to raise their awareness of their own learning, and this in turn made them re-consider how they were structuring the learning for their own students, including the elements of support and autonomy they were providing.

## Discussion

A surprising finding from this small sample of five participants was the degree to which the process of the e-portfolio creation was both mechanical and transformative because each of the participants articulated new understandings about learning and the process of learning as well as a renewed appreciation of their experiential learning. Cranton (1994) describes transformative learning as, “a process of examining, questioning, validating and revising” perceptions of our personal experiences (p.26). According to Cranton, “The more autonomous a learner is, the more likely he or she would be to engage in transformative learning. Likewise, participation in the process of transformative learning further increases autonomy” (p.60). She describes this process as four stages: initial learner empowerment, critical self-reflection, transformative learning, and increased empowerment and autonomy. The findings of this small study align with her conceptualization of transformative learning as empowerment.

The participants also indicated the need for both autonomy and structure and said that they valued a constant presence during e-portfolio development for touching base, checking perceptions, and redirection. Lafortune (2009) theorizes the concept of *accompaniment* as ongoing support for participants in an education-related change process. The providers of accompaniment are those persons who have already made changes; they become the leaders and models for the change process, which includes reflective practice, professional collaboration, and professional autonomy (Lafortune, 2009).



The participants in this study valued ongoing support and indicated that they wanted to be models for future applicants for the e-portfolio as PLAR process. Other aspects of e-portfolios as PLAR such as assessment and policy design warrant further investigation. The value of this present study is the window it provides into the e-portfolio as PLAR process from the participants themselves, confirming that the process of learning to value their holistic experience was more meaningful than preparing a binder to document their achievements.

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# Teaching Probability and Statistics and Contemporary Mathematics Online at Madonna University

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## Abstract

The Department of Mathematics and Computer Science at Madonna University is offering online mathematics courses including a Contemporary Mathematics course as well as a Probability and Statistics course. The Contemporary Mathematics course is designed for the non-science majors by covering a wide range of topics from various mathematics fields. The Probability and Statistics course is required of various science and nursing majors. This paper will discuss how each of these two courses has been designed and offered exclusively online through Blackboard.

## Introduction

Probability and Statistics and Contemporary Mathematics are two of the courses offered at Madonna University that fulfill general education requirements for mathematical skills, with Probability and Statistics being a required support course for some majors and programs including pre-nursing. These courses were traditionally only offered as face-to-face courses prior to 2011 with several on-ground sections being offered each semester, including the spring/summer term. The need to offer these courses online arose from the request of various departments on campus and many students, as Madonna University is mainly a commuter campus with many students holding jobs to support themselves financially. Thus, this opportunity provides students flexibility in managing their busy schedules. It was important to design these courses so that they measure and assess the same objectives and student learning outcomes as the face-to-face courses. Initially, Probability and Statistics was offered as a hybrid course where students complete all assignments on Blackboard, but must come to campus to take the midterm and final exams. However, to accommodate more students, Probability and Statistics was then designed as a course offered exclusively online, where students complete the midterm and final exams on Blackboard. This paper will describe strategies I have developed for teaching Probability and Statistics and Contemporary Mathematics online along with some of my observations.

## Literature Review

Madonna University mathematics instructors are continually looking for different ways to improve the delivery of their online courses with the main objective of enhancing student learning. In fact, instructors should always seek to review and revise their online courses for possible improvements (Ko & Rossen, 2010). There are many advantages as well as disadvantages to online teaching. One of the advantages of online teaching is that it is a cost-effective way to expand higher education (Bach, Haynes & Lewis Smith, 2006). Also, taking courses online provides working students and adult-learners flexibility in their schedules as they try to balance work, family and study times. In fact, the population of nontraditional students is rising, making



online teaching more desirable (Palloff & Pratt, 2001). Some concerns of online teaching are that the younger students are not motivated enough to use self-directed study methods and that online teaching may cause the demise of universities (Bach, Haynes & Lewis Smith, 2006).

## Methodology

Starting 2011, the Department of Mathematics and Computer Science at Madonna University offered its first mathematics online courses, which include Probability and Statistics and Contemporary Mathematics. About five sections of Probability and Statistics are offered in each of the fall and winter terms, where four sections are on-ground and one is online. These sections will each have an average of 25 students. Besides mathematics majors, many majors and programs require this course, including pre-nursing, forensic science, biology and psychology. It serves as a first-semester introduction to the field of probability and statistics with the following course description:

*Topics include data collection and graphic presentation; measures of central tendency; measures of dispersion; normal distribution; regression and correlation; sampling methods; design of experiments; probability and simulation; sampling distributions; statistical inference including confidence intervals and hypothesis testing for one-sample and two-sample problems.*

My colleagues teaching this course online have their own methods and style of teaching it that they follow individually, and what follows is a description of how I have designed and currently implementing the online Probability and Statistics course to mirror my on-ground teaching methods of this course. Students use Blackboard each week to complete various assignments. Students study the instructor's lecture and view other helpful posted websites, participate in weekly chapter discussions, complete homework assignments from the textbook, take weekly quizzes, and practice using the TI-graphing calculator (TI-83, TI-83 plus, TI-84, or TI-84 plus). These are all the components of the face-to-face course as well. For the discussions component, students are asked each week to make two discussion posts on two separate days of the week to encourage students to stay engaged with the course. This requirement parallels the student participation in the on-ground course that meets twice a week. These posts can include a variety of items, including a summary of concepts from the material covered, links and descriptions of helpful websites, and questions pertaining to the material covered.

As for Contemporary Mathematics, about three sections of this course are offered in each of the fall and winter terms, where two of these sections are on-ground and one is online. These sections will each have an average of 25 students. This course satisfies the mathematics goal of the general education requirements and attracts many non-science majors including social work, criminal justice and sociology. The course description is as follows:

*Designed to develop an understanding of and appreciation for the history, techniques, and applications of mathematics. Focus on a variety of real-world problems that can be solved by quantitative methods. Topics are selected from different branches of mathematics in order to bring the excitement of contemporary mathematical thinking to the non-specialist.*

My colleagues teaching this course online have their own methods and style of teaching it that they follow individually, and what follows is a description of how I have designed and currently implementing the online Contemporary Mathematics course to mirror my on-ground teaching methods of this course. Students are responsible for studying the lectures and other helpful websites posted on Blackboard, participate in weekly chapter discussions, complete homework assignments from the textbook, take weekly quizzes and write and present a research paper on a mathematical topic of interest. The on-ground and online sections of this course both have some students with math anxiety. Some of them use the free math lab tutoring available on campus to help them throughout the term. However, students with strong mathematical skills do very well in the course. Students usually enjoy the research component of this course as they choose a mathematics-





related topic of interest to learn more about. They are required to use Madonna University library resources and to submit their report via SafeAssign in Blackboard. These online students must then record themselves presenting their research guided by a PowerPoint presentation. The following week, students take a quiz on the content of the presentations of other classmates to encourage learning of numerous concepts.

### Conclusion

Students taking my online Probability and Statistics and Contemporary Mathematics courses have expressed positive responses to this method of teaching through the end-of-term evaluations. Students report satisfaction with not having to make special arrangements to be on campus weekly for these courses as they can take these courses from anywhere. I have observed that the distributions of grades for the students taking these courses online are similar to the ones for those taking these courses face-to-face. I have also observed that the success of the students taking Probability and Statistics and Contemporary Mathematics online relies on how they effectively and actively utilize the discussion board to ask questions whenever they are struggling.

Although the traditional, on-ground courses may be the most ideal for student learning due to the face-to-face interaction with the instructor and peers, the availability of technology and students' busy schedules provide the necessary shift toward online teaching. Some may even not be convinced of the possibility of high quality and standards of online teaching and learning compared with face-to-face courses. Nevertheless, online teaching will continue to flourish regardless of its shortcomings (Palloff & Pratt, 2001). Moreover, students prefer the instantaneous opportunity to communicate in the online classroom through assignments that emphasize student participation, while downplaying the instructor's role as the main driver in the education process (Ko & Rossen, 2010).

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# High-Impact Teaching: Engaging the Millennial Learner

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## Abstract

Based on an interest in discovering more about today's learners and a desire to enhance student engagement and motivation, best teaching practices were examined and blended with the interests of millennial students to revise a collaborative group project to increase engagement and enthusiasm for learning by this millennial generation. The results of these efforts led to fully engaged students who were motivated to move deeper into the course content using multiple technology tools and free web services. Through use of this methodology, educators in a variety of fields can make available more diverse opportunities for further student engagement in learning.

## Introduction

Millennial learners utilize different methods of learning than previous generations. These students, who have grown up using progressive technology, are adept at using it as a tool for gathering and presenting information. As a general rule, most of these students easily adapt to new and changing technologies. Because their style of learning is different from past generations, it is imperative that educators adapt their method of teaching to most effectively impact these students. Based on a review of literature, best traditional teaching practices were compared with recommended practices that engage millennial learners. By applying the best of both teaching practices, a course project was redesigned to integrate best practices related to engaging millennial learners to encourage them to become even more involved and interested with the material. After the revised project, students were better able to understand and apply the material than with the original project.

## Literature Review

Millennial learners are unique from the students of generations past. Because of the rapid growth of technology and worldwide communication, they are exposed to more information than at any other time in our history. For example, many millennials prefer to work in teams and learn by doing. They also are interested





in technology as a tool to achieve goals, rather than using technology for technology's sake (Oblinger & Oblinger, 2005).

Additionally, Bloom and his colleague's Taxonomy of Learning (1956) has long guided educators on how to best support student learning by developing educational objectives organized around cognitive, affective, or psychomotor goals. As technology continues to be enhanced over time, it is important for these learning objectives to transform to include new methods of learning. Bloom's Digital Taxonomy now incorporates newer technologies such as search engines and design software to help facilitate student learning in the 21<sup>st</sup> century (Churches, 2009).

Similarly, teachers instructing these millennial learners need to integrate best teaching practices that enhance the learning styles of current students including group discussion, active learning, and rewarding participation (Drummond, 1995). In order to best facilitate learning among the Millennial Generation, one should become familiar with Bloom's Digital Taxonomy and best practices for teaching. Applying these to the characteristics of millennial learners will lead to enhanced teaching and learning.

### Methodology

After a review of literature analyzing information about the millennial learner and best teaching practices, a table was created that compares the two areas (See Table 1). Of particular interest are the areas that overlap.

**Table 1. Best practices for traditional teaching compared to the characteristics of millennial learners.**

Best Practices for Teaching	Characteristics of Millennial Learners
Keep lectures short and interactive	Shift attention quickly from one task to another, lose interest quickly, multi task, like to be engaged in learning
Use group discussion to engage learners	Gravitate toward group activity
Ask thoughtful questions that guide the student to the final answer	
Respond to students by reflective listening	
Reward students for participating, while avoiding expressing judgment through praise	
Use active learning strategies or learn by doing	Learn better by doing and discovering, not by being told
Utilize group assignments	Are social and enjoy interacting with others, prefer to work in teams
Connect grades to goals (outcomes), not in comparison to others' performances	Are focused on grades and performance
Be a model of learning, openness to experience, and trust	
Use the double loop feedback method to make students aware of their learning process	
Communicate high expectations	Prefer to know expectations and parameters
Teach students how to become responsible for taking control of their own learning needs, goals, strategies, etc.	
	Identify with parents' values and feel close to their parents
	Value intelligence
	Are fascinated by new technologies



Best Practices for Teaching	Characteristics of Millennial Learners
Respect diverse talents and ways of learning	More diverse than previous generations
	Busy with extracurricular activities
Regulate the physical and mental climate to minimize distraction and set parameters	“Jump around” when learning rather than a linear thought process
	Find it easier to read visual images
	Have better visual-spatial skills
Provide quick feedback	Prefer to respond quickly and expect quick responses in return, dislike slow things
	Constantly connected
	Prefer to work on things that matter and are meaningful
	Use technology as means to an end, not just for technology's sake
	Prefer a moderate amount of technology in their courses

In order to illustrate the value of this table for educators, information gained from it was applied to an existing project in a Professional Business Practices for Interior Design class. The original project had students develop a business plan and present it as a final presentation and paper. Although this original project resulted in students learning about the components of a business plan, and applying cumulative information applied from throughout the semester, the content was relatively unengaging and uninteresting to the students.

In order to revise this project to become more relevant to the millennial learner, students who participated in this pilot assignment were given the option of several different presentation formats that not only use technology as a tool for information presentation, but also work to engage students and encourage them to investigate the material in more depth than before. As an example, an actual final paper from the original assignment was adapted to two of these new presentation formats. The first format was a website created using [www.wix.com](http://www.wix.com). This website format challenged students to think beyond the mere requirements of a business plan and to determine exactly how to make their hypothetical business marketable. The second format was a virtual magazine format using the website [www.issuu.com](http://www.issuu.com) that presented similarly to a traditional paper report virtually. This format, although closer to a written paper format, provides students with the opportunity to link their presentation to other websites, such as an illustrative clip from YouTube or a link to further reading. For example, the location of one business was set in Grand Rapids, Michigan, and this virtual format allowed students to include links that guided the reader directly to internet sites that provided further information about the city. Both formats challenged students to connect more meaningfully with their topic, rather than merely regurgitating information.

## Conclusion

Using a table that compares traditional best teaching practices to characteristics of millennial learners, a final paper/presentation was redesigned to more effectively engage millennial learners. The idea of presenting students with multiple options of expressing information can be an increasingly beneficial way of facilitating learning for all students, regardless of age. Developing assignments that incorporate the effective best teaching practices with characteristics that are effective for Millennial students can result in enhanced critical thinking and increases in the generation of original ideas, both of which correspond with the highest level of Bloom's Digital Taxonomy of Learning. These methods of presentation were quite effective in the pilot assignment, and will continue to be incorporated and researched classroom-wide throughout upcoming semesters.



By using the information included in Table 1, educators in all fields can continue to effectively update class projects that engage Millennial Learning styles and best teaching practices for all student learners. When projects are more relevant to current students, they are more engaged at a deeper level and demonstrate increased retention of knowledge than previously occurred through more traditional teaching methods.

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## Abstracts

*In alphabetical order*

### **Let's Not Weed out Students: Let's Weed out those Killer Courses**

Judith Ableser

“The killer course” is a common student term referring to the introductory course that typically involves large class size, lecture formats, an enormous amount of factual content assessed using multiple choice tests. Such courses often have a high failure rate. It is proposed that students would be more successful with an introductory/foundation course that focuses on critical thinking involving experiential learning, problem-based activities, reflection, and student interests and future career choices. Through discussion, brainstorming and debate, participants will be able to plan “how” to restructure introductory courses and “why” it is important to do so.

### **Getting to Know Your Applicants: An Overhaul to the Admissions and Interview Process**

Charity Accurso, Linda Graeter, Gideon Labiner, Elizabeth Hertenstein

Assessing applicants for academic and affective behaviors is challenging in the traditional application and interview formats. The Medical Laboratory Science Program overhauled its process to include a group interview, project and presentation to further assess affective traits including communication, collaboration, interpersonal skills. As part of this presentation, the audience will brainstorm with respect to goals of an interview process, design of interdisciplinary topics for the group project, and rubric design. Assessment rubrics and outcomes of the revision will be shared.

### **Implementing Problem-Based Learning in the Curriculum**

Gregory Allar

This session discusses the use of the problem-based learning strategy in an introductory international studies course, “The Global Citizen,” as a case study. By integrating real-life problems and issues, this course goes beyond an introspective study of one culture or civilization. On the contrary, it seeks to demonstrate the interconnectedness of the global community and to provoke a deeper understanding of contemporary world cultures.

### **Teaching with Google Earth**

Gregory Allar

Brief overview of Strategy: Your first internet assignment for this course will be to create two virtual field trips; one involves West-East travel via the Trans-Siberian Railway, while the other involves a North-South cruise on the Volga River. This assignment uses Google Earth to introduce you to the vast geographic area which Russia occupies.



## Using Discussion Boards in Face-to-Face and Online Teaching Environments

Sandy Alspach, Sheila BacEachron, David Marion

Three presenters will share their strategies and experiences using Blackboard's Discussion Board tool in their face-to-face and online classes. The presenters represent diverse teaching disciplines: Business (Management), Liberal Arts (Communication), and Health Professions (Nuclear Medicine). Participants will generate additional strategies for using this tool in their courses.

## Marching Together: Social Change through Faculty / Staff Collaboration

Sandy Alspach, Andrea Beck-Jones

This presentation focuses on challenges to communication between and among members of different racial/ethnic, socioeconomic, religious, sex/gender, and other differentiating communities (including age and ability) within the United States. Students were required to examine theories and research to build a knowledge base, develop skills through group and individual projects, and assess their attitudes about cross-cultural communication experiences. The primary theoretical foundation of this presentation is social constructionism, which basically Panelists will share a collaborative ASL project among faculty, students and staff to participate in the Chavez March and celebration in Grand Rapids.

## A Sensory Rich, Brain-Friendly, Technical Presentation

Kirby Anderson

A novel experience seems to capture our attention, and may be an essential need of the mind. The mind is exposed to new experiences, new stimuli, and once fully understood, the mind looks to find another unknown data thread or experience to master. Novelty, combined with data presented across the spectrum of content areas, elicits and engages a student's many learning modalities, and multiple intelligences. The novel experiences are deeply rooted in human development theory, as children move from one novel experience to the next, gaining understanding, then setting each aside, to look for the next experience.

## Infusing Technology and Peer Facilitated Discussion Groups into a Sensitive Topics Course

Jeffrey Angera, Christopher Latty

This presentation will share recently adopted strategies to enhance student participation in discussing potentially sensitive course content topics. The presenters will share their experiences of integrating technology and utilization of peer facilitated discussion groups with their Introduction to Human Sexuality courses. The technologies require any form of Wi-Fi enabled device that can access the internet. Anecdotal data and an introduction to a backchanneling program and survey program will be presented along with examples of how these efforts influenced class participation. Additionally, the integration of peer facilitated discussion groups will be described as a means to provide opportunities for critical thinking.





## **The Magnificent Gallery - An Authentic Group Assignment for the Arts and Sciences**

Deborah Armstrong

“Imagine you are a member of an art gallery curatorial staff, and your gallery has been awarded a fabulous grant that will allow you t...” This is the premise of the Magnificent Gallery project - an authentic assignment used in an art history survey course, but adaptable to any course where meaningful application of knowledge is the goal. This session will introduce participants to the Magnificent Gallery project and how to modify it. Characteristics of authentic assignments and assessment will be reviewed and grading rubrics provided. Participants will draft their own Magnificent Project and assessment rubric.

## **Facilitating Effective Small-Group Discussions: Implementing Best Practices to Achieve Successful Learning**

John August

Small-group discussions provide important opportunities for students to work collaboratively, express opinions, debate ideas, and reflect critically on their understanding of the subject. To meet the learning objectives of these discussions, facilitators must have exceptional skills in planning, questioning, active listening, reinforcing, and summarizing. The ability to display supportive non-verbal communication cues, and to properly interpret subtle behavioral signals from the group, allows the facilitator to promote a safe environment in which participation is encouraged and expected. Attendees will engage in a discussion about the principles of effective small-group instruction, in which the best practices of facilitation will be demonstrated.

## **How Orbital Concept is Used in Exploring Thioesters versus Esters Reactivity in a Cell**

Mohamed Ayoub

We employ natural bond orbitals (NBO) methods and analyses with their visualization capabilities to enhance the teaching and learning of modern chemistry concepts in the classroom and to investigate why thioesters are the most activated form of carboxylic acids in cells using coenzyme A. We use the orbital concept to explore the structure-reactivity relationship for both thioesters and esters by calculating the overlap integral (S) and stabilization energy (DE). In addition, we produce 2d and 3d images for all orbitals involved and causing such difference in reactivity.

## **Reinforcement of Learning and Student Engagement with a Website Creation Project**

Michelle Beechler

Do you want to reinforce students' learning and engagement with course material in a way that allows them to display their creativity? Do you want to bring more technology into the classroom? This presentation will give an overview of an easily adaptable group website creation project, giving several examples of student projects, and a demonstration of the use of free website creation software. Assessment of projects, advantages and limitations, and application across disciplines and assignment types will be discussed. Time will be given to begin creation of your own website.



## **No More Eyesores: A Case Study in Multimedia Makeovers**

Erik Benson, Matthew Roberts

Multimedia presentations have become a ubiquitous classroom feature; conventional wisdom would suggest that they are easy-to-create tools that help students learn. Yet this conventional wisdom is flawed. Most presentations ignore sound principles, such as avoiding “information overload.” For many instructors, the thought of re-designing their multimedia presentations is daunting. However, doing so is both possible and worthwhile. This case study of a multimedia “makeover” will outline good principles, offer practical insights, and motivate participants to eliminate potential multimedia “eyesores.”

## **Advancing Teaching and Learning through Interprofessional Collaboration: A Journey towards Best Practice in Video Assignments**

Jennifer Blackwood, Andrea Becker, James Creps

In an online health professions course, it is often difficult to determine if students have mastered the content objectives when video assignments have been utilized. Likewise, it is challenging to provide constructive feedback to the student while reviewing a video in order to enhance learning. In this engaging session a formative process using an interprofessional collaboration of faculty and instructional designers to determine a best practice in employing video assignments as a method of teaching and learning in an online graduate level course will be described.

## **Plenary Presentation: Do You Want to Teach More Effectively? Then “Grow” your Teaching**

Phyllis Blumberg

This presentation describes a new personal growth model. Using this model your teaching will promote deep and intentional learning. I will address four hierarchical levels of growth: (1.) define the essential aspects of your teaching, (2.) critically reflect on how you teach. Many valid information sources can inform your teaching, (3.) incorporate evidence-based teaching methods by reading the literature on teaching in higher education, and (4.) conduct rigorous systematic investigations of your teaching. You can incorporate one layer at a time and progressively teach better as you add each additional growth layer.

## **TED.Ed Flipped Lessons - Yes, They Are Really Prepared**

David Brobeck

TED.Ed was in beta one year ago. Today, TED.Ed offers a simple-to-use process of “flipping” any video into a high quality lesson. This session will enable participants to learn the basics of producing a high quality flipped lesson designed specifically by you for your students and your course content. Students are not prepared before class? With TED.Ed, you can create a set of questions that accompany the “flipped” video of your choice, email the link to your students, and then wait for the results. Be prepared to be actively engaged to learn how use TED.Ed to engage your students.



## Whole Brain Teaching: Lightning Strikes Again!

David Brobeck, Alan Digianantonio

“Fun People Welcome.” (If you are not fun, you will hate this session.) High energy, gestures, some silliness! Whole Brain Teaching emphasizes interaction, instant feedback, and significant movement to create an engaging, innovative, and fun classroom. Researchers continue to promote the learning advantages of highly engaged instructional techniques from various forms of collaborative learning. What happens when a professor taps multiple areas of the brain? The students learn. This session is HIGHLY interactive. All participants will learn techniques via application, how to structure WBT lessons, and how to ensure critical thinking as a key element of the process.

## Student-Centered Discussions

Beate Brunow

Discussions are an essential aspect of learner-centered teaching (Brookfield & Preskill, 1999, 2005), but engaging students in rigorous and productive discussions among peers can be a challenging task. Learner-centered discussions involve students actively in the process of negotiating meaning and promote social skills. By shifting traditional classroom roles, student-centered discussions enable instructors to act as facilitators and students to assume responsibility for interactions and knowledge construction. This session presents student-centered discussions as a process that engages students in higher order thinking and a way to promote reading skills as well as interpersonal and communicative competence.

## Throwing Out the Test! Reinventing Course Curriculum to Improve Content Knowledge and Subject-matter Appreciation

Jane Bryant

Looking for a new way to spark interest in your course? Try throwing out the test! In this presentation, you will receive tips on alternate assessment methods and evidence that high stakes testing is not the only way - or the best way - to measure student learning.

## Characteristics of Effective Collaborative Practices in a Student Teaching Classroom: Perspectives of University Field Coordinators

Douglas Busman, Linda McCrea

Collaborative skills are an essential competency identified within the Interstate New Teacher Assessment Standards Consortium (INTASC) standards for teacher preparation. Research is readily available that explores expectations for collaboration from the viewpoint of the cooperating teacher and the student teacher but of the expectations of the university supervisor are less well-documented. This study examines the expectations of the university supervisors regarding how they see collaboration within the student teaching experience. Utilizing INTASC competencies as the investigative framework, this presentation explores three themes incorporating a range of practices that foster effective collaboration.



## Helping Our Students Stay Ahead of the Curve: Locating Professional Authoritative Literature Online

Linda Campbell

Students are savvy when it comes to finding information online. But what happens when the familiar go-to source changes and a new one that will impact their profession pops up? For example, when all the financial accounting standards were codified (just like our legal code) and put online, educators are charged with the task of keeping up with the latest information and passing it on to our students. I will discuss some challenging and interesting ways for presenting to students how to seek authoritative literature relevant to their decision-making problems and cases.

## Applying Metalearning: Using Master Metaphors to Teach Transfer

Stephen Carroll, Andrea Pappas

Transfer is the hardest part of learning and the part least practiced (in classrooms, assignments, etc.) Thus, it is the area in which most students are weakest. But when students understand the learning process they can engage in it in a conscious, reflective manner-metalearning-making them more efficient, self-directed learners. Master metaphors are a metalearning practice which help students learn to transfer. This session will explain a successful use of master metaphors and will walk participants through the process of developing, applying, and assessing a master metaphor to deploy in their own teaching practice.

## Using Action Research to Assess & Improve the Preparation of School Leaders

Cynthia Carver, Suzanne Klein

As program coordinators of a master's program in educational leadership, we designed an action research study for the purpose of informing our instructional practice, as well as guiding program improvement. We have now followed two cohorts of students through the two-year program. Study findings have strengthened our support of reflective thinking among students (Carver & Klein, 2013) and contributed to improvements in the required internship (Klein & Carver, 2013). In this session, we introduce action research (including tips for gaining Human Subjects approval) as a methodology for studying teaching and assessing program quality.

## P.A.W.S. Literacy Lab

Cindy Cate, Kelly Burns

P.A.W.S. (Points Alliance with St. Stans) Literacy Lab was established in 2011. St. Stanislaus Elementary School is located next to the university. Throughout the semester, elementary education, special education, and early childhood majors meet twice a week in the literacy lab for coursework and complete their weekly practicum hours within the school's 4k-2nd grade classrooms. Preservice teachers apply what they learn in the lab with their practicum students. During this poster presentation, the presenters will share their experiences of teaching and learning in a semester-long, field-based reading methods course.



## **The Best Hunch of the Bunch: Following the Formative Assessment Hunch for Mindful Literacy Instruction**

Cindy Cate, Kelly Burns, Danae Jaslow, Darcy Johnsrud

Quality literacy instruction hinges on a teacher's ability to aptly assess students' learning needs and then use that data to design, gather resources, and implement appropriate instruction. With more high-stake tests on the horizon, preservice teachers are expected to not only have sufficient knowledge of literacy instruction but afforded opportunities to practice that knowledge. For various reasons, this curriculum challenge exists in most reading preparation courses. This 45-minute presentation, using Dr. Seuss's Hunches in Bunches as the backdrop, invites participants to explore the successes and difficulties of following the Formative Assessment Hunch in a field-based reading methods course.

## **Higher Learning Meets Cognitive Surplus: Cloaking Naked Teaching with the Skills of Digital Natives**

Mick Charney

Because the digital technology that promised to make course content consumption more engaging is actually more impactful outside of class, proponents of "naked teaching" lobby for expelling technology from the classroom in order to maximize more highly valued student-faculty interactions instead. A new consuming-producing-sharing paradigm has special import for "NetGener" students who know how to leverage their "cognitive surplus." What happens when "naked teaching" taps into that "cognitive surplus"? Any number of carefully crafted digital homework assignments asking students to create and share innovative computer-aided products can invest bare-bones teaching with the mantle of even higher orders of learning.

## **The Stream of All Human Consciousness: Designing Social Networking Projects that Teach**

Mick Charney

Social networking is much maligned as a medium that diverts students' attention away from the serious, sustained pursuit of knowledge and toward more trivial, superficial human connections. This poster demonstrates, to the contrary, the impressive didactic potential inherent within closed-networks assembled on Facebook and clustered around a fan page for a renowned historical figure in the arts. In a small-enrollment seminar, design students created avatars for associates of this famous individual, "friended" each other, uploaded their research findings on to dedicated Facebook pages, and thereby ultimately constructed a vibrant and eminently useful repository of interconnected information.

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

Milton Cox

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.





## **Plenary Presentation: Why Students Behave the Way They Do: An Instructor's Guide to Cognitive Development**

Milton Cox

Are you curious about why most of your students prefer that you lecture rather than engage them in active, inquiry-based learning? Is it because they are slackers? Do you wonder why some students are eager to work in small groups and others are not? And why do some students not understand evidenced-based approaches in a course? Many of these behaviors are explained when framed in the cognitive development structures of Perry or Belenky and colleagues. In this session we will discuss approaches that you might engage to nudge students along developmental paths that may lead to their understanding and practice of critical thinking and a commitment to lifelong learning.

## **The Aliens are Here: How Research Can Help Improve the Integration of Outgroup Faculty**

Srgio da Silva

The purpose of this session is to identify some of the challenges associated with the professional status of multicultural faculty in academia, and derive possible solutions from research findings on cultural diversity and sensitivity. Key research on cultural differences that affect intercultural work relationships will be presented. Milton Bennett's Developmental Model of Intercultural Sensitivity will be presented as a springboard for institutional and departmental policy. Participants will discuss ways to apply findings from research on cultural differences to recruitment, and recommend steps to improve integration of minority faculty in academic departments.

## **Fostering a "Coaching Strategy" for Doing the Work of Assessment**

Tim Detwiler

Many colleges and universities find it difficult to engage faculty and administration for a total "buy-in" to the assessment of student learning. One method which might be effective and fruitful is using a "coaching based model." Such a model relies not on imposing the requirements of assessment on anyone, but instead it calls individuals to find the passion deep within themselves as the motivational factor for considering and doing the work of teaching and evaluating the very human process of learning. This session introduces and models a coaching based perspective as a method of developing a campus culture of assessment.

## **Transfer, Transpose, Translate: Writing a Research Paper in Spanish**

Louann Disney

The transfer of skills, content, and application is a crucial component of higher education. This presentation uses a 300-level Spanish assignment to illustrate that the transfer of learning requires direct incorporation of cross-curricular content, skills and processes. This sample assignment fosters the students' emerging Spanish competence through literary analysis. Guided peer reviews and reflective self-evaluation familiar from composition classes scaffold new learning. In addition, a structured, step-by-step process supports a growth-oriented mindset. Handouts will be provided in the presentation to demonstrate the students' increasing awareness of the writing process applied to second language acquisition.



## The New Science of Learning

Terry Doyle

Almost daily neuroscience, biology and cognitive science researchers reveal new insights about how the human brain works and learns. The value of this research is its potential to elevate the learning success of all students regardless of their learning situations. This research about human learning requires changes not only for teachers but for students as well. This presentation will discuss research that strongly suggests students must take on a new level of responsibility for how they prepare themselves to learn. The presentation will focus on how oxygen intake, hydration, diet, exercise and sleep profoundly impact learning readiness and memory formation in learners. The presentation will also discuss how to help students meet this new level of responsibility for preparing themselves to be successful learners.

## Sweat the Small Stuff! Easy to Implement Small Instructional “Stuff” that Enhances Student Learning

Eron Drake

Do students sometimes make you sweat? You’re certainly not alone. Join us for an informative and practical session, where you will learn easy-to-implement behaviors and strategies that engage students and enhance learning. These behaviors and strategies are based on current research findings, data collected from over 100 observations of faculty in higher education settings, and recommendations for improvements from more than 1000 students. Learn the small “stuff” that you can implement in your classroom to yield rewarding results.

## Technology Tools to Support Instruction

Fredrick Ennis

This presentation will provide an update on new online resources that are available to support instruction. The internet based resources are evolving and creating new more useful tools including Khan Academy, Free Video Lectures, YouTube for Schools, TED, Cosmo Learning, Open Culture, I-Tunes University, PhotoFunia, PhotoFlexer, Bubbl.us, Wordle, Voki, Glogster, Vuvox among many others. The participants will be made aware of the wide range of supportive techniques to effectively use these technologies in the classroom.

## Teaching as Performance

Leslie Felbain

Passion for a subject does not always translate from the podium across a lecture hall to students who would rather be browsing on Facebook than engaging as an active listener. This workshop will explore foundational performance techniques and concepts in order to create a learning environment where performer (the teacher) and audience (the students) engage together in the performance (the class). Teaching as Performance is an interactive workshop where participants will have the opportunity to explore their multi-dimensionality, and apply performance techniques to the subjects they teach.



## **They Said WHAT!!! Graduate Healthcare Management Education Competency Levels: A Practitioner Assessment**

John Fick

Professional health care organizations have long offered their collective input on student competency levels in health care management. Recently, the National Center for Healthcare Leadership (NCHL) developed and refined the Healthcare Leadership Competency Model, consisting of three domains and 26 competencies (National Center for Healthcare Leadership, 2012). In this session, the findings of health executives surveyed to determine their assessment of the competency levels of new graduates as they entered the health care leadership profession will be discussed. Further, based on these findings, the session will also discuss planned curricular improvements to the health care leadership program.

## **Engineering Student Involvement**

Eugene Frazier

This 40 minute-long presentation is entitled Engineering Student Involvement. The presentation addresses characteristics of active learning classrooms, the digital generation, computer literacy, information literacy, technological literacy, and includes experiential learning using Web 2.0. The first 20-minute segment, comprised of lecture, video, and experiential venues will examine and inform on the learning objectives of the presentation summarized above in the second sentence of this abstract. The second 20-minute segment is the experiential part of the presentation examining Web 2.0 tools applicable to an active learning classroom environment and serves as a demonstration for session participants.

## **Leadership for the Digital Generation**

Eugene Frazier

This poster presentation is entitled Leadership for the Digital Generation. The poster explores the attributes of leadership models. The leadership models include the Great Man, trait, transactional, transformational, and situational theories of leadership. Use of the leadership models may variably influence satisfaction and performance. The different leadership models are the criterion variables while job satisfaction and employee performance may be designated the predictor variables. Doing so facilitates the use of a quantitative research method in exploring possible influences among the criterion and predictor variables.

## **Teaching with Panache: Create Learning Experiences that Engage, Inform and Transform**

Brad Garner

Teaching is one of the key elements of the college experience. As we might expect, there is a tremendous range of quality in the teaching that occurs in college classrooms. Good teaching, as measured by the level at which students are learning, should be a critically important priority for every institution of higher education. Avoid the mundane! Resist the ordinary! Come to this session and learn at least ten new strategies that they can be quickly and easily transported back to your classroom. Strategies that will actively and enthusiastically engage their students in the process of learning.



## **Students Can Achieve Even More: When Challenged and Coached They Enjoy Learning on Their Own**

Noor Ghiasvand

In the literature dealing with human learning, it has been demonstrated that deep learning is change in neuronal networks, and such changes in the brain occur when students actively engage in the material. Therefore, effective teaching is achieved when students are coached and empowered to use and expand their existing neuronal networks (prior knowledge). There are strategies for increasing student engagement, however some instructors are hesitant and many students are first resistant to their application. Here, a learner-centered teaching strategy is presented that increases students' motivation for greater engagement and learning on their own - for which they are accountable.

## **Creating Successful Students: Getting Them through the Door and Keeping Them Here**

Tracy Glentz

Everyone wants students to succeed. From the standpoint of a faculty member, it is important to recognize the efforts campus wide which has brought our students into our programs. Recognizing the recruitment efforts, introductory courses, and campus resources offered is the key to getting students in and keeping them here, thus improving their chances for success in our individual programs.

## **Creating an Experience for Learning: A Proposal for Interdisciplinary Peer Education**

Tracy Glentz, Lisa Singleterry

A decade has passed since the Institute of Medicine (IOM) issued the goal that working professionals develop and maintain proficiency in working as part of interdisciplinary teams. It is common for allied health professionals to share space within colleges and universities, creating the perfect opportunity for cross-discipline experiences. The purpose of this proposal is to organize and structure interdisciplinary educational experiences between nursing and Medical Imaging, specifically Nuclear Medicine Technology students at Ferris State University.

## **Connections Class - An Easy Way to Improve Faculty-Student Interactions**

Laila Guessous

Connections Classes are designed to enhance faculty-student interaction in 1st and 2nd year engineering/STEM courses. Faculty spend 15-20 minutes during one class period sharing information about themselves, their research, their career path, their interests, how they decided to become a professor, and/or any other information they feel comfortable sharing with the class. Students can ask questions and the dialogue is intended to be informal and open. Connections classes have been implemented in several engineering courses at Oakland University as part of a mini-grant from the NSF-funded ENGAGE program. Lessons learned and assessment results will be shared during this presentation.



## Reflecting on Service

Neal Haldane, Olga Martinez, Chris Benson, Veronica Riha

More than 70 percent of college students participate in some form of volunteering, community service, or service-learning during their studies (Association of American Colleges and Universities, 2012). As important as service is to enhancing student engagement and civic responsibility, Joplin (1995) said “Experience alone is insufficient to be called experiential education, and it is the reflection process which turns experience into experiential education.” Session participants will engage in a brief service project during the presentation along with structured critical reflection activities.

## Students, Please Take out Your Electronic Devices - Show Me That You are Learning!

Kevin Hankinson

If educators wait until the midterm or final exam to determine whether students understand concepts, they have done them a great disservice. As students progress through content, effective educators assess along the way and check for understanding by engaging their students in formative (informal) assessment to adapt their instruction toward meeting student needs. Due to the ubiquitous nature of cell phones (and other electronic devices) in college classrooms, professors could begin to transform these toys to tools by unlocking their potential to maximize teaching and learning.

## Lecture-Driven Versus Flipped-Inverted-Inverted Class Format: Comparison of Outcomes in Beginning Nursing Students

Susan Harrington, Nancy Schoofs, Melodee Vanden Bosch

This study employs a flipped-inverted class format as an innovative teaching method in nursing undergraduate students. The flipped-inverted class format intentionally shifts the delivery of information to a place outside of the classroom. This involves the skillful relocation of content using technological innovations. Classroom time consists of face-to-face interactions to apply concept-based learning. The intent is to promote the classroom as an arena of active learning, specifically the application and integration of concepts. This correlational descriptive study compares a cohort of second semester baccalaureate nursing (BSN) students who were randomized to either a traditional lecture-driven or a flipped-inverted class format.

## Rubrics! A Great Tool to Assess Both Student Products and Student Processes

Clark Harris

Participants will learn about rubrics and how they can be used to assess learning. The information will be learned through active learning strategies, presenter presentation, as well as group discussion. You will learn several strategies to use rubrics to assess processes & behaviors. You will also learn techniques to provide an objective grading strategy to assess student products, whether it is written assignments, speeches, presentations, hands-on projects, etc. We will also look at using rubrics to assess group projects. Rubrics give a framework that provides objective evaluation, as well as a framework to defend your assessment of learning.





## **What, Me Talk in Class? Strategies to Engage Students in Classroom Discussion**

Clark Harris

Be prepared to learn! Be prepared to get involved! Participants will leave the session with several strategies to enhance discussion in their instruction. The presenter will model good discussion strategies and participants will be actively involved in this session. We will discuss how students' discussion in class will keep them actively engaged in the lesson, increase their preparation prior to class, and contribute to their academic success.

## **War Veterans in the University Classroom**

Marilyn Harvey

Desiring to meet the academic needs of a diverse student population with many unique life experiences is a high calling. In this 20 minute session, the primary goal is to discuss the challenges of stimulating students to research relevant current event topics, respect one another's submission when discussed in the classroom, and be prepared for dialog that may include sensitive information. The ability to accept another's thoughts and opinions is a learned behavior, requiring the instructor to create an environment that models true interest, acceptance, and understanding.

## **Engagement of Cultural Awareness and Language Acquisition via Service Study Abroad**

Graciela Helguero-Balcells

The traditional study abroad has been one where students either are taken on a tour with a broad spectrum of the culture and eliminating the language acquisition. Although this is an introduction to the global society there is a lack of connection linguistically and culturally. Another version is the language immersion which only gives a real life taste of the target language/society. Via service study abroad it involves the learner in assisting in the betterment of a particular issue hence the students have an invested interest in the experience.

## **Managing Undergraduate Practicum Experiences at a Distance**

Elizabeth Hertenstein, Charity Accurso, Linda Graeter, Gideon Labiner, Malanie Giusti

Distance education Medical Laboratory Science (MLS) students complete practicum experiences in their home communities completely at a distance from the program. Establishing affiliation and preceptor agreements, bilateral legal unit discussions, gathering documentation that fulfills accreditation guidelines, communication of expectations, monitoring and evaluating distance students during his or her practicum experience occur online and by telephone. Communication amongst the program, student and preceptor also occurs online and by telephone. Students complete coursework and examinations online using Blackboard. Mechanisms that the program developed to manage all of these associated activities will be discussed along with lessons learned.

## **Instructional Technology Toolkit: Integrating Tools to Engage All Learners**

Amanda Nichols Hess

Identifying and implementing instructional technology tools in the classroom can be challenging - conveying content and engaging students in learning are central concerns, even to innovative, technology-using instructors. However, integrating these tools becomes less daunting and can create more meaningful learning opportunities when instructors consider learning styles or preferences and view technology use through the lens of active learning. This presentation will equip attendees to take instructional technology into their classrooms with a toolkit that includes scholarship and research-based best practices, different tools for different learning styles, and strategies for implementing active learning techniques.



## Creating Faculty Learning Circles

Nicholas Holton

Kirtland Community College created a Faculty Fellows Program to bring faculty from diverse backgrounds together to reflect on AND improve their teaching. This Session will explore the creation, implementation, assessment and future for this project. Come ready to share you success and challenges with your similar projects.

## Print Exposure is NOT Enough: An Evidence-Based Approach Critical Reading

Alice Horning

This session will report on a set of case studies (conducted in an IRB-approved process) that show how highly engaged students respond to an assignment in critical reading and thinking as part of an inquiry project. The outcome of the study suggests that assignments that require the critical thinking and reading skills students need can lead to a much greater level of engagement and success in research, writing and course work. Participants will create their own assignments to engage students in critical reading and thinking in conjunction with research and inquiry assignments.

## Sending Students to Serve and Lead in the Developing World: An Ethnographic Study

David Howell, Jeff Trudell

The office of Servant-Leadership at Milwaukee School of Engineering engenders student leadership and service skills by coordinating service projects in the developing world. This year, the office of Servant-Leadership teamed up with the school's student chapter of Engineers Without Borders (EWB) to find out how a targeted service initiative engenders leadership and service skills in the students who participate in such overseas initiatives. This presentation will tell the story of the academic alliance between Servant-Leadership and EWB focusing on a recent project in Guatemala and illustrate its strengths and weaknesses through the data collected in an ethnographic research project.

## Promoting a University Environment where Engaged Learning will Flourish

David Hua, Edward Lazaros

There are many factors that influence students to stay engaged in the learning process in the university classroom. Information relating to these many factors will be disseminated. Literature relating to how university faculty can influence student engagement in the learning process will be presented. Conference participants will be better prepared to implement strategies to promote engaged learning in their own university classrooms after viewing the presentation.

## Fostering Student Engagement and Achievement: Four Key Practices for Faculty

David Hultgren

Engaging learner-centered approaches require faculty to adjust their planning and facilitation accordingly. Based on numerous classroom observations, years of teaching, and supporting research, this session will focus on four key practices that are critical to fostering student engagement and student achievement. The presenter will involve participants in exploring the four practices in relation to their own teaching and provide handouts to help them implement the four practices in their own classrooms.



## **Best Practices to Maximize the Learning Experiences of International Students: Focus on China, Korea, and India**

Fayyaz Hussain, Alison Rautman

Michigan State University has been internationally known for its large pool of International students. However, as a result of changing global economies and emerging economic powers, even larger number of international students is joining US colleges and universities and MSU is no exception. Recently, MSU received a record number of international students including the highest ever from China. This influx of international students creates the need for a new approach to delivery of our lectures and other material. This session will focus on issues related to the changing demographics of US universities and will present some of the successful strategies.

## **Defining Competencies: Use of a Modified Delphi Process to Conveniently Collate Expert Opinion**

Kristin Janke

When faced with the challenge of defining competencies, a task force is often charged and multiple meetings ensue. However, the group is frequently faced with scheduling difficulties and opinion-strong members among other issues. Obtaining quality participation, a strong set of competencies and consensus can be a challenging and painstaking process. This session describes the use of a modified Delphi process conducted virtually to gather expert opinion on the competencies required of graduates in a new area of instruction. The process of selecting experts, conducting the online “rounds”, attaining consensus, and the resulting competency document will be described.

## **Making Ourselves Obsolete: Teaching the Skills Required for Self-Directed, Lifelong Learning through a Portfolio Process**

Kristin Janke

In response to a highly instructor driven curriculum, a learning portfolio was created to support students in “moving into the driver’s seat” and assuming responsibility for their learning during their final year. The aim of this work was to ensure that each student graduates with the skills necessary to self-direct their own lifelong learning. Students identify career goals then define quarterly learning plans that move them toward these goals. Longitudinal assessment of learning skill development, including measures of skills in self-assessment, learning planning, learning reflection, learning documentation, evaluation of learning progress and collaboration, indicate statistically significant increases on all measures.

## **Engaging Students: Active Learning Strategies in the College Classroom**

Eileen Johnson

Research has shown that the overall quality of teaching and learning is improved when students have the opportunity to clarify, question, apply, and consolidate new knowledge. This session will introduce participants to the definition and elements of active learning and provide hands-on experience with several active learning techniques. Participants will leave the session with a specific plan for incorporating active learning strategies into their own teaching.



## **A Guide to Creating Engaging Emails Based on the Real-Time Motivational Needs of Students**

Sara Kacin

A significant problem that continues to confront higher education is the number of students who enter college but leave prior to achieving their goal of degree completion. One solution is to motivate students through the use of emails that are created using the real-time motivational needs of students. In this interactive session, learners will be able to recognize motivational theory and why it is important to utilize in the classroom, identify the real-time motivational needs of students in their current classes and immediately create motivational emails that reflect the real-time motivational needs of their own students.

## **Massive Open Online Courses the Future of Online Education or the Flavor of the Week**

Shane Keene

Massive Open Online Classes (MOOCs) are becoming popular because it has found success initially in markets “where the alternative is nothing.” This accounts for why online learning is already important in adult higher education. The cost of higher education and limited access to some degrees online has facilitated a substitute product into the educational landscape. Most of the MOOCs currently being offered are free; however, they award no college credit. Many schools have plans to adapt MOOCs into online curriculums, but whether MOOCs are just a fad or a game changer for online education remains to be seen.

## **A Dialogue on Deweyan Democracy through Interdisciplinary Student Engagement**

Deborah Keller

This paper will describe how the authors implemented a cross-curricular assignment to enhance students' understanding of democracy. Specifically, students in an introductory Ethics course and students in an introductory Education course engaged in online dialogue in response to Dewey's “Democracy and Educational Administration.” The purpose of the assignment was to provide students an opportunity to relate Dewey's concept of democracy to their respective disciplines as they examined Dewey's concept from ethical and educational perspectives, to experience how Dewey's concept bridges the disciplines, and to consider how it connects their educational experience with the larger world of democratic citizenship.

## **Engaging Students through Collaborative Writing: Bringing Students in from the Cold**

Carole Kendy

Many students feel challenged by academic writing and when they are assigned essays in a subject other than their freshman composition course, they can feel intimidated. Most instructors assign essays by suggesting topics and providing general requirements and due dates. Students then begin the solitary journey of creating something decent enough to pass. Research shows that students who work collaboratively on assignments perform better than students who are left to do the work alone. This presentation is designed to encourage instructors of all disciplines to develop a collaborative approach to selecting writing topics, developing thesis statements, creating paragraph topics and editing.



**Text Connections for Contribution**

Christine Kenney, Aviva Dorfman

The dreaded blank stares, looking down at the phone screen, or worse yet the student who is falling asleep. University instructors know students who respond in these ways and have watched them disengage during class meetings. We recognize that many students want to be engaged, but posit that they don't know how to go about it. In this session, we explore two instructional strategies, contributions and text connections, designed to encourage active involvement in the learning process, and foster a studious attitude. The session includes a learning activity using these strategies and reflection about implications.

**Creating an Instructor Presence in Online Learning through the Use of Instructor Made Videos**

Kimberly Kenward, Sally Hipp

Is it possible to establish an instructor presence of being present in our online classes without actually being there? This presentation will seek to answer that question by providing multiple ways of creating instructor presence through the use of personal instructor-made videos. Research by Blignaut & Trollip concludes that, "Being silent (the instructor) in an online classroom is equivalent to being invisible" (p. 347). Student response data indicating that students feel more connected to the instructor when able to view instructor made videos will be shared, as well as, suggestions for getting started and equipment needed.

**A Study of Faculty-Librarian Collaboration**

Mari Kermit-Canfield, Donna Smith, William Burmeister, Betsy Verwys

This panel illustrates how three Ferris State University faculty members worked with a librarian to redesign the curricula of their respective classes. The panel will present data collected in a student study conducted in the Spring term of 2013 following these faculty-librarian collaborations.

**Using Reading Reactions and Small Group Discussion to Enhance Student Learning**

Kathleen Kinkema

Student accountability for reading outside of class and having effective class discussions often challenges college instructors. This session focuses on use of a "Reading Reaction" to hold students accountable for assigned reading in a sociology of physical activity course and to help facilitate class discussion based on that assigned reading. The Reading Reaction will be fully explained, including how it is assessed. The session will also include information about how the subsequent student-led small group class discussion on the required reading is facilitated and assessed.

**Effective Integration of Technology in Models of Teaching**

Mitchell Klett, Kia Richmond

Teaching is a highly complex process where a knowledgeable person (teacher) designs and delivers content to a group of learners (students) and those learners are expected to apply newly acquired skills and demonstrate newly gained knowledge. Even though learning goals have undergone major changes during the past century, society expects more from today's schools than schools from 100 years ago. Technology has provided a means for teachers to measure students' knowledge base, afford more powerful classroom teaching tools, and offer students a way to elaborate and share newly developed knowledge and skills.





## **Blended Learning: Effective Pedagogy across Learning Platforms**

Barbara Klocko, Sarah Marshall, Ben Jankens, Regina Umpstead, Kay Harris, Margaret Partio

In this presentation, we share examples of how to translate effective face-to-face learning strategies for online. This study is a result of a Faculty Learning Community (FLC) at Central Michigan University that meets to discuss building community and increasing student engagement through blended learning. This session will highlight 8 effective traditional teaching practices and how they work in the online environment, including design and practical considerations, examples of available tools, and vignettes of application.

## **Flipped Classroom Model to Increase Student Engagement**

Daphene Koch

Wouldn't it be great if students spent all time in class full of energy and excitement? No more boring lectures that students forget about two minutes after class. One proven method for increasing student engagement is a flipped model where students obtain technical content out of class and apply knowledge during the class. Please join this presentation to review how to flip a class, the research which supports the technique, and practice applying it to your class. The presenter will demonstrate two different types of courses and assist all attendees in creating active learning in their courses.

## **Hello, Is Anyone There? Creating an Instructor Presence in Online Courses**

Poonam Kumar, James Bowers

As an increasing number of faculty are asked to teach online classes, they face the challenge of creating a strong "instructor" presence without being physically present in the class. Research suggests that a strong instructor presence has an impact on students' success and their satisfaction in online classrooms. In this session the presenters will share evidence-based pedagogical approaches for creating a strong instructor presence in virtual environments. The presenters will also share examples of strategies and tools from their own teaching to illustrate how instructors can create a strong instructor presence without having any face to face interactions with students.

## **Using Web Conferencing Technology for Building a Community of Learners in the Classroom and Beyond**

Poonam Kumar, Danilo Sirias, Deb Roberts, Robert Arterburn

Research has demonstrated that students' success in online classrooms is related to their level of engagement with the classroom community. In online classrooms creating a community for learners can be challenging. In this session the presenters will discuss strategies to leverage web conferencing technologies to foster student engagement and to create a community of learners. The presentation will also discuss strategies and examples of how to use web conferencing technology to create a global community of learners that extends beyond the classroom.



## **What Influences Student Perception of Student-Teacher Interaction in the College Classroom?**

Hermann Kurthen

Based on student observations and surveys, my presentation shows that classroom context like class size, class length, and class time are important factors explaining quantity and quality of student-teacher interaction. In addition, class content and its effective communication by an instructor are very important reasons why face-to-face teaching and learning environments are perceived as satisfactory. In contrast, use of a variety of classroom media like PPT, Blackboard, or videos are less important for pedagogical success.

## **Using Technology to Enhance Hybrid, Online, and Flipped-Classroom Learning**

Nicholas Lauer

Dr. Lauer designs and teaches online courses for graduate students in the Human Development and Child Studies Department at Oakland University in the area of special education. In this presentation, he will address how to deal with content that has typically been delivered face-to-face, how to engage the online learner, and ways to assess online learning. Dr. Lauer will discuss screen technologies that allow instructors to present lectures online, as well as ways to use social media and a variety of software applications to make learning more meaningful and engaging.

## **Strategies for Providing Substantive Instruction in the University E-Learning Environment with the Use of Multimedia**

Edward Lazaros

Using strategies for providing substantive instruction in online university courses should be of paramount importance to faculty. Information relating to how verbal text, images, audio, and video can reinforce instruction will be disseminated. Literature relating to the differences that exist between online courses with and without multimedia will be presented. Conference participants will be better prepared to modify their online instructional strategies at their own educational institution after viewing the presentation.

## **Intercultural Experiential Learning: Designing Effective Travel Programs**

James Lee, Jennifer Swanson

The essence of pedagogical design is enabling learning, but how does one both learn about the lens through which your world is seen and simultaneously learn to deal with others who possess a different lens: all at the age of 19 or 20? We believe that the capacity to interact effectively across cultures is a critical element in a liberal education, and we believe that this capacity cannot be learned by a traditionally-aged undergraduate in the classroom. Therefore, we travel with students as part of a structured learning experience; the design of these experiences is the topic of our presentation.



## **Interdisciplinary Mentoring for Strategic Teaching and Learning Improvements**

Rebecca Leugers, Seung-Yeon Lee

An interdisciplinary mentoring model for improving college teaching will be shared, with focus on several key steps of the journey. Join the interactive journey through the identification of key focus areas for improvement, strategic consideration of course placement within the curriculum, teaching strategy discussions, observation and reflection sharing, and discussion of unique challenges, benefits, and potential outcomes that may occur as a result of mentoring. Discussion of formulating a teaching dossier throughout the mentoring process will be included. Start the process of reflecting on your own teaching and considerations for the type of mentoring you may wish to seek!

## **Effective Practices that move Students through the Developmental Education Pipeline Quickly and Successfully**

Megan Lin

This session will focus on effective developmental education practices that ensure student success. Emphasis will be on a systematic process for placement and curriculum that meets learner outcomes while accelerating the developmental education process.

## **Visual Literacy to Engage Learners**

A'Kena LongBenton

Animotos are short video clips that can creatively serve as external stimulus for learning. This digital presentation tool uses images, music, and content to engage even reluctant learners. Animotos can be used to introduce or conclude a teaching concept. By viewing these Animoto videos, students can gain writing, math, and science process skills, learn historical basics and classical novels' plots and themes.

## **Engaging the Hard-to-Engage Student: Transformational Leadership in the Classroom**

Tammy Looman

What motivates student learning? Is it good grades, the promise of a degree, or the desire for a job? The answer is yes for some students, but for others, the answer is no, not even close. New research shows that using transformational leadership can help students better engage in learning. Transformational leadership, sometimes referred to as transformational teaching, arises out of the culture of an organization and works to inspire students to learn and grow. This presentation will focus on ways to use transformational leadership theory and best practices in the classroom to promote and motivate student learning.



## **The Jigsaw: An Old Game as a New Method of Interactive Learning**

Marcia Mackey

Finding a means by which to encourage and hold students accountable for reading course materials, as well as determining their level of comprehension, continues to challenge faculty. The Jigsaw method of instruction creates an environment in which the students become the subject matter experts and thereby ensure others in the class comprehend the course readings. The best way to master pedagogy is to teach it to another individual. It is rewarding when students take ownership of their learning. Participants will leave with practical experience in the Jigsaw methodology, instructions for use, and a renewed excitement for engaging students.

## **Learning with Bachelors' of Science Completion Students and Traditional Nursing Students**

Katherine Marshall, Mary White

The University Of Detroit Mercy McAuley School Of Nursing provides for unique collaborative learning experiences in the Bachelors' of Science Completion (BSNc) program and the traditional nursing program. The course director assigns traditional students to inpatient preceptors who are also students in the BSNc program for a 116 hour preceptorship. BSNc students and traditional students work together to identify a clinically significant issue from their inpatient practice. Traditional students use the research process to provide a review of the literature on the selected topic and develop a poster and presentation that is given at the university and at the clinical site.

## **Improve College Teaching: Strategies and Techniques to Reinforce Learning**

Sarah Marshall

The act of teaching is complex and challenging. Effective teaching requires knowledge of the discipline and a commitment to student engagement. In this session, participants will learn how to build a safe learning environment, engage students, use interactive activities to reinforce learning, and implement a student-centered classroom. Numerous creative teaching tips and teaching will be shared.

## **Vulnerability, Technology and Student Learning: A Twenty-First Century Classroom**

Kristen McCauliff

I address the necessity of instructors to be vulnerable in the classroom. In particular, when instructors attempt pedagogical innovations, they often feel pressure to integrate the new approach perfectly. I argue that showing vulnerability increases student learning. The presentation will develop vulnerability as a theoretical idea and address ways to become more comfortable with vulnerability.

## **O.C.D. - Online Course Design: How to Overcome Technophobia**

Pamela Ross McClain, Elaine Makas

This interactive workshop is designed for educators who want information on how to effectively teach using a hybrid instructional design (on-line and in-person). The presenters will engage participants in an open dialogue and candid discussion about their challenges as they attempted to address their own technophobia (skepticism about teaching mixed-mode) while creating an effective on-line learning environment for graduate students in Educational Leadership. Topics of discussion will include how to build a dynamic virtual learning community, create an instructor presence, engage in effective communication (facilitator-to-student; student-to-student; and facilitator-to- community) and accommodate student differences and comfort with technology use.



## **Partnering, Parenting, and Professionalism - The Quest to Find a Healthy Family, Work-life Balance**

Pamela Ross McClain, Nathaniel McClain

This presentation examines the family/work life balance challenges faced by a heterosexual married couple who are both practicing educational leaders and committed to promoting equity in P-12 urban educational settings. This presentation will address how married couple are practicing educational leaders have used personal enlightenment, and re-visioning to liberate themselves from the conventionality of tradition that would have dictated family practices that are archaic and non-practical for a two-professional family. This presentation will chronicle a year long journey in journaling used as a means navigate busy schedules while fulfilling the need to introspectively reflect and effectively communicate with one another. The presenters will share personal awakenings with regard to how they have purposefully used family journaling to embrace the light of love, erase the shadows of resentment and seek balance between familial obligations, parenting, work life, community engagement, multicultural education and social activism.

## **Metaphors our Students Live by: The Cognitive Power of Analogies in Teaching**

Ildiko Melis

Metaphors are no longer considered the specialty of literature professors; they became a household term in cognitive science that considers human cognition the work of our analogical mind. The presenter will provide examples of how analogies help learning from a variety of content areas and participants will be encouraged to discuss, create, and share their own analogies.

## **The Relationship between Self-Efficacy and the Gender-Based Behaviors of Women Leaders**

Marion Mety

Perceptions regarding gender-based behaviors have often prevented women from realizing their full leadership potential. If they exhibit the gender-based behaviors of women leaders, which include being caring, understanding, and communal, they are perceived as incompetent, indecisive, and lacking in leadership skills. If they choose to exhibit the male-oriented behaviors that are equated with effective leadership, including being assertive and decisive, they are perceived as disagreeable and unlikable. Research for this study will identify the gender-based behaviors of women leaders and explore the relationship between self-efficacy and women's ability to overcome these behaviors and develop their own leadership style.

## **Improving Pedagogy through Student Self-Evaluation using a Retrospective Pre-Post Evaluative Design**

Leona Mickles-Burns, Debra Hanselman

In order to meet or exceed expected course outcomes, instructors in higher education continually assess their pedagogy to improve future classes. Using a retrospective pre-post self-evaluation instrument based on the course objectives, students evaluate their understanding now upon completing the course concurrently with reflecting back to then, before starting the course (Allen & Nimon, 2007). When the retrospective pre-post design is utilized students are able to more accurately assess their understanding of course content (Raidl et al., 2004). Analyzing the data can provide the instructor with knowledge of students' perceptions of learning; therefore, revealing content areas that may need enhancement as well as areas that are already effective (Rockwell & Kohn, 1989).



## **Embracing the Digital Devil: Harnessing College Student's BFFs to Increase Engagement with Difficult Topics**

Margaret Murphy

Mobiles, tablets, social media, apps. and more. Today's multi-tasking undergraduates find disconnecting almost impossible. Faculty responses vary from encouragement to tolerance to contraband confiscation. This paper argues digital tools should be incorporated (carefully) into curriculum, especially when tackling "dreaded" courses within liberal arts and sciences, communications and even, fine arts. "Next gen" and millennial students' 24/7 digital behaviors, industry projections and current scholarly research will be explored. In addition, applied classroom experiences will be highlighted, involving digital student engagement with tools such as: mobile apps., social media listening, text analytics, digital ethnography, online interviewing, etc. to inspire group ideation work.

## **Why Fight it? Adding Dimension to Teaching with Social Media**

Shelby Newport, Joseph Reinsel

Are your students distracted by social media in the classroom? Do you feel in line behind their smartphone or tablet? Instead of fighting that battle, why not use social media to enhance course engagement? We are among the growing community that feel that embracing these social technologies and using them in our courses not only increases student interest in the material but has produced stronger outcomes from the students. This session will introduce the benefits of using different types of social media as well as engage participants in a facebook group that will keep the discussion going throughout the conference.

## **Connecting Higher-Education. ESL Students' Language Learning with Local Community Involvement**

Sryeeda Nix, Kathy Cornman

This poster presentation examines the benefits of and strategies for implementing service-based and experiential-based learning, also referred to as place-based learning, in a higher education Intensive English Language Program (IEP). As an introduction to our larger theme, conference participants will receive information on the IEP and student profile at the University of Michigan-Flint. The English Language Program (ELP) predominately prepares non-native speakers of English for matriculation into degree seeking programs. Given the yearly exponential increases of international students being admitted to colleges nationwide, an understanding of how to meet their linguistic needs while maximizing their educational experience is of great interest to the faculty and teaching staff.

## **CAEP/NCATE Standards: How Content Program Review Drives Education and Content Area Faculty Collaboration**

Karen Obsniuk, Rick Benedict, Stewart Wood

Teacher educators are expected to develop sustainable and reliable assessment systems that yield valid data to inform decisions on curricula and best practice to benefit teacher candidates. An effective system requires collaboration between education and content area faculty. Join us in exploring a "Content Program Review" system, for the purpose of the assessment of the six CAEP/NCATE standards. The Content Program Reviews house data from a series of common key program assessments that also measure pedagogy and teaching dispositions. The common approach to evidence-based decision making and the collaborative relationships that develop in the process inform significant changes in practice.





## **Promoting a Sociocentric Worldview: Eight Theoretical Perspectives that Work across Courses!**

Randall Osborne, Paul Kriese

This presentation discusses a common theoretical foundation that we use in three different courses - Politics of Hate, Psychology of Prejudice, Discrimination and Hate & International Psychology. In these courses, we have discovered that 8 theoretical perspectives (Critical Psychology, Liberation Psychology, Post-Modernism, Social Constructivism, Social Identity Theory, Social Reduction Theory, Symbolic Interactionism, and Vygotsky's Sociocultural Theory) serve as a foundation that assists students in understanding all three courses and assists them in engaging in the kind of self-reflective (critical) thinking that understanding of others requires.

## **Eat, Drink, (Sleep) and be Merry in College: A Guide to Learning Success**

Adam Persky, Jeannie Loeb

All-nighters, Freshman 15, Ethanol comprise the college experience. As instructors we spend time and effort elucidating conducive environments for learning. In comparison, we have not paid as much attention to internal factors which make the learner better able to process information, and yet, research suggests that these factors are critical. In this interactive session, two faculty members, one from pharmacology and one from behavioral neuroscience, will share with you which factors make students more or less fertile ground for learning. Have a little fun and leave with a few practical tips you can share with your students.

## **The Benefits of a Successful Service Learning Course In Humane Education**

Michelle Proctor

Much has been written expounding the benefits of service-learning (SL) curricula. Providing students and faculty the opportunity to participate in meaningful community service not only fosters a sense of community and responsible stewardship within the institution but within the larger community as a whole. This presentation will illustrate an interdisciplinary service-learning curricula that offer students and faculty a vehicle through which to accomplish the goals of promoting social justice, not just in terms of multiculturalism, but also human rights, inclusion and sustainability. This will be accomplished through examples of SL experiences of Madonna University's Sociology and Humane Education Program.

## **Use of Response Technology (Clickers) to Increase Student Participation and Learning**

Martina Reinhold

Current research suggests that active learning approaches in the classroom improve learning outcomes (Prince 2004; Thaman et al. 2013). This presentation will describe how the use of audience response technology such as Clickers can transform the classroom into an interactive learning environment, resulting in greater student attention and participation as well as allowing the evaluation of student understanding of the material. For students the use of clickers provides a quick way to validate their own learning. Examples will illustrate how to integrate various instructional strategies within a traditional classroom to encourage participation, learning, reflection and discussion.



## Building for Team-Based Learning

Laurie Richlin, Eli Collins-Brown, Sylvia Merino

Western Michigan University School of Medicine (WMed) will open in August 2014, with innovative medical education strategies. We will promote a learner-centered approach that comes to life through adult learning principles of self-directed, peer-supported, experiential inquiry and learning. As part of the renovation of a building donated to the school, medical educators are working with architects to design spaces appropriate for Team-Based Learning (TBL) activities. The presenters in this session will discuss how TBL will be integrated throughout all four years of medical school and will show the architectural drawings for the classroom and simulation floors of the new building.

## Graphic Illustrations in Education: Using Comics to Engage and Motivate Students

Kari Richards

Research shows that using both text and visuals, such as those found in comics, in conjunction with audio lectures can foster comprehension and memory skills. This session will describe the process of creating graphic illustrations, in particular content-based comics that teachers can use in both online and traditional classrooms. A variety of technology tools will be introduced - everything needed to create a variety of graphic illustrations from 'low tech' panel comics to more advanced animated comics - each of these tools can be used with a minimum of technical experience and will be demonstrated for attendees edification.

## College-Ready?: Accelerating Student Success in Developmental Math and English

Martine Courant Rife, Leslie Mohnke

Math and English faculty discuss the conception, design, and implementation of accelerated course options and supplemental instruction. In Math, initiatives from the onset of a developmental placement paired with curriculum redesign have been employed with a keen awareness that exponential attrition is evident and most developmental math students do not make it to that first college level math course. In English, course redesign now allows students placing into the traditional one semester developmental writing course to take a combination course where these students are mainstreamed into a college level writing course while simultaneously taking a supplemental course where they receive individualized instruction.

## Text-to-Speech Use and Implications for Remediation of Reading Deficits

Kelly Roberts, Robert Stodden, Kiriko Takahashi

An experimental study was conducted to examine the effects of text-to-speech software upon the reading performance of ninth grade struggling readers, when not using the software (i.e., unaided). After using the software for one semester, the intervention group students had significantly greater increases in vocabulary and comprehension when compared to the control group. These findings contribute to increasing the scientific evidence-based research on the use of text-to-speech software as a reading intervention for secondary and postsecondary struggling readers. Implications for postsecondary education include the possibility of using TTS software as a reading intervention/remediation while providing access to grade level content material.



## **Instructional Gymnastics 101: What I Learned from My Year in a Flipped Classroom**

Matthew Roberts

While much of the publicity is focused on K-12, the “flipped classroom” model of instruction is one of education’s most talked about concepts. This session will give participants a hype-free introduction to the flipped classroom, as well as its benefits and weaknesses. The principal focus will be on the presenter’s experience implementing flipped instruction in an introductory American government course. The session will include a discussion of student reactions to flipped instruction and practical advice for those interested in flipping their own classes.

## **Investigating Adult Learners’ Processes with PLAR for Graduate Admissions**

Lorayne Robertson

Little is known about the process adults undertake to provide evidence of undergraduate degree competencies using digital portfolios. This study follows a cohort of graduate school applicants who created digital portfolios which combined education and work experience in order to meet established provincial competency standards for an undergraduate degree through PLAR. The study follows them through the application process to graduate school and one year later, capturing their voices through both the digital portfolios and interviews. The research study finds that the e-portfolio can be an effective entry point for a graduate program, providing that there is a supported process.

## **Pedagogically Articulating the Value of an Undergraduate Degree: Course Innovation, Student Engagement, and Curricular Transcendence**

Renee Robinson, Julie McNellis

Due to external stakeholder concerns about the cost of higher education, the value of a college degree and organizational legitimacy as it relates to contributing to students’ employability and earning potential upon graduation (see Harden, 2013; Huff Post College, 2011; Liberson, 2013), institutions of higher education are struggling with their mission and purpose. In response to this challenge one department created an innovative, hybrid, career readiness course designed to engage learners by helping them to transition from college student to working professional while simultaneously identifying and articulating how an undergraduate degree prepares critical thinkers and workers for the information age.

## **Creating a Culture of Interaction and Engagement in Student Seminars**

Mark Rogers

The student-led seminar format class lends itself to a high level of interaction and engagement. It can be difficult, however, to keep students involved when they are not leading the discussion. In this presentation, I will explain and demonstrate active and cooperative learning techniques that can be used both by the instructor and by student presenters to keep the other class members actively engaged during the class session. Proper use of these techniques can enhance learning among both the presenting students and the other participating students.



## **Practical Application: Merging General Education Course Concepts with Career Implications**

Mark Rogers, Jane Bryant

Practical Application: Merging General Education Course Concepts with Career Implications presents findings from original research on attitudes toward liberty and security from the perspective of American Government students compared to Computer Forensic students. Presenters will also offer suggestions on how this same innovative instruction approach can be applied to different disciplines.

## **Building a Public Institution Sustainability Program from the Ground Up**

Thomas Rohrer

Universities have often been described as a microcosm of the larger society. A medium-sized public university, such as Central Michigan University, has as part of its campus all of the elements of a small city. The relatively autonomous governance structure of a public university provides a leadership opportunity to rapidly deploy innovative approaches to sustainability throughout the campus community. By securing both top administrative support and grassroots advocates for a more sustainable university campus, an effective program can, in principle, be instituted in a relatively short period of time which advances the three sustainability goals of environmental stewardship, sound fiscal management and a better quality of life for students, faculty and staff.

## **Dynamic Interactions: Teaching Purposefully with Social Intelligence**

Tamara Rosier

Successful teaching professors “read” their students. They read their nonverbal signals and discern how their students may be thinking and feeling. They read and manage the affective element in a class, understand how to affect the behaviors of their students, and convey concern for their students’ well-being and success. They are socially intelligent. This interactive session provides a conceptual framework for understanding the important roles that social intelligence plays in effective teaching strategies. Participants will analyze how they already use their social intelligence and explore new strategies for increasing student learning.

## **Don’t Teach the Controversy, Teach Controversially**

Alan Rudy, A.E. Garrison

Our goal in this presentation is to instigate and provoke healthy disagreement, as we do in our classes. We will suggest that a route to effective classroom work can be through discomfort (and the attendant feminist-inspired emotion work), being challenged (within a carefully generated safe space), and being made to work (which means making the work worth it).

## **Teaching Assistants’ & Academic Dishonesty: Lessons Learned**

Michael Seals

Academic dishonesty continues to be a major problem on college campuses. Teaching Assistants, in their dual role as students and novice instructors, face a particularly tough task in addressing cheating in the classroom. This presentation will discuss results of a student on Teaching Assistants preparation for, attitudes towards, and experiences with academic dishonesty at a research intensive university. Attendees will engage in discussions about preparing TAs to address academic dishonesty and methods for promoting academic integrity in the classroom.



## **Developing Orientation Experiences to Support Specific Student Groups' Success Needs**

Michael Seals, Daphene Koch

The purpose of this session is to assist participants in designing orientation experiences geared to address needs of at-risk student groups. Faced with an increase in international student enrollment and poor transition success, Purdue University launched an ambitious pilot program designed to address both facts by supplementing existing orientation programming. Attendees at this program will be guided through the development process, participate in some activities, and participate in a discussion of how to adapt the process to the unique needs of their student populations.

## **The Digital Classroom: Teaching to Our "Digital Native" Undergraduates**

Jennifer Simpson, Teri Alaniz

Teaching methods have transitioned from various mediums that have influenced classroom engagement. For example, college institutions implemented specific technologies such as blackboard, whiteboard, and PowerPoint. This generation of students has grown up in a digital world and is being introduced to computers, tablets, and smartphones before they even enter grade school. Many instructors have been incorporating Twitter and Facebook into their classrooms, however, there is still more that can be done. This session will showcase eight programs/apps that can easily introduced into the classroom along with lesson examples so that audience members can learn how to use them. Each session member will also be given a CD that has the PP presentation, information about all of the programs and apps, and some example lesson plans.

## **Strategic Instruction Not Participation: Applying Conventional Lesson-Planning Approaches to Online Instruction and Discussion**

Steven Simpson

As online curricula push towards standardization, the ability of faculty to modify and change assignments, course work, and course materials has diminished. This has not however diminished the potential of faculty to be active drivers of the instructional experience and student learning. This session focuses on the application of traditional lesson-planning strategies to drive instructor-student interaction, student learning, and critical thinking. The emphasis of the session will be on advancing the role of the online instructor from engaged participant to strategic educator through the purposeful use of instructional strategies, engagement strategies, and formal and informal assessment techniques.

## **Using Metaphor in Teaching: Insights on Learning from the Wizard of Oz**

Karl Smart, James Scott

The classic movie, The Wizard of Oz, provides a metaphor for demonstrating several elements of effective teaching and student learning. This session explores connections and similarities between Oz and the classroom in an active, engaging way. Specifically, we'll look at teaching to individual needs, what to do if you're not an all powerful wizard in the classroom, and why individuals learn best through experience and collaboration. Warning: Although you'll not be required to confront a wicked witch, active participation is expected.



## **Story it! Making Connections to Influence Learning and Retention**

Debra Smith

Stories stimulate our mind, appeal to our heart, and trigger our imagination. Stories originate from our experience. Stories use a beginning, middle and end sequence to explain both what and how things are. A well-told story can activate meaning making, fill knowledge gaps, spark action and advance our development. In this interactive session, participants will use a worksheet to Describe, Operationalize, Tailor and See how the audience, content, and the learning environment can be connected through story to influence learning, retention and transfer to practice.

## **Determining Student Satisfaction of a Magnetic Resonance Imaging Curriculum in Preparation for Certification Examination**

Barry Southers, Alan Vespie

## **The Beauty of Design: Thinking Rhetorically About Course Design**

Jason Stevens

This session will explore course design as a rhetorical activity. The rhetorical cannons of invention, organization, and style offer an extremely useful and flexible set of principles for creating, shaping, and delivering course material. Rhetoric makes both students and content integral to excellent course design. Rhetorical teaching is not abstract: its aim is the practical and powerful delivery of content. Its success is measured in terms of its effect on audience. Thinking rhetorically about course design allows us to deliver intellectual content (invention) in an effective order (organization), in a way that is powerful, moving, perhaps even beautiful (style).

## **Incorporating the Voices of Faculty Stakeholders in Course Assessment: The Missing Link**

Mary Lou Strong, Stephen Sanders

Instructors of an introductory research skills course set out to assess whether their course met student needs. Usually this process involves evaluation by faculty teaching the course. However, we realized an important perspective was being overlooked, namely faculty in disciplines depending on our course. A pilot study surveyed Freshmen English Faculty about their observations of student information literacy abilities and which skills faculty most value for student success. Survey data and a follow-up focus group provided invaluable insights and led to interdepartmental collaboration. Survey creation and administration (with its 73% return rate!), focus group planning, and results will be discussed.

## **Approaches to Mobile Technology Application Development**

Andrew Suhy

I will discuss the rapidly growing importance of mobile technology. Next, I will cover three major approaches to presenting this technology to students so that they will have the skills and understanding to create their own mobile applications and the advantages and disadvantages of each approach. I will then discuss how my institution is including this technology area in our curriculum and the challenges and opportunities of making the courses available for computer systems majors as well as non-majors.





## **Pacific Alliance - Increasing the Number of Individuals with Disabilities in Science, Technology, Engineering, and Mathematics Fields and the Workforce**

Kiriko Takahashi, Hye-Jin Park, Kelly Roberts, Robert Stodden

The overarching goal of the Pacific Alliance for Supporting Individuals with Disabilities (IWD) in STEM Fields Partnership (Pacific Alliance) is to advance knowledge and understanding within the disability and STEM fields and significantly increase and broaden the participation, achievement, and quality of IWD in STEM postsecondary education programs and ultimately the STEM workforce. The presenters will provide an overview of the project, lead several high interest STEM activities that will be conducted by the audience, and have an open discussion on ways to increase STEM participation for underrepresented groups.

## **The Perceived Key Concepts In Biology, Geology, and Chemistry Across Educational Levels**

Jeff Thomas

Come see and discuss which concepts college students and college professors stated were the most important concepts in their subject areas. Over a one-year period data was collected from high school teachers, college students, and college professors about what they perceived were the most important concepts in their areas of study. Data was collected in biology, chemistry, and geology to determine how much overlap existed between perceived key concepts. We will discuss the possibilities for completing such a data collection as a teaching activity or research opportunity in your setting.

## **Using Web 2.0 Tools Effectively in Teacher Preparation**

Jeff Thomas, Joyce Gulley

The session addresses the development of 21st century teachers and the tools that they can use for two purposes. One, use to teach material (e.g. Thinglink or NewHive). Two, to use in student assessment or work prior to class (e.g. Titan Pad or VoiceThread). The presenters have been using these tools and many others with students. The presentation will showcase how we use these tools with preservice teachers. Using the tools with other disciplines is straightforward and we will share possibilities.

## **Implementing Authentic Learning: From our FLC to Your Classroom**

Michelle Tollefson, Lorrie Evans

Our Faculty Learning Community is focusing on techniques for enhancing life-long learning. Authentic learning is one such technique that encourages students to learn course objectives through application of concepts to their real-world experience. We will examine how faculty can easily increase authentic learning in their classroom through designing authentic learning tasks that have social value beyond the classroom, encouraging collaboration, and teaching students to act in a manner similar to experts in our fields. In this interactive workshop, we will share our experiences along our journeys, provide you with resources, and help you incorporate authentic learning into your classroom.



## Teaching Contemporary Mathematics and Probability and Statistics Online

Susan Toma

The Department of Mathematics and Computer Science at Madonna University is offering online mathematics courses including a Contemporary Mathematics course as well as a Probability and Statistics course. The Contemporary Mathematics course is designed for the non-science majors by covering a wide range of topics from various mathematics fields. The Probability and Statistics course is required of various science and nursing majors. This presentation will discuss how each of these two courses has been designed and offered exclusively online through Blackboard.

## Experiences of Student in an Online Master of Education Degree

Andrew Topper, Sean Lancaster

Students in GVSU's first online graduate degree in educational technology (M.Ed.) are not required to attend class on campus. This session shares what has been learned from the two-years this program has been in place, focusing on student experiences. Data analyzed include student course evaluations, student survey data, and faculty experiences.

## The Marshmallow Challenge: Team Collaboration, Innovation, & Creativity

Chester Trybus, Andrew Peterson

The Marshmallow Challenge is a remarkably fun and instructive design exercise that encourages teams to experience simple but profound lessons in collaboration, innovation, and creativity. The task is simple: in eighteen minutes, teams must build the tallest freestanding structure out of 20 sticks of spaghetti, one yard of tape, one yard of string, and one marshmallow. The marshmallow needs to be on top.

## The Ancient Arts of Memory: Affective Learning through Memorization Techniques

Michael Van Dyke

Up through the Renaissance, an educated person normally committed a large number of texts to memory and also possessed memorization skills that lent a certain affective quality to their knowing. In other words, they related to their own knowledge in different ways than later generations did. Today, with ready access to texts of all sorts, we see no use for the ancient arts of memory, and sometimes even see memorization as inimical to the more polyvalent process we call learning. This session, however, will explore the qualitative difference it makes when long-lost memorization techniques are integrated into the learning experience.

## Using the Flipped Classroom to Enhance Student Learning

Julia VanderMolen, Leigh Harrell

Flipping a classroom is a fairly recent and growing trend seen across the country due to its many benefits. A flipped classroom is about viewing and/or listening to lectures and/or online tutorials outside of the traditional classroom setting. This presentation will describe the flipped classroom and demonstrate how this technique was implemented in undergraduate microbiology labs. Presenters will provide participants with examples and student perception regarding the flipped classroom model and how it enhanced the learning experience.



## Team Based Learning Primer

Cynthia Wagner, Sarah Leupen

We will be presenting a 80-minute workshop on the basics of Team-Based Learning (TBL). TBL allows students to gain the needed skills to apply the course content to more “real-life” problems, while building team cohesiveness. The students’ first exposure to course content is done outside of class as students read the assigned material and are tested on their preparation, individually and as a team. Class time is used to apply the course content by working team application problems. The workshop will use TBL to provide introductory information to teachers who would like to use this teaching method in their classrooms.

## How Did the Discussion Get There? Improving Asynchronous Discussion Using Course Objectives and Thread Linkage

Michael Wambach

Methods of guiding the discussion to reproducibly assess the course objectives are often inadequately addressed in the literature. The technique described here maps a pathway to iterate course objectives to topic questions. After a topic is linked, a series of “redirection,” “elaboration,” “research,” or “summary” headers are used to further refine and focus discussion to achieve the learning necessary for each topic. Each header can also be linked to previous or future discussion topics (vertical links) or threads within the current discussion session (horizontal links). Instructor composed responses can be used to economize effort without loss of individualization.

## Quality Matters with Evidence Based Online Teaching and Learning

Susan Wancour, Kimberly Beistle, Kathleen Harlan, Catherine Archer, Sandra Burns

The “problem” with traditional methods of online instructional delivery is that little responsibility is placed on the student to actually process, understand and apply knowledge. Unless critically engaged in the material in a thoughtful, applied way, the student will not analyze and synthesize the information in a manner that allows them to internalize and apply knowledge to real world situations. Thus, utilizing the “Quality Matters” framework for evidence based online teaching strategies promotes active student learning and community.

## Plenary Presentation: Simple Activities Designed to Engage Learners in the Classroom while Maximizing Student Learning and Satisfaction

Keith Whittington

This plenary will engage all attendees in using techniques that the speaker has successfully used in his classrooms and have been shown to be more effective than traditional methods in all evaluations and assessments conducted in a study funded by the National Science Foundation.



## Teaching Outside the Box

David Wilson

I would like to present a poster and handout describing the course structure and teaching methods I use and have found excellent success with. Mine is a very basic approach, based on practices that I have learned from and enjoyed as a student myself. I have modified these practices to fit the courses I teach at Northwestern Michigan College and Lansing Community College and feel that there may be a thing or two that other instructors would find useful as well. The poster will provide an overview of these practices, with helpful details listed on the handout.

## Creating IEP Documents for Educational Success

Kathleen Winterman, Clarissa Rosas

In an effort to provide information pertaining to the education of children with disabilities, state departments of education publish documents on policies and procedures concerning special education services. This study examined the readability level of those published documents to determine if they were commensurate with the reading level of most American adults. Results of this study revealed that the level of literacy proficiency required to interpret the documents is significantly more sophisticated than initially indicated.

## Online Assessment Dilemmas: The Use of Rubrics and Professional Judgment in Grading Individual Achievement

Stewart Wood, Dennis Bozyk

The pervasive use of asynchronous discussions in online courses gives rise to questions of grading criteria and assessment validity. Dilemmas associated with the grading of online forums are analyzed using example rubrics from a variety of disciplines to identify different approaches to the assessment of forum quality. In engaging participants in an evaluation of valid grading practices, responses to these dilemmas will be analyzed. We will generate discussion questions that help faculty consider the limitations of rubrics in assessing student achievement and make the case for a renewed focus on the role of professional judgment.

## High-Impact Teaching: Engaging the Millennial Learner

Jeanneane Wood-Nartker, Emily Beuschel, Eron Drake

Based on an interest in learning more about today's learners and a desire to enhancing student engagement and motivation, we examined and blended best teaching practices with the interests of millennial students to revise an end-of-semester group project. The results led to fully engaged students who were motivated to move deeper into the course content using multiple technology tools and free web services, e.g. [www.wix.com](http://www.wix.com) and [www.issuu.com](http://www.issuu.com). Participants will have the opportunity to apply practices that engage millennial learners in "doing and discovery" and will be introduced to an interactive virtual document. Participants must provide their own laptop or ipad.



## **Gaming Your Class: Flipping And Gamification In The Classroom to Maximize Student Learning**

Helen Woodman, Christine Conley-Sowels, Kristen Motz, Andrew Peterson, Monica Frees

This interactive session will engage participants in activities involving student gaming and the flipped classroom approach. An instructional technologist with a skill for gaming, a librarian with a flipped classroom pilot, and two experienced faculty (education and reading) will help participants transform their classrooms into learning spaces where everybody can win. Attendees will carry home a CD of activities and gaming concepts to put into practice on Monday morning.

## **Teaching Excellence by Design: A Three Year Retrospective on the “Catalyst Course Design Project”**

Jan Worth-Nelson

In Fall, 2010, a new director of the Thompson Center for Learning and Teaching at the UM \_ Flint approached a new Provost with an idea: what if we assemble a project to encourage innovative teaching strategies and pay faculty to participate? The new Provost said yes, and since then, 40 faculty have completed the Catalyst Course Design Project. The program's results yield many insights about models for faculty training. Further findings from the program prompt sober consideration of risks and rewards attendant to encouraging teachers into innovation.

## **The Academic Advisor: Student Advocate...or Lethal Weapon?**

Mari Yancho, Troy Boquette

While most student success initiatives center on the student, the Advising Center at Mott Community College (MCC) in Flint, Michigan is also approaching the issue from a behind-the-scenes perspective; that of improving the caliber of Academic Advising to increase student success and satisfaction. This presentation will demonstrate how advisor assessment testing was developed at MCC, piloted, and shown to improve Advisor assessment test scores by approximately 45% within a two-month period. Come and see how your school can create and implement similar assessment tests to meet the needs of your institution and students.

## **Developing an Extensive Reading Program within an Intensive English Curriculum**

Judy Youngquist, Mary Klaus

How do instructors get their students to read more? Research has shown that extensive reading can benefit second language readers, who face special language-specific challenges and who can get discouraged by the slow speed of their reading. To help develop the reading skills of pre-university second language learners in the English Language Program at Saginaw Valley State University, an investigation of extensive reading programs was undertaken. As a result of the investigation, the ELP decided to pilot an extensive reading program as a component of an advanced reading course. The steps and results will be demonstrated.



**Plenary Presentation: Critical Challenges in Teaching and Learning: What Teachers Will Likely Face and How to Meet those Challenges Head On**

Todd Zakrajsek

University faculty can expect to face serious challenges in educating students in the coming years. How will we integrate learning technologies? How will brain-based learning affect our practice? What will be the impact of the Scholarship of Teaching and Learning? What do we know about how undergraduates interact with the world and the impact it will have on education? We simply can't continue to teach the same way teaching has been done, even though it has been done in a very specific way for a LONG time. This session will focus on some of the biggest challenges we will be facing, and also some directions we can take to address those challenges.





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