This publication includes papers and one-page summary sheets from the 36th Distance Teaching and Learning Conference, where provided. This publication does not include presenter handouts. If presenters submitted handouts for their session, you may access them on the Guidebook Conference App.

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360-Degree View: Shared Experiences of a HyFlex Course Design Pilot

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Summary

Hybrid-Flexible (HyFlex) course design models can be effective in addressing student, faculty and institutional educational needs and interests (Beatty, 2019; Raes, Detienne, Windey, et al., 2019). HyFlex courses are courses where students can choose to participate in a given course section live in person, synchronously online, asynchronously online and/or any combination of the aforementioned participation choices. The HyFlex course design model has been referenced and implemented via various other names such as: Hybrid Synchronous (Raes, Detienne, Windey, et al., 2019), Blend Flex, Flexible Hybrid, Multi-Options, Comodal, Blend Synch, etc. (Beatty, 2019). It has been suggested that research into HyFlex and related synchronous hybrid learning is still in its infancy (Raes, Detienne, Windey, et al., 2019).

Rush University (RU), located in Chicago, IL USA, is a top-ranked primarily doctoral level health sciences university. RU is the academic enterprise of Rush University Medical Center (RUMC) and therefore has a tripartite educational, research and clinical mission. RU’s College of Nursing (CON) is a highly ranked nursing program that offers masters and doctoral level nursing degrees. CON is a nationally known leader in online learning. CON is the first college at RU to conduct a pilot study implementing the HyFlex course design model and this was done prior to the onset of the COVID-19 pandemic. More specifically, a senior/veteran faculty member in CON’s Community, Systems & Mental Health Department’s Family Nurse Practitioner Doctorate Program (FDNP) piloted the HyFlex course design model in the Fall 2019 semester with the assistance of a fellow FNDP colleague and an instructional designer colleague from RU’s Center for Teaching Excellence and Innovation (CTEI). The aims of this pilot study were to provide both faculty and students an opportunity to have shared experiences with the HyFlex flexible model and then to contribute to the growing knowledge and research pool of the HyFlex course design model.

Study Background

This HyFlex pilot study was an ex post facto exploratory and reflective study of an RU doctoral level nurse practitioner pediatrics and obstetrics management course that was delivered in a HyFlex course design model. Part of the motivation for piloting the HyFlex course design model was a programmatic discussion about potentially eliminating the in person, live on-campus sections of RU’s graduate nurse practitioner courses that were currently being offered in both an in person live on-campus course section and an asynchronously online course section in alternating semesters. The enrollments in the live on-campus course sections have been declining and skewed far less than enrollments in the asynchronous online course sections of the aforementioned graduate nurse practitioner course. The HyFlex design model pilot was also implemented due to potential upcoming faculty logistics for that particular semester.
The participants, setting and methods are described below.

Participants

The participants in RU’s first HyFlex pilot study were the students and the faculty person in charge of this live, on campus doctoral level pediatrics and obstetrics nurse practitioner management course that has been traditionally offered both live on-campus for one 4 hour session once a week, once a year and asynchronously online once a year. The students in this course were first made aware of this HyFlex course model pilot study during the first-class session. All of the students in this class specifically selected the live, on-campus version of this course because they felt it best fit their learning style and they had no objection to the pilot study. Another nursing faculty colleague and an instructional designer colleague were secondary participants as observers and research collaborators. In addition, the course had a few guest speakers who were informed about the HyFlex pilot the week before their scheduled class. As noted earlier, there has been declining enrollment in the live, on campus course sections of RU’s CON graduate nurse practitioner courses that are offered both live on campus once a year and asynchronously online once a year. Thus, there were six students registered for the live, on campus course section used in this HyFlex course pilot study. All six of the student participants were practicing nurses and/or attending FDNP clinical rotations while enrolled in this HyFlex course pilot study. All six students presented themselves as female. The faculty participant for this HyFlex course pilot is a senior/veteran female faculty member who was the course director/lead faculty for this course and had taught both the live, on campus course sections and the asynchronous online course sections for a number of years.

Setting

The course in this HyFlex pilot met live, on campus one day a week for approximately four hours each week. The live, on campus classroom’s configuration included a podium integrated with a microphone, computer, and other audio/visual components that are connected to a projector, ceiling microphones and ceiling speakers. The computer integrated with the podium and the ceiling speakers and ceiling microphones are joined to the same web conferencing system and session as the synchronous online participants. In addition, each synchronous (i.e., live, on campus and live online) session was recorded via a web conferencing system.

Furthermore, the HyFlex course used a learning management system (LMS) to provide asynchronous participation, communication (e.g., discussion boards, messaging, e-mail, announcements) and sharing of resources (e.g., instructor contact information, handouts, readings, recordings of the synchronous sessions). Therefore, both the live, on campus participants and the synchronous online participants could communicate and interact with the instructor and each other via the integration of the audio/visual configuration in the live, on campus classroom and a web conferencing system. In addition, all students and the instructor could also communicate and interact with each other via the LMS.

Since the HyFlex course design model affords students the choice to participate in a given course section’s class sessions live, on campus, live online, asynchronously online and/or any combination thereof, some students participated synchronously online from their homes, job sites, and/or clinical rotation sites. We did not query the student participants about their location if they were joining synchronously online because we felt that if they were on vacation somewhere, they might not want to share that with us. The lead instructor for this HyFlex course pilot study facilitated the course remotely from her on campus office for one session and from home during another session. The primary role of the second nursing faculty and instructional designer colleagues were to observe the HyFlex course sessions and debrief with the lead instructor after each HyFlex course session was completed. These debriefings were held weekly during the entire semester. In addition, the instructional designer provided instructional design support and technical support for both the instructor and students.
Methods

As an exploratory and reflective study, an action research in nursing education methodology (Moch, Vandenbark, Pehler & Stombaugh, 2016) to share experiences, reflections and observations in a doctoral level nurse practitioner management HyFlex course pilot was implemented. This pilot study specifically explored student’s HyFlex participation choices, student’s reported experiences about the HyFlex course, instructor’s experiences and reflections as well as the observations of the instructor’s collaborating colleagues.

The student data was obtained from the LMS discussion forum, web conferencing attendance and recordings reports, a brief survey regarding student’s reported HyFlex experiences, and the student responses in RU CON’s end of course evaluations. The data regarding the instructor’s experiences and reflections as well as the instructor’s collaborating colleagues’ observations was obtained from the instructor’s and collaborating colleagues’ notes and their recorded collaborative faculty development presentations regarding RU’s first HyFlex course design pilot. Due to the small number of students in this HyFlex course pilot study, the collected data was primarily qualitatively descriptive in nature.

Findings

Observed Student HyFlex Participation Choices

One of the most significant findings is the students’ HyFlex participation choices, especially since the course in this HyFlex pilot study was listed as a live, on campus course at the time the students registered for this course. In seven of the thirteen (54%) weeks of the HyFlex course pilot study the number of students who chose to participate in the HyFlex pilot study course live online was the same or greater than the number of students who chose to participate live, on campus. Furthermore, in four of the thirteen (31%) weeks of the HyFlex course pilot study the number of students who chose to participate in the HyFlex pilot study course asynchronously online was the same or greater than the total number of students who participated synchronously (i.e., synchronously online or live, on campus) in the HyFlex pilot study course. In addition, each student (100%) participated at least once synchronously online. Additionally, for five of the thirteen weeks (38%) all of the students (100%) chose to participate online (i.e., synchronously and/or asynchronously online) and not live, on campus.

Self-reported Student HyFlex Participation Choices and Experiences

Although only two of the six students (33%) registered for the course in this HyFlex pilot study responded to the HyFlex course’s LMS discussion forum (i.e., Midterm Feedback) regarding RU’s HyFlex course pilot and only two of the six students (33%) responded to the HyFlex course pilot’s student survey, the comments seemed to be consistent with overall student participation choices’ patterns. The students’ responses to both the HyFlex course’s Midterm Feedback discussion forum and the HyFlex student survey reported that the students viewed the technical difficulties in the HyFlex course pilot as “minor” or “occasionally buggy”. Furthermore, the students’ responses in the HyFlex course pilot’s student survey reported a higher frequency of participating online (e.g., synchronously and/or asynchronously online) than live, on campus during the HyFlex course pilot and that the students felt like they were part of the class regardless of how they chose to participate in the course.
Instructor’s and Collaborators’ HyFlex Pilot Experiences and Observations

Overall the HyFlex model was well received. The lead faculty did share the same challenges about the technology that the students had but no class had to be ended because of the technical challenges. It was a different type of experience discussing a topic with no students sitting in the physical classroom but participating through the speakers as no video was required or used during the pilot study. Once the conversation got started, though, it almost felt like everyone was in the same room. We did have to be conscientious about remembering that there were students attending synchronously online from a remote location so that we would not forget to include them in the conversations. It was very helpful to have the other faculty and instructional designer attending the course sessions so they could monitor the questions and/or comments posted in the web conferencing system’s chat.

Guest faculty presenters were leery but receptive to the HyFlex model pilot. One guest faculty presenter totally embraced it because he had previously presented in a simulcasted session. One guest faculty presenter made it very clear that they did not like it when there were no students in the live-in person classroom because she could not “see their faces” and it made it difficult to feel like she was communicating with the students. One faculty wanted to do a demonstration of a piece of equipment and they did not find the HyFlex model used in this pilot conducive to doing that without prior planning.

Conclusion

In conclusion, although this HyFlex pilot study had a small sample size and thus was not intended to be a generalizable study, it provided some insightful shared experiences, reflections and observations for Rush University (RU) and possibly for other institutions considering piloting the HyFlex course design model. Both the observed and student reported HyFlex participation choices seemed to suggest that students in this HyFlex pilot study had an appreciation for and exercised the flexible participation choices in a HyFlex course. Since this HyFlex course design model pilot at RU took place prior to the COVID-19 pandemic, it has facilitated RU in officially adding the HyFlex course delivery mode to RU’s official course delivery mode options as well as facilitating other colleges, departments, and programs at RU in planning to implement HyFlex courses in response to the COVID-19 pandemic and related continuity of education planning. Further research, both qualitative and quantitative, seems warranted for HyFlex course implementations and related course delivery models as the HyFlex course design model appears to be gaining more interest from various institutions (Lederman, 2020).

References


Dr. Agruss is an Associate Professor at Rush University as well as a practicing Family Nurse Practitioner. She is a long-time faculty member of the College of Nursing and has been instrumental in developing new, innovative methods of course materials and content delivery. She received her Bachelor of Science in Nursing from the University of Illinois, Chicago, her Masters of Science in Nursing with a minor in Education from Loyola University, Chicago and her PhD and Nurse Practitioner education at Rush University, Chicago.

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Leadership in a Decentralized Organization: Moving DL Forward Together

Dr. Lujean Baab
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Summary

The strategic leadership of distance learning at an institution is greatly affected by the organizational structure in which distance learning is managed. Communication, redundancy of services and support, data collection and reporting, establishing common goals and recognizing the different characteristics of colleges, departments and programs within the institution contribute to the challenges that must be addressed for leadership to be effective. Models for organizational structures for distance learning exist, including what is known as “functional”, “divisional/departmental”, “outsourced” or “consortial” and these models will be explored in the session along with an opportunity to identify which of these - or combination of these - exist at a participant’s institution. Participants will then consider whether their current model is effective with regard to setting goals, making decisions, preparing and supporting faculty, maintaining high quality in distance learning courses, providing student services and support, etc. We will consider the requirements of accrediting and certifying agencies, SARA participation, and other outside influences on strategic leadership for distance learning within the organizational structure and the challenges identified. Finally, we will look at the stakeholders affected by the organizational structure and consider what voices must be heard in the strategic planning process for effective leadership in a decentralized organizational structure. Throughout this exploratory session, we will share information, experiences, successes and missteps from which we can all learn. We will establish connections and processes to continue the sharing in a network that can support current and future strategic leaders of distance learning in the participant’s institution.

About the Presenter

Dr. Lujean Baab currently serves as Senior Director of Grants and Awards for Technology-enhanced Learning and Online Strategies (TLOS) for Virginia Tech. In this role, she provides leadership for the support of distance learning through strategic planning for and coordination of key funding programs and leads efforts to fulfill TLOS responsibilities for meeting expectations of university policies, accreditation and credentialing entities as well as strategic initiatives related to distance learning.

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Evaluation Rubrics for Online Courses and Programs: Start to … Finish?

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Summary

The effective evaluation of online courses and programs is a critical component to any college or university with an online presence. Several models, such as Quality Matters and OSCQR, exist to help institutions with these quality initiatives. Such evaluation rubrics, however, rarely provide a one-size-fits-all solution for the needs of any given institution, so campus leaders will often remix from existing frameworks as a way to balance what has been proven in the field to “work” with what the college or university requires from its evaluation instrument. In addition, evaluation rubrics can serve many purposes: instructors can use them informally as a checklist in the development of their own courses; departments can use them as a peer evaluation mechanism for program improvement; institutions can mandate their use as a measure of quality standards; and teaching and learning centers can use them as an effective teaching tool in their faculty development programs. While these purposes are most often in alignment, developing an evaluation rubric that addresses all of these needs can be a challenge. Furthermore, online program rankings, such as the U.S. News and World Report, use the course evaluation process as an indicator of quality and overall ranking among online undergraduate programs. This leaves campus units who support the creation of online quality courses wondering where to start… and where they might finish. The University of Wisconsin-Whitewater’s (UW-W) Learning Technology Center and the University of Wisconsin-Milwaukee’s (UWM) Center for Excellence in Teaching and Learning recently and independently revised their online course evaluation protocols in response to new research by The National Research Center for Distance Education and Technological Advancements (DETA) that identified eight quality indicators for online courses. The process for adopting new instruments required identifying key campus stakeholders and developing a system for continuous improvement and flexibility to reflect future campus changes and the dynamic nature of higher education.

About the Presenters

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Critical Analysis of Open and Distance Education Concepts

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Summary

The ePoster will discuss our empirical findings on how ten open and distance education concepts such as: (1) online learning, (2) e-learning, (3) Web-based learning, (4) distributed learning, (5) computer supported learning, (6) computer assisted learning, (7) computer mediated learning, (8) virtual learning, (9) open learning, and (10) distance learning have been constructed and deconstructed in three decades in Turkish academia. Our data source is 200 dissertation studies published on the above concepts in Turkey. The purpose was to better understand the consistencies, interactions, and research problems addressed under each concept. Dissertations were thematically coded in a qualitative sense in NVivo 12 software and the codes were numerically compared in a quantitative sense in Microsoft Excel. Findings provide a historical picture and interaction map of the mentioned ten concepts.

About the Presenters

Merve Basdogan is a doctoral candidate in the Instructional Systems Technology Department of Indiana University (IU). Her research focuses on exploring, understanding, and supporting strategies for learner’s engagement in both online and face-to-face contexts with an emphasis on personalized learning and technology-supported learning design. Currently, she is conducting a conceptual analysis of open and distance education concepts to better understand the consistencies, interactions, and research problems addressed under each concept for her dissertation research.
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Multi-Modality Feedback: High Touch Strategies to Support Metacognition and Transformative Learning

Dr. Kristen Betts, Clinical Professor & Kate Fan, PhD Student
Drexel University

Summary

Feedback is critical to student learning and meeting course objectives. Effective feedback also supports the development of reflective thinking skills. Although feedback plays a vital role in facilitating student’s development into independent learners who can evaluate and regulate their own learning (Ferguson, 2011), effective feedback is complex and multifaceted (Ahea, 2016; Sadler, 2017). Research shows that students often misunderstand teacher’s feedback, especially written feedback, in higher education (Agricola et al, 2020; Sadler, 2017), making multi-modality feedback a potentially more effective alternative, particularly when teaching across educational formats including online, hybrid, and face-to-face.

This session focuses on shifting from feedback to feedforward approaches and discusses how metacognitive practices can assist students with transfer of learning. High touch strategies for providing multi-modality feedback (text, voice, and video) will be shared and demonstrated. Quantitative data and qualitative feedback will also be shared. Participants will leave with a feedback checklist that can be used with onsite, blended, and online courses.

About the Presenters

Dr. Kristen Betts is a Clinical Professor in the School of Education at Drexel University. Kristen has over 20 years of experience working in higher education with online learning and serving in key leadership positions within private, public, and for-profit institutions. Her research focuses on online and blended learning; Mind, Brain & Education science; Online Human Touch/high touch; neuroandragogy; accreditation; student/faculty recruitment and retention; and transfer of learning.

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**Student Success: Balance Content, Assessment & Cognitive Load**

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**Summary**

Advancements in neuroscience and technology are transforming what is known about the brain, mind, and learning. These advancements provide critical insight that inform course development, instruction, and assessment in support of student success across online and blended learning. This 3-hour workshop engages attendees in evidence-based practices related to neuroplasticity, course design/review, learning, Carnegie Unit, credit-hour policy, and the critical balance between course content, instruction, assessment, and cognitive load/overload. The session also differentiates between online learning and remote learning. Attendees will actively work with one of their current/future courses and syllabus on individual and group activities. A course calculations demonstration will be provided and then attendees will have access to an Excel-based review sheet to work with their own course to measure student-instructor, student-content, and student-student. Attendees will then be assigned small groups to discuss preliminary findings and share out to the larger group. Attendees will then be provided access to a cloud-based application where they will work on their own measurements. They will then work in different small groups to discuss their findings and report out to the larger group. The session concludes with a collective discussion on policies/regulations, cognitive load, and shared best practices. This session is facilitated by an interdisciplinary team of faculty from three colleges/schools at Drexel University: School of Education and College of Nursing & Health Profession. Panelists will share replicable instructional and assessment strategies to assist students in improving their learning and to improve key indicators of student success, including retention, graduation, transfer, and placement rates. This workshop is designed for all educators (instructors, instructional designers, administrators).

**About the Presenters**

**Kristen Betts**, EdD is a Clinical Professor in the School of Education at Drexel University. Kristen has over 20 years of experience working in higher education with online learning and serving in key leadership positions within private, public, and for-profit institutions. Her research focuses on online and blended learning; pivotal pedagogy; Mind, Brain & Education science; Online Human Touch/high touch; accreditation; and student/faculty recruitment and retention. Dr. Betts is a Fulbright Specialist and teaches with the OLC certificate programs.

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Dana Kemery, EdD is the Director of Innovative Course Design and Technological Infusion and an Associate Clinical Professor at Drexel University College of Nursing and Health Professions. Dana is a University Online Fellow, supporting learning online and digitally enhanced educational environments across the university. Dana regularly presents at educational conferences focusing on novel technology use in synchronous and asynchronous environments. As a Quality Matters Master Reviewer, she has reviewed ten online and blended courses both internal and external to Drexel University focusing on online quality and the learner experience. Dana is certified as a Nurse Educator and is a member of the CNHP Master Teachers Guild.

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Online Labs – It Can Be Done!

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Summary

What does it take create a quality lab experience for students in an online course? Learn how the laboratory experiences for two introductory-level college biology courses were developed, supplied, and taught online using hands-on, wet science lab kits. Discover the range of lab possibilities offered by Carolina Biological Distance Learning. Share your experiences, ask your questions, and brainstorm ways to move your lab experiences into the online space.

Presenter Information

Kalli-Ann Binkowski collaborates with faculty to integrate existing and emerging technologies into their teaching. Her work includes managing projects and initiatives, creating course sites, implementing emerging technologies, and designing new instructional and assessment activities. Kalli has 18 years of teaching experience and holds master’s degrees in education and plant biology.

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How Does Competency-based Education Change the Faculty/Dean Dynamic?

Heather Bradshaw-Arne, J.D.
Professor
Rasmussen College

Caroline Gulbrandsen, Ed.D.
Academic Dean
Rasmussen College

This session will explore techniques to a successful working relationship between faculty and their supervisors in the competency-based education format.

About the Presenters

Heather Bradshaw, J.D. is an innovative professor of law and ethics, who connects with students in a variety of modalities: residential, purely online, blended, and flat instruction. She is committed to helping students achieve their goals by providing them with a variety of resources and skills for overall career success. Heather has more than twelve years of experience in developing system-wide curriculum and courses for law and ethics courses from the 200-600 level. She is currently teaching and designing courses for our undergraduate and graduate Competency Based Education courses.

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Caroline Gulbrandsen, Ed.D. has been the academic dean at the Rockford, Illinois campus of Rasmussen College since 2009 and manages full and part time faculty. She has more than twenty-eight years of experience in education and professional development. Caroline has created numerous faculty and professional development programs as well as designed traditional and CBE courses at multiple levels for several institutions. She also teaches a graduate scholarly research and writing course in the CBE modality as well as doctoral level courses in a more traditional online format.

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Effectively Training Hands on Software Virtually
Hands-on Virtual Training with the Direction of a Live Instructor and Floater Instructors

SUMMARY

There are many platforms of virtual training where a user can watch a task but cannot perform the task in a real-time setting while the instructor observes and have instant feedback. Using this method of virtual training allows the students to see and understand how they are performing with the feedback provided by the instructor. The students will initially watch the instructor do the task and then after the instructor has completed their instructions can perform the steps hands-on. The students are given time to ask questions and perform the same task while the second instructor is watching their performance and/or individually assisting a student. If the second instructor sees there are problems understanding the task, the second instructor will indicate to the primary instructor to go over the task again to make sure the student understands the concept of the task.

ABOUT THE PRESENTERS

Angela Chase is the Assistant Chief Learning Officer for Distance Education.
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A design framework for adaptive learning in higher education

Baiyun Chen, James Paradiso, Joseph Lloyd
Center for Distributed Learning
University of Central Florida

Summary

The University of Central Florida (UCF) is strategically implementing adaptive learning to improve student success in large-enrollment and gateway courses. Since 2014, UCF faculty members and instructional designers have collaborated to deliver courses through a variety of adaptive platforms, including Realizeit, ALEKS from McGraw-Hill, Knewton Alta, Acrobatiq, and others. Employing these adaptive systems has markedly improved student learning outcomes; therefore, the Center for Distributed Learning (CDL) continues its strong commitment to providing pedagogical and technical resources to help faculty members successfully integrate the adaptive system that fits best with their personalized teaching approach and unique classroom dynamic.

This ePoster will discuss the adaptive design framework employed by the Personalized Adaptive Learning (PAL) team and faculty at UCF. Courses designed under this framework include a portion of the overall instruction delivered via an online adaptive learning system that customizes objective-driven content and assessments to create a personalized learning path for each student according to their knowledge, skills, and learning needs. Lessons learned and supporting data (e.g., student learning outcomes) will also be highlighted throughout the session.

About the Presenters

Baiyun Chen is a Senior Instructional Designer at UCF’s Center for Distributed Learning. She leads the Personalized Adaptive Learning team, designs and delivers faculty professional development programs, and teaches graduate courses on Instructional Systems Design.
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James Paradiso is the Program Coordinator of UCF's Affordable Instructional Materials (AIM) initiative and an instructional designer on UCF's Personalized Adaptive Learning (PAL) team.
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Joseph Lloyd is an instructional designer on UCF's Personalized Adaptive Learning (PAL) team and facilitator of UCF’s PAL6000 Faculty Development Course for faculty interested in implementing PAL content into their coursework.
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Improving Writing Skills in Clinical Students Through Online Gaming

Jodi Clark-LoCascio, MD MPH
CWWS Associate Professor
Nova Southeastern University

Yamile Marrero, JD MPH
CSCS Clinical Assistant
Professor Florida International
University

Summary

The ability to communicate through reading, writing, listening, and speaking are skills that clinical students should possess as future health practitioners. Professional documentation is imperative for good medical practice and proper documentation. Practitioners must also write effectively to convey medical concepts and critical scientific information. The use of web-based writing skills training for health science students’ self-assessment and self-directed learning can be an invaluable tool for clinical academic programs.

This presentation will describe the evolution of the implementation of an online learning gamification and concurrent class learning game competition to improve the writing-skills of health science students in the distance learning classroom. This project will replace a conventional online lecture-type educational module and is the first of its kind to be developed for this online health professions program. The demonstration will include the experience of researching, developing, and implementing the training and the use of the online gamification. The presenters will also discuss incorporating the learning management system’s tools such as the discussion board, quizzes, and vlogs, to facilitate the game’s student-led team engagement. In the session, the faculty will share the gamification's current use, lessons learned, and student feedback. During this exploratory forum, the creators will also discuss future aspirations for the gamification experience, potential next steps, and gather information from interested participants.

About the Presenters

Jodi Clark-LoCascio is an internal medicine physician, public health practitioner, and an associate professor. She teaches undergraduate, graduate, and doctoral level medical and public health courses and is also responsible for developing, implementing, and evaluating clinical higher education trainings within several of the health science programs. Dr. Clark began teaching online in 2002 and has taught in online and blended environments.

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Yamile Marrero is an attorney, public health practitioner, and a clinical assistant professor. She has taught online and blended courses for over 10 years.

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AAA is the new A+ Mastering Accessible Online Course Development

Anna E. Cook, Senior Product Designer and Instructional Designer
University of Colorado Boulder, ATLAS Institute

Summary

When it comes to distance education, we are tasked with generating viable course materials and ensuring that our courses connect with students in a digital format. However, to truly create an inclusive learning environment, we need to employ empathetic design strategies at every step in our course creation. In this session, we will provide strategies to support developing courses inclusive to students with a wide range of abilities, including students with disabilities. Learn about the Web Content Accessibility Guidelines (WCAG) and how to deploy them effectively in distance course design and development. We will share accessibility resources for course organization, Word and PDF creation, video captioning, and image management. Come away from this session understanding how designing for learning differences can help all students while having step-by-step accessible course design guides to make it happen.

About the Presenter

Anna E. Cook is a Senior Product Designer and Instructional Designer pursuing a Master's of Science in Creative Technology and Design at CU-Boulder. Over the past eight years, Anna has specialized in building inclusive experiences and creating scalable systems to support accessible practices in both product teams and educational environments. Anna has hands-on experience teaching both educators and students alike and is a passionate advocate for universal design thinking in all aspects of her work.

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Working with OPMs and Other 3rd Party Providers - Tips and Resources

Becky Copper-Glenz
Dean, School of Graduate, Online and Continuing Education
Fitchburg State University

Summary

Online education has become a necessary component of higher education in today’s market. Many universities that consider themselves to be “traditional” have sought out the help of 3rd party vendors to build and grow their online programs as a low-cost alternative to investing in developing their own internal infrastructure to support and promote online programs.

This session will provide a brief outline of the recent growth of Online Program Management (OPM) providers and discuss the pros and cons related to OPM and other 3rd party University partnerships. The results of a survey conducted to gather perceptions from University professionals that work with OPMs or have considered working with OPM’s will be shared. Interview summaries with several OPM providers will also be reviewed to reveal their thoughts about the future of OPMs and University relationships. Finally, a summary of best practices for managing OPM partnerships and a checklist of considerations Universities should review prior to deciding whether or not to embark on a relationship with an OPM will be provided.

About the Presenter

Becky Copper-Glenz is the Dean of Graduate, Online and Continuing Education at Fitchburg State University and one of her responsibilities is to manage partnerships with an (OPM’s) and related 3rd party vendors. Becky has worked in the field of online learning and extended campus for over 25 years and has experience working at private non-profit, public and for-profit universities. Becky has a Doctorate in Education Leadership and a Master of Arts in Human Development with a focus on Universal Design from Saint Mary’s University of Minnesota.

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User Experience Strategies to Improve the Learner Experience

Maria Dahman
User Experience Architect
University of Wisconsin-Madison

Summary

User Experience (UX) improves the usability, accessibility, and desirability of a product or service through Human-Centered Design. Learn some fundamentals of UX to improve your online course. This session will include using “design thinking” to improve an imaginary course, a short usability test, and small, attainable ways to make online content more accessible.

About the Presenter

Maria Dahman does user research in the Center for User Experience at UW-Madison. She studied philosophy and human computer interactions and has been integrating these studies with her interest in distance education for the last few years.

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Accountability in Education - Measuring Success for Online Learners

Jaime L. Davis, Ph.D.
VP of Academic Affairs
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Summary

Stakeholders – from students and families to regulators, accreditors to employers – are increasingly concerned with student outcomes. Outcomes can be measured through internal indicators such as course completion, competency demonstration as aligned with course outcomes, or student engagement and satisfaction surveys. Outcomes can also be measured through external indicators such as first year retention, graduation rates, employment rates, and cohort default rates.

In this session, we will discuss accountability and its relevancy in education management. Upon agreement to our obligation as educators to prepare students for education and career success, we will then be prepared to discuss the need for accountability. Participants will review the types of metrics that could exist, selecting those most appropriate for their institutions. We will also discuss tools for measuring selected areas, as well as how to determine the frequency of measurement. Finally, participants will design an accountability framework and prepare to advocate to stakeholders regarding the benefits of accountability for their organizations.

About the Presenter

Dr. Jaime Davis is the Vice President of Academic Affairs for the Center for Excellence in Higher Education. She has worked in higher education for over 18 years, with experience in Admissions, Instruction, Career Services, Operations, and Administration. Jaime believes that education empowers people to improve their lives and is committed to providing a positive environment that allows for personal and professional growth. In addition to her career in education, Jaime is the CEO of Beacon Harbor Services, a training and consulting firm whose mission is to serve others by sharing strategies that prepare people for success.

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How I Learned to Stop Worrying and Love Online Group Projects

Katie Deering
Instructional Design Consultant
University of North Texas

Summary

Across the United States, educators and administrators alike are having the same conversation: How do we increase retention? How do we do more to engage students and keep them coming back? Creating strong teams and collaborative environments in online courses is a great way to increase student engagement and keep a community of learners coming back for more.

In this session, I will discuss the reasons I incorporated online collaborative work into my introductory political science course. Retaining students so that they can reach graduation is tied directly to most institution’s funding models. Unfortunately, online courses in lower retention rate than face to face courses (Bawa 1). Especially in the time of COVID-19, with many institutions going online for Summer and Fall, it is imperative that we keep students engaged and interacting with course content. In addition, opportunities for social interaction assist in keeping students involved and there is evidence that support from other students can be more effective that instructor support in dropout prevention. In addition to being good for my institution, working in a collaborative online environment is also good for my students. Reducing the isolation of online course work by incorporating group work helps students to feel supported and valued in the class (Park 41- 42).

So why was I worried about adding online group work to my classes? I was worried that students would not be able to successfully work together without being physically present in a classroom. Students were worried about free riders and not receiving credit for their work on the project (Capdeferro 26-28). Fortunately, there are number of practices that can help alleviate the issues. Through proper planning and design, you too can stop worrying and learn to love online group projects.

References


About the Presenter

Katie Deering is an Instructional Design Consultant for the University of North Texas, where she works with faculty to create high quality online courses. Before becoming an instructional designer, Katie worked as an adjunct professor in government and history for North Central Texas College and Texas Woman’s University. Katie loves group work and she hopes you will learn to love it too.
Using Course-level Data for Research

Mary Ellen Dello Stritto, Ph.D.
Oregon State University

Summary

In doing research on student outcomes in online education, access to student data is not always available or there may be barriers to accessing the data such as privacy regulations. In some cases, course-level data is more easily accessed. For example, you may not have access to individual students’ grades in a data set, but you may have the average grades for a set of courses. What can you learn from this course-level data? How can you use course-level data to answer your research questions? We designed a study around course-level data to answer questions about the comparative outcomes of students in online versus face-to-face courses.

This presentation will describe the multi-step process that was developed to prepare course-level data for a study of the course outcomes for instructors who taught online and face-to-face within the same academic year. There is a significant body of published literature that comparing outcomes in online course vs face-to-face courses. In the Online Learning Efficacy Research Database there are currently 260 of published comparative studies across 75 discrete disciplines from 187 academic journals. An examination of these studies reveals many small-scale studies comparing one or a few terms of online vs face-to-face courses. There are fewer large-scale studies comparing the outcomes from multiple terms or instructors. Due to the nature of these comparative research study designs, the results have limitations. Some studies do not control for factors such as the instructor, instructor experience, term taught, class size, and other factors.

We set out to conduct a study that could reduce some of these factors that limit the value and rigor of these comparisons. The study was conducted at a large, comprehensive R1 institution with over 24,000 students taking online courses. This presentation will share the process of planning and conducting this study by answering the following questions:

1. How did we get the data?
2. What did we do with the data?
3. How did we build a one-instructor data-set?
4. What did we analyze?
5. What did we find?

The study results suggest that instructor, term taught, and class size may not fully explain the differences in outcomes for the course types. Participants will be asked to brainstorm other factors that could contribute to differences in these modalities.

About the Presenter

Mary Ellen Dello Stritto, Ph.D. is the Director of Research for Oregon State University Ecampus, where she designs and conducts research studies on online teaching and learning, provides support for faculty research on online education, and produces tools to promote research literacy. Her background is in psychology with a specialization in quantitative methodologies, survey design, and statistical analysis.

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Researching online students’ perspectives

Oliver Dreon, PhD
Director, Center for Innovation in Teaching & Learning
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Summary

To better examine the factors that contribute to online students’ perceptions of quality and engagement, our institution developed a survey that drew on foundational concepts of online learning (Community of Inquiry, Moore’s Model of Interaction, etc.). The survey was distributed to all students who completed an online class in the previous academic year. With over 800 undergraduate and graduate students participating in the study, the data demonstrates critical factors that contribute to students’ feelings of engagement with faculty and peers and to their overall satisfaction in their online classes.

This session will provide an overview of the survey and examine the results, but also discuss how the data can be used to inform the design and facilitation of online classes. The session can also serve as a springboard for evidence-based professional development efforts on campus in support of effective online instruction.

About the Presenter

Oliver Dreon, PhD is the director of Millersville University’s Center for Innovation in Teaching & Learning and regularly lead professional development sessions for faculty who want to learn how to teach in online and blended learning environments. With thirteen years of experience in teaching in online collegiate environments, he provides best practices and evidence-based solutions to online instruction. Additionally, he also serves as the coordinator for a graduate program in K-12 Online Teaching and is the co-author of the book The Power of Blended Learning in the Sciences (Dreon, Shibley, & Wilson, 2019).

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What Are We Talking About, When We Are Talking About Online Interactions?

Xueyan Duan
Warner School of Education
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Summary

Social interaction has always been a defining characteristic of education, training, and learning. Online interactions are not an innovative topic, especially in online courses in American higher education where colleges are trying to reach to the full potential of online technology to develop a transformative model of learning. Despite a number of studies conducted on this subject, the role and impact of online interactions remain vague and narrow. Most of studies measured the quality or quantity of online interactions, which only gives us only a partial understanding about how online interactions influence students’ learning.

This ePoster will summarize the recent literature on the role and impact of online interactions in online courses in higher education, provide examples, and identify the relevant research gaps.

About the Presenter

Xueyan Duan is a Ph.D. candidate at Warner School of Education, University of Rochester, where she develops her research interest in online teaching and learning, online EFL education, as well as online education and equity. She has been working as an online instructional designer, teacher and research assistant in various online teaching and learning projects for the past six years. Working in these projects, she gains expertise in helping online instructors and students, particular those in rural areas, to taking up dynamic and responsive actions.

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Measuring Engaged Learning in Online and Blended Courses

Stephanie Edel-Malizia
Instructional Designer
Penn State University

Summary

Designing instruction for engaged learning is critical to creating high quality online and blended learning courses. By encouraging student engagement, institutions of higher education can have a positive impact on student success that leads to retention and degree completion. How can the *Indicators of Engaged Learning Online Framework* be applied to the design of online and blended courses and leveraged to improve course quality?

This presentation explores the use of the *Indicators of Engaged Learning Online (IELO) Framework* as a guide for faculty, administrators, and instructional designers, to measure the quality of online and blended courses. We will also explore how to use the *ELO Framework* to evaluate, create, and revise online and blended courses that increase course quality through planned opportunities for student engagement.

About the Presenter

**Dr. Stephanie Edel-Malizia** is currently an Instructional Designer for Penn State University, with over 20 years of experience as a leader in instructional technology spanning the k-20 realm. Her conference presentations include the European Conference on E-Learning, Online Learning Consortium, Educause, The Teaching Professor Technology Conference and the International Society for Technology in Education.

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Successful Implementation of Online Communities of Practice at BYU-I

Melissa Everett  
Online Instructor Developer  
Brigham Young University-Idaho

Caleb Trujillo  
Online Community Coordinator  
Brigham Young University-Idaho

Summary

“Providing online faculty with enriching experiences designed to improve practice, combat isolation, and share knowledge and resources is a challenge.” (Golden 2016) At Brigham Young University-Idaho (BYU-I), we have adopted various Communities of Practice (CoPs) to support our online instructors and improve the scholarship of teaching and learning in our organization. This session will involve attendees in small and large group discussions of various approaches to the aforementioned challenge and present the following successful strategies for engaging online instructors.

- **Teaching Groups**-Instructors are organized into CoPs called Teaching Groups (TGs). TGs are designated groupings where instructors ask questions, collaborate on solutions, and share best teaching practices.

- **Teaching Squares**-Peer mentoring takes place each semester in a synchronous, small-group Teaching Square meeting of 3-4 instructors.

- **Online Instructor Community**-The Community is a collaboration tool where instructors can counsel on quality online teaching practices, share successes and failures, and access ideas for improvement as an instructor.

- **Course Groups**-These groups live in the Community and are where instructors can interact, collaborate, and share resources with others who teach their same course.


About the Presenters

**Melissa Everett** is an Online Instructor Developer at BYU-Idaho working with the Instructor Development team to develop and support close to 2000 remote, online adjunct faculty. Melissa has 25 years of teaching experience in higher education (12 years online, 4 years online administration), and she is also the chair of BYU-Idaho’s annual Online Learning and Teaching Conference.

**Caleb Trujillo** manages BYU-Idaho’s Online Instruction Community and regular messaging to online instructors working closely with other departments of BYU-Idaho Online Learning to assess and influence the online instructor experience. Caleb has worked in online, higher education since 2014.

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Evidence-Based Projects Versus Dissertations to Enhance Retention

Helen Ewing, DHSc, MN, RN
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School of Healthcare Business
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Summary

Many students do not succeed in doctorate studies due to failure to complete a dissertation or other required research project which leads to high program attrition. Up to 50% of US doctorate students do not complete their degree. Research-based curricula has been the standard for post-graduate level education yet providing more innovative and applicable learning may be more appropriate for the changing and increasingly diverse student population that are seeking advanced education. Many doctorate degrees are offered through distance education to meet the needs for flexibility of learning and to accommodate diverse learners. Innovative and applicable curriculum is needed to support these learners.

The presentation will compare and contrast the strengths and limitations of an online evidence-based project versus a research dissertation curriculum for doctorate level education. A case study will present how one university developed the curriculum for an evidence-based capstone project, offered through distance education, to doctorate of health science students. The presentation will promote discussion and consideration of alternative methods to deliver doctorate programs and explore ways to enhance successful completion of the degree and promote relevant, real-time applicable projects.

About the Presenter

Helen Ewing overseas the operations of the Doctor of Health Sciences program at MCPHS University and designed and implemented the evidence-based capstone project. The capstone project is the main component of the critical terminal project for the degree.

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Click “Next” to continue: Exploring Self-Paced eLearning

Kevin Forgard
Senior Instructional Designer
WIDA at the Wisconsin Center for Education Research
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Summary

Self-paced eLearning can be defined as a type of distance education that is asynchronously delivered with little to no facilitation. Examples of self-paced eLearning can vary greatly. Most of us have experienced these in human resources training delivered through an LMS-delivered SCORM packages. However, self-paced eLearning courses could also be, Kahn Academy modules, web-based software training via Lynda.com, or other learning experiences that learners consume independent of an instructor. These learning packages offer a convenient way to reach a large audience by providing a multi-media instructional experience and assessment process that is typically designed around specific learning objectives, front-loaded with instructor presence in the form of narration and text. As ubiquitous as self-paced learning material offerings are, it is important to explore their design considerations and assumptions. For instance, what designers need to ask is: What motivates learners to engage with self-paced eLearning materials? What design choices help or hinder learners? How do designers best leverage development tools to implement an effective self-paced course or curriculum? How does assessment certification i.e. “badging” really work in a self-paced environment? And, what are the hurdles in self-paced eLearning design related to learner accessibility?

This session will ask participants to explore various self-paced eLearning examples in order to elicit discussion on what works or does not work in common design practices. The idea of – Click “Next” to continue – models design practices often seen in self-paced eLearning courses, which is often the design template for these materials – a somewhat linear progression through learning materials that ends in an assessment. Through discussion and overview of design standards and practices, such as those espoused in Clark & Mayer’s book, E-Learning and the Science of Instruction, Michael Allen’s book, Michael Allen’s Guide to e-Learning, and Moore’s Theory of Transactional Distance, participants may challenge their assumptions and incorporate new ideas into their self-paced eLearning course designs.

About the Presenter

Kevin Forgard is an instructional designer for WIDA, designing and developing training materials for K-12 educators who work with English Language Learners. His focus is on high enrollment self-paced training courses, designed to meet the needs various state-client training needs. Prior to this role, Kevin had worked for the University of Wisconsin Colleges Online (defunct) where he helped manage the design and delivery of an online undergraduate curriculum and an online faculty professional development program.

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A Case Study Examining the Effects of Online Instructor Training

Thomas M. Freeman
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Dr. Michelle Jarvie-Eggart
● Sr. Lecturer, Engineering Fundamentals
● Affiliated Faculty, Cognitive Learning & Sciences
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Summary of Presentation/Discussion Topic:
In the 2018/2019 academic year, Michigan Tech’s Faculty Senate voted to require all online instructors to be trained in current best practices of online teaching. Faculty were also incentivized with a $500 stipend for completing ED5101, Foundations of Online Teaching. In the spring of 2020, all faculty shifted to emergency online teaching during the global COVID-19 pandemic. The University has maintained the Senate Policy must be adhered to and all faculty must be certified for either fully online teaching or Remote Instruction (live synchronous class sessions via Zoom) by Fall 2020. This presentation will discuss the content of ED5101, as well as participating faculty’s perceptions of the course and some of their surprising takeaways.

Group discussion will address the following questions:
1) What are the essential elements of effective training for online teachers?
   a) How can we leverage the opportunity to teach educational methods in online faculty training?
2) How has online training changed in a COVID-19 world?
   a) How have your universities responded to training needs for online faculty?
   b) Are training needs different for fully online teaching vs Remote Instruction (live synchronous distance education class sessions via Zoom)

Presenter Summaries:
Thom Freeman, MA in Ed., oversees the provision of Instructional Design services and LMS Support and provides guidance and direction in the design, development, and administration of distance learning programs and online learning, to faculty and academic departments. He teaches graduate education courses in online teaching and integrating educational technology into teaching and learning. Michigan Technological University, Jackson Center for Teaching & Learning, 1400 Townsend Dr, Houghton, MI, 49931, phone: (906) 487-3026, email: tfreeman@mtu.edu

Michelle Jarvie-Eggart, PhD, PE, ENV SP, lectures in Michigan Tech’s first year engineering program. She is also teaching an emergency section of ED5101 for summer 2020. She has taught online at MTU, UMGC, NMU, MUST, GCU & APUS. Michigan Technological University, Department of Engineering Fundamentals, 1400 Townsend Dr, Houghton, MI, 49931, phone: (906) 281-1872, email: mejarvie@mtu.edu
Redesign Course on a Dime

Carissa Gober, Ed. D & Jenny Stegall, Ph.D.
Assistant Professor of Education
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Summary

This hands-on workshop will focus on our experience in the integration of the asynchronous tools of Flipgrid, Nearpod and Edpuzzle. These tools have enhanced course interaction and engagement, which has been extremely beneficial during the shift to all online instruction due to COVID-19. Course surveys and evaluations support the integration of these tools.

We will share our own experience in course redesign, experiential videos, and our successes. Work alongside us as we showcase each tool and explore ways to implement these tools into classes. There will also be a time for brainstorming and questions and answers.

About the Presenters

Carissa Gober, Ed.D. has taught ten online graduate and undergraduate courses and designed seven courses for two institutions. She frequently presents to PK-12 schools, community colleges, and campus departments on the subjects of English Learners, pedagogy and online instructional tools.

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Start with the end in mind: Backward design in online courses

Dianne Gregory, Lead Instructional Designer
Susan Bailey, Lead Instructional Designer
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Summary

Designing and developing a new online course – or even revising an existing online course – can be a daunting task for faculty. The employment of backward design can help mitigate some of that anxiety and work to create an effective learning experience.

Backward design centers course development on achievement of learning goals. Course learning goals and objectives help clarify activities and tasks within a course that lead to effective learning. By beginning with the end in mind, instructors are able to lead students in a well-defined direction toward assessment of learning.

In this session we will lead audience members through the process of backward design, highlighting three stages:

- Identifying learning goals and objectives in a course
- Determining appropriate activities, assignments, and assessments
- Designing learning experiences that will meet the stated goals and objectives

Participants will be able to use a provided template to visualize the major components of a course; discuss examples, questions, and ideas; and consider ways to use backward design in their own course design and development.

About the Presenters

Dianne Gregory collaborates with faculty to create engaging, creative, and effective online courses. With more than 20 years of higher education teaching experience, Dianne’s interests include meta-cognition, digital literacy, teaching through storytelling, and student engagement. She works with faculty to encourage strong online teaching practices and enjoys helping instructors feel confident in the online environment.

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Susan Bailey works with instructors to design and develop courses for effective online delivery. Susan has supported teaching and learning in higher education for over two decades and draws from her experience as both an online instructor and an online student to provide sound pedagogical support.

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Integrating diverse workforce experiences into hybrid courses

Amanda M. Hinson-Enslin, Ph.D.
Marietta Orlowski, Ph.D.
Nicole R. Kinzeler, Ph.D.

Summary

Incorporating early experiences of professionals in online content, assessments, and activities is a method of workforce development, shares potential career paths, and provides opportunities for students to engage with professionals and their expertise. Often these experiences are found in the face-to-face courses; however, there is a need to include the same experiences into online/hybrid courses. This session we will 1) review the challenges and solutions of incorporating professional experiences in online content; 2) discuss and demonstrate the development of five assessment/activities for a new project management course that are transferable to other disciplines; and 3) discuss the development of an action plan for incorporating an assessment/activity that utilizes professional experiences.

About Presenters

Amanda M. Hinson-Enslin is an assistant professor at Wright State University where she teaches in the Master of Public Health Program. For almost a decade, she has been involved in instructional design, course development, and teaching face-to-face, hybrid, and online courses that promote self-directed learning.
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Building a Mentoring Program for Online Instructors

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Instructor Developer
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Brad Barson
Instructor Developer
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Summary

As institutions increase the size of their online programs, the mentoring of online instructors to encourage professional development and ongoing improvement in online instruction is of increasing concern. BYU-Idaho Online Instruction has mentored, trained, and developed online instructors for over a decade. Instructor and student survey data consistently shows that as instructors engage in the mentoring program, they experience improved student satisfaction scores as well as increased job satisfaction.

During this Interactive session, Instructor Developers from BYU-Idaho share their mentoring principles, the structure of their mentoring program, and their training and reporting processes. Potential pitfalls and roadblocks to a successful mentoring experience will also be discussed. Finally, participants will explore how the lessons shared can be applied to their own institutions. They will draft thoughts and questions for further exploration with their departments.

About the Presenters

Rachel L. Huber works at BYU-Idaho developing leaders and mentoring programs with almost 2,000 remote online instructors. Her doctorate focused on applying servant leadership to higher education online learning and has seen how powerful these principles can be in improving learning and teaching.

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Brad T. Barson works on the Online Instructor Development team to help facilitate the professional development of almost 2,000 remote adjunct online instructors. He has been involved in creating online training courses, modules, self-help articles, learning conferences, and live online webinars for almost five years, earning a master’s degree from Utah State University in Learning Technology and Instructional Design.

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Accessibility Now: Inclusive Policy and Design

John P. Jones
Director, Media Resources Center and Interim Accessibility Coordinator
Wichita State University

Summary

A wave of new accessibility complaints and lawsuits has created new pressure on institutions to address the accessibility shortcomings of their offerings. Wichita State University was put in a position four years ago to make an agreement with the National Federation of the Blind that bound us to making our offerings accessible.

This presentation will provide the benefit of lessons learned and resources developed over the course of the four years that Wichita State has been working to create an accessible experience for our students and community. We will discuss writing policy, auditing technology, creating purchasing processes, and developing instruction and experiences that are accessible for all.

About the Presenter

John P. Jones has taught online for more than five years and has led instructional design teams launching dozens of online programs at Wichita State. He also worked as an instructional program manager for a fortune 500 company and has two decades of experience in web design and media production.

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Effectively Training Hands on Software Virtually
Hands-on Virtual Training with the Direction of a Live Instructor and Floater Instructors

SUMMARY

There are many platforms of virtual training where a user can watch a task but cannot perform the task in a real-time setting while the instructor observes and have instant feedback. Using this method of virtual training allows the students to see and understand how they are performing with the feedback provided by the instructor. The students will initially watch the instructor do the task and then after the instructor has completed their instructions can perform the steps hands-on. The students are given time to ask questions and perform the same task while the second instructor is watching their performance and/or individually assisting a student. If the second instructor sees there are problems understanding the task, the second instructor will indicate to the primary instructor to go over the task again to make sure the student understands the concept of the task.

ABOUT THE PRESENTERS

Angela Chase is the Assistant Chief Learning Officer for Distance Education.
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Empirical approach to identifying digital learning innovation trends

Tanya Joosten, Ph.D.
University of Wisconsin - Milwaukee

Background

The Online Learning Consortium (OLC) partnered with the National Research Center for Distance Education and Technological Advancements (DETA) sponsored by the Bill & Melinda Gates Foundation to identify digital learning trends in postsecondary education. Underrepresented students enrolled in postsecondary educational institutions in the U.S. are faced with key barriers and challenges that have created an equity gap. By considering the needs of underrepresented students, faculty and institutions are able to implement digital courseware solutions to take a step towards closing the equity gap and improving student learning, course completion, persistence, and degree completion. Along with the imperative to improve student outcomes and close the equity gap, digital learning innovations have the potential to improve instruction and learning effectiveness by facilitating effective pedagogies of and to improve the efficiency in higher education.

Minimizing costs and improving the quality of learning are intrinsically tied together with several of the digital learning innovations. Although the innovations may improve access and be more efficient, there is an initial investment that is required by institutions and faculty. Faculty require times and funding to support their professional development in using new innovations. Institution implementation of innovations required proper infrastructure - human, technical, and financial. Fidelity of implementation can help or hinder any adoption of a digital learning innovation, and therefore, it needs to be carefully planned and implemented with care within an institution and within a course. Although there is evidence that more academic leaders view digital learning innovations as part of their strategic plan, faculty still are reluctant to invest the time to adopt these solutions.

Some institutions and faculty are long time adopters of digital learning innovations. Learning management systems (LMS) and mobile devices are thought of as core learning technologies at the majority of institutions and systems throughout the U.S. With the advancements in mobile version of technologies and learning tools interoperability allowing for the integration of courseware into LMS, students have one stop learning from their device anywhere and anytime. Yet, there are faculty and institutions that are newcomers to digital learning innovation. The on-ramping of these entities while redundant has created a spiral effective or waves of adoption of core learning technologies situated as emerging technologies. These core learning technologies remain critical to advancing student success and closing the equity gap. Moreover, students appreciate them.

With the increase in digital learning innovations, it is evident that institutions, faculty, and researchers find themselves with large amounts of data about teaching and learning that they previously were unable to capture in scale in traditional, face-to-face, and onsite courses. Although some faculty have been using data within the LMS for years to guide their support for their students and their instruction, there are new opportunities to advance methods in collecting and analyzing data to enhance the understanding of and the ability to predict student success. Additionally, these data can be visualized for easier consumption and in of themselves have the opportunity to improve student learning.

Data Analysis
The focus of this effort was to illustrate trends in digital learning innovation. Traditionally, trends in the mass media in postsecondary education are determined by a solo expert’s opinion or possibly the opinions of a group of experts or an organization. Seldom are trends developed through qualitative or quantitative methodologies including data collection and analysis.

For this study, digital learning innovations were to be located through a scan of the postsecondary environment through various data sources in order to identify prominent innovations that have the potential to improve student outcomes in postsecondary education. Digital learning innovations were to include technologies, such as adaptive learning and open education resources, that improve access, equity, and learning. A timeframe for the collection of relevant data was established from January 1st, 2018, to September 1st, 2019. Previous Bill and Melinda Gates digital learning innovation award analysis was included as one data source. Other data sources included documents produced and distributed by industry leaders, national organizations advancing technology and learning, prominent research centers, influential research journals (peer reviewed), popular news and media outlets, funded initiatives, key institutions, vendors or products of interest, and other key publications from national organizations or efforts to see what themes and topics are relevant in the current landscape. Over a dozen data sources were reviewed. Documents, including articles, reports, web content, and more) were pulled directly from database and organizations’ sites when possible. Informal interviews were conducted with various academic leaders in the field at key organizations. Articles were summarized noting key themes and findings until themes were saturated, at which point key themes were noted but articles were not summarized. Articles were saved and compiled on a server for additional review or verification. In sum, over 400 articles were reviewed.

Findings

Primary trends in digital learning innovation included adaptive learning, open education resources, gamification and game-based learning, massive open online courses, learning management systems and interoperability, mobility and mobile devices, and design. Secondary trends in digital learning innovation included blended learning, dashboard, and virtual reality and artificial intelligence. Secondary trends in digital learning innovation are trends that were not prominent throughout the data set but may have been identified as a theme for at least one data source. Several honorable mentions have been shared as well.

Conclusion

Both adaptive learning and OER were prominent solutions facilitated by digital courseware adoptions through the lifecycle of the DLI Awards.

Gamification, game-based learning, and MOOCs revelation as a trend is driven by the prominence in relevant research journals due to their general popularity across the country and the globe. The LMS and mobile devices seem to be two staples in digital innovation that continue to have broad adoption and implications for student learning. These two are core technologies and infrastructure components across postsecondary institutions that influence student expectations and continuity of their learning experience.

Portions of this conference proceedings are excerpts from the report that can be found through the Every Learner Everywhere Network at:
References


Presenter summaries

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Minority students’ online learning readiness

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Background

Students require certain behaviors and attitudes in order to learn successful online. Early studies performed an inquiry amongst groups of faculty and students to help identify what students needed to possess and do in order to be successful in online courses. Later studies looked to operationalize these requirements to better assess student readiness and influence student outcomes. Joosten and Cusatis (2020) developed a new instrument incorporating two decades of literature. They reported significant findings with several measures of online learning readiness (e.g., online work skills) and students’ outcomes. However, in examining the differences of perceptions of readiness, they also reported that minorities have significantly different perceptions of their readiness for online learning, in particular, in areas that could impact their success in an online course. They also had findings that contradicted previous research and felt that additional research was needed. This conference session and proceeding will share findings from our third study at the National Research Center for Distance Education and Technological Advancements (DETA) examining online learning readiness with support from the Spencer Foundation.

This study extends the research by examining the critical association between students’ preparedness and readiness and students’ outcomes in online courses using a new iteration of the readiness instrument previous developed by Joosten and Cusatis (2020) and replicating the study to a mixed methodological approach as previously conducted by Joosten, Cusatis, Harness, and Craig (2020) to enhance our understanding of the needs of minority students and how they can be better serviced through instructional and institutional practices.

This proceeding and session discusses the findings of our most recent research where we 1.) examined the relationship between minority students’ preparedness and readiness for online learning, 2.) identified skills that minority students feel are most useful in an online course, and 3.) provided recommendations for how minority students can be better prepared for learning in an online environment.

Data Analysis

Data was collected from students enrolled in at least one online course at one of three institutions of postsecondary education through a student survey and the institution’s student information system. Measures included nine (9) areas to assess their preparedness for online learning: Social Technology Skills, Online Work Skills, Technology Access, Organization and Self-Directed, Online Efficacy, Communication Competencies, Experimentation and Growth Mindset, Achievement Mindset, Student Socialization, Social Competencies with Instructor, Social Competencies with Classmates, Learning, Academic Achievement, and Satisfaction. Also, qualitative data was collected through open-ended survey questions asking students about the impact previous experiences in online courses had on their most recent learning experience, skills they perceive as necessary for online learning success, and recommendations for how instructors and institutions of higher education can help students succeed in an online learning environment.

Both minority and non-minority students (N = 441) were surveyed. Analysis on the participants who were identified as a racial/ethnic minority according to student information system’s data (N= 154) was conducted. Statistical analyses included multiple regression analyses to examine student preparedness and readiness as a predictor of student outcomes for minority students. Thematic analysis was used to analyze the qualitative data.

Findings

RQ1: What is the relationship between ethnic and racial minority students’ preparedness and readiness for online learning and student outcomes?
H1: Ethnic and racial minority students’ perceptions of H1a.) learning, H1b.) satisfaction, and H1c.) academic performance (course grade) will positively and significantly related several components of readiness and preparedness for online learning as described previously. The results of the regression indicated the preparedness measures and related demographics explain about 46% of the variance in perceived learning. It was found that online efficacy and communication with instructor were significantly and positively associated with self-reported learning. The results of the regression indicated the preparedness measures and related demographics explain about 60% of the variance in perceived learning. It was found that online work skills, online efficacy, and communication with instructor were significantly and positively associated with satisfaction. Additionally, communication with classmates was inversely associated with satisfaction. The results of the regression indicated the preparedness measures and related demographics explain about 28% of the variance in perceived learning. It was found that organization and self-directedness was significantly and positively associated with students’ final grades. Contrastingly, communication competence was significantly and negatively associated with final grade. Note: The statistical findings can be found in the published article referenced at the conference session.

RQ2: What skills do minority students feel are most useful in order to be successful in an online course? The primary response from minority students related to time management. Other themes included misconceptions of easiness of online courses and inconsistency in the quantity and level of difficulty of online coursework. Minority students reported that their experience in previous online courses assisted them in feeling prepared and ready for additional online courses. Advice for succeeding in online courses also focused on organizational practices (e.g., calendar, due dates, task prioritization, syllabus reviews).

RQ3: How can instructors and institutions better prepare minority students for online learning? Students recommend that instructors and institutions invest in providing additional resources for students in online courses (e.g., sharing tips and strategies, providing an online readiness course, and increasing the types of academic support services for online students). Also, they recommend support to help with time management, the importance of it and how to achieve it. Note: Detailed qualitative findings can be found in the published article referenced at the conference session.

Conclusions

Institutions and instructors need to build capacity to support online learners, in particular, minority students and other underrepresented groups. DETA is currently developing an intervention including a self-assessment tool and an online learning readiness course.

References


Presenter summaries

Tanya Joosten, Ph.D., is a Senior Scientist and the Director of Digital Learning Research and Development and the National Research Center for Distance Education and Technological Advancements, at the University of Wisconsin – Milwaukee. More information can be found on her website http://tanyajoosten.com or at DETA http://detaresearch.org.

Tanya Joosten
Using Learning Principles to Design Transformative Digital Education

Rachel Koblic
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Summary

Given the modern age of lifelong learning and our need to be continually upskilling and reskilling to keep pace with rapid evolution in the workplace, more and more learners are seeking out educational opportunities to keep up. In this pandemic-accelerated digital age, an increasing number of universities are opting, or being required, to offer those opportunities online. However, to date, many of these online learning experiences are no more than direct replicas of the residential classroom—digitized textbooks, lectures recorded from the back of the classroom, exams with pages of multiple-choice questions. Digital tools and technology allow us to do so much more than this simple translation. The question is, how can we use evidence-based principles of learning science to transcend this replication and achieve truly transformative digital education? Join 2U, Inc. Senior Director of Course Strategy Rachel Koblic to learn how innovative curriculum design and delivery in digital education has not only challenged pedagogical norms but has also enhanced the student learning experience to ensure digital courses are just as good as—if not better than—their on-campus counterparts.

About the Presenter

Rachel Koblic is the Senior Director of Course Strategy at 2U, Inc., where she oversees a team of learning designers that help our university partners’ faculty bring their courses to life in the digital environment. She has more than 15 years of experience connected to learning and education—including designing and developing curriculum for the American Sommelier Association in New York City—and is an online MSEd candidate in Instructional System’s Technology at Indiana University—Bloomington.

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Ask a Librarian: Integrating Library Resources into Course Design

Eric Kowalik and Claire Dinkelman
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Marquette University

Summary

Marquette University, a Midwest medium-sized Jesuit institution, recently began offering its first fully online undergraduate degree program and is expanding its online graduate program and certificate offerings. Through this process of creating new classes or converting on-site classes to online classes, the Office of Digital Learning (ODL) has partnered with the library to ensure student academic success.

In spring 2019, the ODL reached out to the Library to assess how to involve librarians in the online learning environment. The library developed a “menu” of services and the library established itself as a receptive and collaborative partner, particularly in the area of copyright. Design involvement is in the early stages but opening clear communication of what is possible will open more doors in the future.

Librarians and instructional designers from the Raynor-Memorial Libraries and the Office of Digital Learning will showcase how these two departments have partnered to develop interactive digital learning objects, an embedded librarian program, and digital scholarship support. It will explore how the two departments established a relationship and how departments overcame initial challenges. This session will also highlight how the library’s involvement changed when all summer classes were moved online and created through the Office of Digital Learning.

Please bring ideas and implementations from your own campus experience so through the wisdom of the crowd, we can discuss other ways the library can support distance learning programs.

About the Presenters:

Eric Kowalik is an instructional designer in the Research and Instructional Services (RIS) department at the Raynor-Memorial Libraries at Marquette University. He has over a decade of experience collaborating with faculty and librarians, using Desire2Learn and a variety of multimedia software, to design and develop online courses and learning objects on a variety of topics.

Claire Dinkelman is a health sciences and online learning librarian in the Research and Instructional Services (RIS) department at the Raynor-Memorial Libraries at Marquette University. As the RIS liaison for the Center for Teaching and Learning and the Office of Digital Learning, she works with instructional designers to find appropriate online course materials, while fielding questions about copyright.

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The Care and Feeding of Adjunct Faculty in Online Classes

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Summary

Change can be scary. No one wants to look foolish. I believe these two statements cause many prospective instructors to avoid online delivery. While technical tools are vital, technology resources by themselves do not vanquish the underlying fears of faculty new to online delivery. In this session, I will relate my experience in mentoring adjunct faculty as they developed and delivered online courses. I will describe the process I used in working with our university’s online resources while serving as a one-on-one mentor with the adjunct faculty member.

About the Presenter

Diane Kuhlmann, PhD, is a professional lecturer and assistant director of the MS in Taxation program at DePaul University in Chicago, Illinois. She has been associated with the DePaul online MST program since 2002. Initially, she was the tax director at a national CPA firm which partnered with DePaul in offering an in-house online synchronous MST program. In 2012, she joined the DePaul faculty with responsibility for transitioning the MST program to asynchronous delivery.

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Phone Apps That Create Engagement, Accountability, and Behavioral Change

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Summary

"Phone Apps That Create Engagement, Accountability, and Behavioral Change", will share with the audience how phone/tablet apps are being used in course designs to increase student involvement, and help the instructors assess true attendance/assignment completion with the use of a GPS app, step tracker, HR monitor, and self-assessment activity reflection. Higher Education Programs, that align with the Health Science fields, are constantly addressing behavioral change concepts and attempting to find ways to help Americans engage in more daily activity that is fun and sustainable. This course design engages students with solid course outcomes but also has been found to be a behavioral change tool for many of them as it has increased their weekly/daily activity output that is now sustainable and beneficial to their overall health and wellness. The tools and apps in this course are not being used in hybrid campus courses that have found the same positive outcomes both in and educational outcomes and the personal health outcomes. Adding movement to normally stationary courses has been found to increase retention of content and also increase the understanding of the content when linked with an activity that aligns with the course content. The outcomes of the course design are from student course evaluation and subjective feedback on success stories from individual students that have results of decrease anxiety, improved attention and focus on tasks, and improved sleep. the presentation will share the course design, apps used in the course, tweaks made to improve the course after one semester of use, and how some of the course content has been mixed into other courses [both online and hybrid] with positive outcomes for students and their college experience.

About the Presenter

Dr. Kim LeBard-Rankila is an Assistant Professor at the University of Wisconsin Superior, In the Health & Human Performance Department, and is the Community Public Health program coordinator and Exercise Physiology Lab Director. She led the on-line program development of both the public health and exercise science programs allowing students to complete their four-year degrees fully on-line. She has designed multiple courses in both face-to-face and online formats that are student centered and researched based to align with current career needs.

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Equity-Centered Digital Learning Strategies for Open Education

Danielle R. Leek, PhD
Director of Academic Innovation & Distance Education
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Summary

Open education strategies have the power to reshape education by reducing costs, freeing information and bringing culturally relevant and student-centered pedagogy to our classrooms. Yet the success of open education projects relies on the ubiquity and cost efficiency of digital technologies that are not experienced equitably by students, faculty or staff. Digital inequities, such as differing access to software or broadband internet, are amplified by cultural narratives that encourage us to see the world as a series of circuits – a collection of people who have tech skills or don’t, people who can access the Internet or cannot, or people with resources and those without.

This workshop invites participants to challenge the institutional and cultural factors that perpetuate digital inequity by exploring an approach used in Bunker Hill Community College’s successful open education program. First, participants take a cultural wealth approach to map the “circles of technology” in their own experience, and on their own campus. Next, participants are asked to explore how digital technologies shape our stereotypes of what to expect from ourselves, our students, and our campus experience. The workshop concludes with a guide for moving forward with open education programs that are equity-centered in their approach to digital learning.

Participants are encouraged to bring a piece of paper and writing instrument, or digital drawing device, to the workshop.

About the Presenter

Danielle R. Leek, PhD, is the Director of Academic Innovation & Distance Education at Bunker Hill Community College in Boston, Massachusetts, where she directs the College teaching center and oversees online programs. She also heads up the college’s Open Educational Resources Program which includes over 200 sections of open education courses annually in almost every academic program at the College. Danielle was a 2018 Open Education Group Research Fellow and is currently a member of the Massachusetts Department of Higher Education Open Educational Resources Advisory Council.

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Required Student-to-Student Interactions: To Have or Not to Have?
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Summary
While exploring factors influencing charitable giving on the part of alumni of online programs, my colleague, David Schejbal, and I came across an interesting finding. In terms of student satisfaction with required student-to-student interactions in online courses, the results are mixed. For example, while some studies such as by Swaggerty & Brommel (2016) and Martin & Bollinger (2018), reported that students found useful certain forms of required learner-to-learner interactions; Beulow, Barry, & Rich (2018), & Moore, Warner, and Jones (2016) reported that in the big scheme of online learning, student-to-student interactions are deemed a poor use of time. In a study exploring the relationship between presences and learning, Kyei-Blankson, Ntuli, & Donnelly (2016) found that while learner-to-content and learner-to-instructor interactions were significant influencers of the online student experience, learner-to-learner interactions were not found to be influential.

As student satisfaction is a predictor of charitable giving on the part of alumni of online programs (Guild, 2018), we designed a qualitative study to further explore student perceptions of required student-to-student interactions in online courses (Lesht & Schejbal, 2019). In particular, we were interested in students’ views of required learner-to-learner interactions in online degree programs.

Study Background
This was an interview-based study of students. The sample was drawn from four institutions, three public and one private. This study was limited to students in online degree programs, rather than students enrolled in stand-alone online courses. The interviews were semi-structured to facilitate deep exploration of various aspects of student input on this matter. Data were collected during spring-summer 2019. The researchers worked in cooperation with colleagues at the select institutions who in turn reached out to students in their respective online degree programs about the study.

Participants
Thirty-three students (including one recent graduate of an online program) participated in the study. The invitation was open to online degree students regardless of discipline or level. Consequently, participants included those enrolled in undergraduate and graduate online programs as well as those at various stages in their respective programs from just starting to completing. A variety of disciplines were represented by students in the sample.

Methods
For this qualitative multi-institutional study, a semi-structured interview procedure was used. To facilitate participation, students were offered time slots on various dates. Several (albeit not all) students chose the same dates and times and thus were interviewed together. The other participants were interviewed individually. Data were analyzed for generic themes.

Findings
Students consistently noted that discussion forums were only useful if their instructors were actively engaged in the discussions, were relevant, and were structured to encourage useful dialogue. There was strong sentiment among participants that required discussion between students should be authentic rather than rote. Participants also noted activities such as peer review and group projects, when properly structured, were much more helpful than discussion forums with one exception. Opportunities through
forums that were not required but allowed students to ask each other questions about courses or application of material were valued.

A number of participants questioned the assumption that students should be required to interact with each other in online courses. The point was made that in on-ground courses students are not necessarily expected to engage with each other in every class session. A “buddy” system among students in discussion forums was also suggested. Students in the study encouraged instructors to carefully consider the way any required student interaction is graded, to set clear and consistent expectations, and to be fair when grading.

Conclusions

A major recommendation from this study is that instructors should seriously consider the necessity of required student-to-student interactions in their online courses. Does such a requirement advance learning on the part of students? If so, how will assignments be structured to ensure critical thinking and practical application? Furthermore, if requiring learner-to-learner interactions in online courses it is imperative that the structure of such interactions facilitate genuine discourse that advances knowledge and skills rather than mono-syllabic responses. The latter are frowned upon by online students. At the same time, focused assignments, such as peer review and encouraging students to share how material covered can be applied in actual situations they’ve encountered, can enrich the online experience.

References


About the Presenter

Faye L. Lesht, Ph. D., has worked in online and continuing education for over 30 years. Her current research, in collaboration with her colleague Dr. David Schejbal, is on philanthropic behavior of graduates of online programs toward the institutions from which they earn degrees.

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Teach More Students Without Increasing Your Instructional Time

B. Jean Mandernach
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Summary

With more students seeking online learning opportunities, student demand for access to online classes often exceeds course availability or traditional class size limits. While there is considerable literature outlining strategies for increasing class size by automating learning activities via technology or utilizing teaching assistants, there is a dearth of research exploring strategies to increase online class size while retaining high levels of personalized interaction/feedback with a single instructor. Presentation overviews online course design strategies that allow an instructor to double (or triple) course size while maintaining opportunities for frequent student-instructor interaction, individualized feedback, and a personalized learning experience. Study overviews a comparative analysis of student learning outcomes, satisfaction and engagement from students enrolled in either a 25- or 60-person online general psychology course.

This research focuses on strategies for increasing course size without increasing faculty workload. Key to this instructional approach is integrating student choice in learning activities and the creation of an interactive, personalized learning experience that doesn't overwhelm instructional time.

Study Background

This was a reflective comparative analysis of an online general studies course (specifically, General Psychology) that was redesigned with an intentional focus on increasing class size without impacting the instructional time required to facilitate the course, student learning, or student satisfaction. Key to the redesign was a focus on maintaining consistent student-student, student-content, and student-faculty interaction. In addition, priority was placed on ensuring limited instructional time targeted interaction, presence, and feedback.

Setting

The study took place over two subsequent semesters in which one online section of General Psychology was offered each semester. Courses each lasted 16-weeks and were fully online with no face-to-face or synchronous online components. Both the original and redesigned version of the course contained 15 modules of content (one chapter of material per module) and a final exam. All courses utilized the same textbook, were taught by the same instructor, and included an identical final exam. The course does not utilize a teaching assistant or supplemental grader.

The target course (General Psychology) is a prerequisite for more advanced courses in the Department of Psychology and aims to provide a foundation from which to build a more complex understanding of psychological processes and phenomenon. The following goals were consistent across all sections of the course:

- Introduce students to the diverse field of Psychology. The field of Psychology is extremely broad which makes it impossible to teach students about every important concept in one class. Rather than attempt to
become “experts” in any one area, the course familiarizes students with a general understanding of the various fields of Psychology.

- Demonstrate that psychology is a research discipline with important human applications. The course emphasizes how psychologists do research, consider the results, and apply these findings to real-world settings.
- Teach students to become intelligent consumers of psychological research. This course teaches students critical thinking skills to effectively analyze psychology and behavioral research to allow students to incorporate psychological knowledge into their daily life.
- Familiarize students with current trends in technology that influence the field of Psychology. As computers and other technology become increasing incorporated into education and research, it is vital that students learn to use computers/technology to their advantage.

In the original course, students were required to complete the following assignments for all 15 modules:

- **Online Discussion** - Online discussion explore the application and analysis of psychological concepts. Students must post a minimum of three times to each discussion (initial response to discussion prompt and a minimum of two peer replies).
- **Mastery Quiz** - For each chapter, students must complete an online quiz. Mastery quizzes can be completed an unlimited number of times prior to the due date; only the highest score received prior to the due date will be recorded.
- **Journal** - Students are required to keep a personal psychology journal throughout the semester and complete one journal entry per chapter. For each journal entry must be a one-page (typed, 12-point font, double-spaced, 1-inch margins) description relating course information to your life.

The revised course was divided into three blocks that each contained five modules/chapters. Students were given a list of five assignment options (see below) and were required to select and complete ONE of each assignment type per block plus the mastery quiz. As such, at the end of the course, they had completed three of each type of assignment (for a total of 15 assignments) and 15 mastery quizzes. The assignment options are:

- **Online Discussion** - Online discussions explore the application and analysis of psychological concepts. Students are required to respond to the initial discussion question and a minimum of four peer replies.
- **Journal** – Identical to the previous original course journal assignment.
- **Research Analysis** – The research analysis requires students to read a selected journal article and analyze its value/relevance. Each research analysis includes 20 multiple-choice questions and one essay designed to test students’ ability to understand, critically evaluate and apply information from psychological research.
- **Video Exploration** – The video exploration is students’ opportunity to investigate ONE selected course topic in more detail. The video exploration requires students to select a single topic, theory, term, concept, or research study relevant to the chapter and research the selected topic in more detail. The goal of this assignment is to learn more about the topic than what is presented in the textbook. Students then create a video of themselves sharing the information they discovered. Videos must be between 1- and 2-minutes. They do not need any graphics or other multimedia; the video should be of student talking into the camera.
- **Current Event Analysis** - The current event analysis is designed to allow students to further explore psychology in the real world. For the current event analysis, students must find reports of current events (i.e., media reports, news stories, magazine articles, blog posts, or videos) that relate to concepts of psychology. Students submit an identification of the psychological concepts relevant to the current event and an explanation of how psychological concepts apply. Current event analysis must be prepared as a bulleted list in which students identify each concept then include a few sentences explaining the relationship.

Participants
Participants in this study self-selected to take the online version of General Psychology at the University of Nebraska at Kearney. While no demographic data was collected about individual participants, students taking this course (including those in the online version) tend to be traditional-age, campus students who are taking online courses to increase schedule flexibility. Most students are not psychology majors, but rather are taking General Psychology as a component of their general studies requirements.

The original version of the course enrolled 25 students per semester. The revised version of the course enrolled 60 students.

**Method**

All data was collected using existing course metrics and evaluations at the conclusion of the course. The following variables were included in the comparative analysis:

- **Student Learning** – Student learning was examined using final exam scores and overall course grade.
- **Student Engagement** – Student engagement was measured as a function of the number of discussion posts beyond the required minimum for grading.
- **Student Satisfaction** – Student satisfaction was gauged using end-of-course evaluations (both quantitative and qualitative data).
- **Instructional Workload** – Instructional workload was measured in the revised version of the course using self-report time logs of work. No instructional workload data was available from the original course, so published indicators of average online teaching time were utilized for the comparison.

**Findings**

An examination between the 25-student original course and 60-student revised course showed no significant difference in final exam score or overall course grades. As anticipated, the revised course structure did not increase learning; but equally important, it did not harm learning either. The grade distribution was equivalent across both sections of the course.

In contrast, students reported feeling more engaged in the revised, large-enrollment course and engagement metrics showed that students in the 60-person revised course actually posted beyond the required posts in the discussion forums more frequently than did the students in the smaller-enrollment section. Students in the 60-person section frequent commented in the end-of-course evaluation that they enjoyed not having a discussion every week, and, as such, were more energized and engaged in the interaction on the weeks in which they elected to participate in the discussion.

Likewise, an examination of the end-of-course student evaluations showed that students in the revised, large-enrollment course were overall more satisfied with their online learning experience. They reported feeling more engaged with the content and more engaged with the instructor. While they did not report feeling more engaged with their classmates, they also did not indicate a dissatisfaction with the level of peer-to-peer interaction. A content analysis of the open-ended responses found three consistent themes in the feedback of the revised, large-enrollment section: 1) students enjoyed having a choice in the assignments they complete; 2) students appreciated variability in the assignments each week (particularly noting that they get tired of completing discussions all the time); and 3) students felt like they had high levels of interaction with the instructor. The two areas of complaint indicated by the end-of-course responses were confusion in understanding the LMS gradebook and challenges with assignment choice within the LMS structure.

While no data was kept about instructional workload in the original, 25-person section, instructor workload logs of instructional time investment were kept for the revised, 60-person section. On average per week, the instructor spent 150 minutes facilitating discussion interaction, 198 minutes on grading and feedback,
minutes responding to email and texts, 20 minutes in synchronous interaction, and 30 minutes on content development. In total the instructor spent an average of 8.07 hours (or 484 minutes) per week teaching the revised, 60-person section. If we compare this with research concerning the average time spent per week teaching an online course, approximately 9.5 hours per week (an estimated average based on Cavanaugh, 2005; Mandernach and Holbeck, 2016; Mandernach, Hudson and Wise, 2013; Mupinga & Maughan, 2008; Rockwell, Schauer, Fritz and Marx, 1999; Van deVord and Pogue, 2012), the revised course structure resulted in a slight decrease in instructional time.

Conclusions & Recommendations

The original course structure required all students to complete all assignments every module. This structure creates a learning environment in which all students have high levels of interaction and feedback every module. As such, the time required for effective instruction, feedback, and grading is directly proportional to the number of students in the class. Using this model, increases in class resulted in associated increases in instructional workload.

The course revision was driven by a distributed workload strategy. In the revised course, each assignment option was selected to serve a specific pedagogical purpose and required differential instructional time. Specifically, discussions targeted interaction, journals focused on feedback, and video exploration targeted instructor presence. Rather than having high levels of interaction, presence, and feedback in every module, these components were distributed across three blocks. In this manner, all students had consistent, distributed opportunities for high levels of interaction, feedback and instructor presence. Using the block structure ensured that students didn’t select all one assignment option for subsequent weeks (for example, choosing to do the discussion for three weeks in a row) that would prevent having regular interaction or feedback throughout the course. The result of distributing the student activities is a leveling of the instructional workload across the semester. The following workload estimations are based on a 5-day workweek with a 60-student class size that results in approximately 12 students per assignment option per week:

<table>
<thead>
<tr>
<th>Course Assignment</th>
<th>Frequency</th>
<th>Pedagogical Purpose</th>
<th>Instructional Workload</th>
</tr>
</thead>
<tbody>
<tr>
<td>Online Discussion</td>
<td>1 per block / 3 total</td>
<td>Encourage critical thinking about course concepts; promote student-to-student and student-to-instructor interaction</td>
<td>≈30 minutes a day facilitating discussion (150 minutes per week) ≈2 minutes per week feedback per student (24 minutes per week)</td>
</tr>
<tr>
<td>Journal</td>
<td>1 per block / 3 total</td>
<td>Prompt personal reflection and application; provide individualized feedback</td>
<td>≈6 minutes per week feedback per student (72 minutes per week)</td>
</tr>
<tr>
<td>Research Analysis</td>
<td>1 per block / 3 total</td>
<td>Understand psychology as a scientific discipline; connect course concepts to research</td>
<td>≈1 minute per week feedback per student (12 minutes per week)</td>
</tr>
<tr>
<td>Video Exploration</td>
<td>1 per block / 3 total</td>
<td>Encourage personalized learning; establish instructional presence</td>
<td>≈3 minutes per week feedback per student (36 minutes per week)</td>
</tr>
<tr>
<td>Current Event Analysis</td>
<td>1 per block / 3 total</td>
<td>Apply course concepts to life events; provide feedback on understanding</td>
<td>≈4.5 minutes per week feedback per student (54 minutes per week)</td>
</tr>
</tbody>
</table>
The revised course structure created a learning environment that maintained learning while increasing class size, interaction, perception of instructor presence, and student satisfaction. While the goal was to maintain instructional workload, the resulting workload was actually slightly lower than the average time spent to teach an online course. Current investigations are examining class size limits to this model (with an 80-student enrollment); initial results suggest that the class size can be increased further with non-proportional increases to the instructor’s workload.

References


About the Presenter

B. Jean Mandernach, Ph.D. is Executive Director of the Center for Innovation in Research and Teaching at Grand Canyon University. Her research focuses on enhancing student learning in the online classroom through innovative instructional and assessment strategies. She explores strategies for integrating efficient online instruction in a manner that maximizes student learning, satisfaction, and engagement. Jean is an active presenter and consultant in the field of online education and serves on various editorial boards. In addition to authoring numerous journal articles and chapters, Jean co-authored (along with Tobin and Taylor) the book, Evaluating Online Teaching: Implementing Best Practices.

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Virtual Worlds Provide Gateways to Virtual Reality Learning Simulations

Kay McLennan, Ph.D.
Sr. Professor of Practice
Tulane University, School of Professional Advancement

Summary

Voice-enabled virtual world platforms have been replaced with virtual reality (VR) applications in the lexicon of noteworthy new educational simulation technologies. Yet, the same impediments to the wider use of early virtual world technologies now inhibit the wider educational use of the available VR technologies, including the high cost of custom content creation, limited proven applications, and limited use (by early adopter faculty).

This exploratory session will cover the new features in virtual world viewers that enable [older] virtual world platforms to be used with [newer] VR applications. In turn, the use of retrofitted virtual world viewers in concert with existing virtual world content overcomes some of the impediments to more widespread use of VR applications, including the high cost of custom content creation and limited proven applications.

About the Presenters

Kay McLennan has more than fifteen years of experience teaching online as well as directed a two-year online courses quality improvement initiative (https://files.eric.ed.gov/fulltext/EJ967819.pdf) and is the founder of the Tulane SoPA Metaverse virtual world. Kay uses student feedback to refine and expand the virtual simulations she creates to use in the business and education online courses she teaches.

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Stacey Eharb developed and manages the SoPA Video Studio. Stacey’s professional foci include videography, animation, and gaming in online learning.

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Utilizing Varied Workshop Formats to Develop Effective Online Faculty

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Sr. Professor of Practice
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Kayla Jutzi
Instructional Designer
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Summary

While providing short length webinar-based training topics for adjunct instructors is an important first step towards optimizing the effectiveness of adjunct instructors, certain types of faculty training (like how to develop an online course and how to teach online) merit the use of longer faculty training sessions. In addition, longer format training sessions provide more opportunities for isolated adjunct faculty to establish collegial networks and feel more connected to the institution.

This exploratory session will detail the successes and challenges involved in the use of a 13-week online course development workshop and a 4-week one teaching essentials workshop. Discussions during this session will feature proven examples of how to organize and deliver longer format faculty training; how to utilize gaming elements to increase faculty participation and engagement; and, how to increase training participant completion rates.

About the Presenters

Kay McLennan has more than fifteen years of experience teaching online as well as directed a two-year online courses quality improvement initiative (https://files.eric.ed.gov/fulltext/EJ967819.pdf) and is the founder of the Tulane SoPA Metaverse virtual world. Also, Kay developed and facilitates a 4-week long Online Teaching Essentials (online teaching behaviors) workshop.

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Kayla Jutzi is one of the instructional designers at SoPA -- creating and facilitating a 13-week long faculty online course development workshop. Kayla’s professional interests include online course workload calculators, processes, and building effective instructional designer professional networks.

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Designing for Social Learning - Taking the “groan” out of group work.

Nicole E. Messier
Instructional Designer
Rasmussen College

Summary
Why are people so passionate about social learning, either for it or against it? If we say the word group work, why do people groan aloud? What makes us have such a strong emotional response to group work, when we all need to learn how to work well with others?
Is creating social learning opportunities in online learning vital to student success? How do we prepare students for the workforce of the future without social learning? How do we foster communication, teamwork, diversity, and collaboration with no interactions between students?
What are the steps to design effective social learning? What questions should be asked in the designing of social learning? What are some best practices for providing opportunities for social learning in course design and instruction?
These are just a few of the questions we will discuss as we examine evidence-based practices for designing and using social learning in online courses. We will look at examples of both traditional group work and non-traditional group work. We will analyze the positive and negative effect on student outcomes of both traditional and non-traditional group work. We will also discuss guiding questions for designing, technology tools that support social learning, and the challenges of implementing social learning in online courses.
This session will use Padlet for reflection and discussion. You can download the App from Google Play to your phone, and a link will be provided for laptop use. Participants will receive a digital handout with guiding questions for designing social learning as well as research on social learning.

About the Presenter

Nicole E. Messier is an instructional designer at Rasmussen College, where she collaborates with subject matter experts, faculty, and other stakeholders to create traditional and competency-based online courses. Nicole has a Bachelor of Arts Degree in Education and Public Policy from Ashford University and a Master of Arts Degree in Curriculum and Instruction from Saint Xavier University.

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Peer Review Model – It isn’t the receiving but the giving of feedback!

Nicole E. Messier  
Instructional Designer  
Rasmussen College

Summary

“The purpose of feedback is to change the student, not the work, to improve their performance on tasks they have not yet attempted.” ~ Dylan Williams

This session will address this quote by examining the importance of feedback for student learning and performance, the effects of giving and receiving feedback on student performance, the challenges of using a peer review model.

The process for designing a peer review model will be broken down and guiding questions will be provided to support the development of new models. Elements of a peer review model developed for a Bachelor of Nursing Capstone course will be shared, as well as how this model addressed challenges in peer review and each of the guiding questions.

This session will use Padlet for reflection and discussion. You can download the App from Google Play to your phone, and a link will be provided for laptop use. Participants will receive a digital handout with a peer review model, guiding questions for designing a peer review model, and research on the effectiveness of peer review.

About the Presenter

Nicole E. Messier is an instructional designer at Rasmussen College, where she collaborates with subject matter experts, faculty, and other stakeholders to create traditional and competency-based online courses. Nicole has a Bachelor of Arts Degree in Education and Public Policy from Ashford University and a Master of Arts Degree in Curriculum and Instruction from Saint Xavier University. 

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How can we use data to inform design and deployment of online courses?

Alexandra Miller
Instructional Designer

Derek Thurber
Senior Instructional Designer

Arizona State University

Summary

Since the rise of distance teaching and learning, the use of data has been central to the conversation of improving outcomes, driving retention, and better supporting the work we do across all areas of higher education. Yet, like in many industries, making data actionable to see real improvement has fallen far short of promises. The data readily available for online courses tends to be too high level (e.g., enrollment rates), too focused (e.g., student evaluations), too ambiguous (e.g., learning analytics), or too anecdotal (e.g., student focus groups). How do we gather relevant, actionable data at scale? How might we leverage that data to make informed decisions? In the Mary Lou Fulton Teachers College at Arizona State University, we have developed a documentation ecosystem to tackle this issue. The central component of the ecosystem is the “courseography,” a database of more than 150 courses across all of our programs. The courseography includes staffing details, course objectives, course assessments, media assets, external tool information, and scope and sequence documentation. Data have already helped document accessibility of course media, usage rates of technology tools, and comparison of student workload expectations across courses and programs. With over 3,000 individual records in the courseography and growing, the potential for additional insights from the data is significant.

In this session, we will explore additional ways to utilize data to make actionable decisions about course design and deployment. What types of insights around student achievement or student perceptions on key design elements such as teaching presence can be determined based on a review of course components? Can we derive any understanding of optimal group sizes for different types of assessments, courses, or student populations? The presenters will share their own experience designing and implementing a documentation ecosystem, specifically the courseography, including the highlights and struggles of that process, then engage session participants in structured discussion and interactive exercises to consider what approaches to data accumulation and usage would be appropriate in their own contexts. As such, the session will focus on actionable insights into collecting and using data to improve decision making in real world contexts related to administration, design, and deployment of online courses.

About the Presenters

Alexandra Miller is an Instructional Designer with the Mary Lou Fulton Teacher's College at Arizona State University. She designs and manages online courses in multiple graduate education programs. Previously, she was the Educational Technology Specialist for the Office of English Language Acquisition Services at the Arizona Department of Education. In that capacity, she created and delivered virtual professional development and online certification courses for teachers of English learners. She has an M.Ed. in Education Technology from Northern Arizona University and an M.A. in Anthropology from Arizona State University.

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Derek Thurber is a Senior Instructional Designer for Learning Design at Mary Lou Fulton Teachers College at ASU who spends his time facilitating and coordinating all aspects of a curriculum design and planning process with groups of faculty engaging in multi-year program design or redesign efforts. Prior to joining ASU, Derek worked for Northwestern University where he was responsible for the conceptualization and launch of a graduate certificate in Higher Education Administration and the support of in-person and blended-format courses in the School of Education and Social Policy. In his early career, Derek also worked for Riverland Community College designing, developing, and facilitating online and in-person tutor training.

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Diversity, Equity, and Inclusion of Neurodiverse Online Learners

Gloria Y. Niles
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University of Hawai‘i - West O‘ahu

Summary

Neurodiversity is a concept that recognizes and honors neurological differences as variations of the human genome like the human diversity of ethnicities, genders, and orientations. The neurological divergence that creates neurodiversity of the human experience includes individuals who are often labeled. This session will explore inclusive practices in higher education that reframe the concept of neurodiversity, focusing on the removal of exclusionary barriers often experienced by neurodivergent learners.

Exclusionary barriers can manifest in attitudes, beliefs, and practices situated in unconscious biases that impact course design. Accommodations and institutional policies that comply with federal laws designed to ensure equitable access for individuals with disabilities can marginalize Neurodiverse learners. Attendees are encouraged to bring a copy of their institution’s syllabus statement that addresses accommodations for students with disabilities. During this session, attendees will critique the statement through the conceptual framework of the individual or medical model of disability and the social model of disability, intersecting with the concepts of diversity, equity, and inclusion.

At the course level, this session will address universal access in digital learning pedagogy and instructional design elements for an inclusive learning experience that embraces neurodiversity. Attendees will apply concepts of positive niche construction to accommodate universal access through personalized learning experience platforms. A central focus will address promoting a class culture that respects and values neurodiversity by facilitating peer reciprocity in collaborative paired and group interaction in online and blended learning environments.

About the Presenter

Gloria Y. Niles has over 25 years of experience in various levels of education. By earning a Doctor of Chiropractic degree with post-doctoral training in Neurology, and a Ph.D. in Special Education Leadership, Dr. Niles has unique expertise and a passion for promoting diversity, equity and inclusion for Neurodiverse learners in higher education, particularly in the online learning environment.

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How to be in 2 Places at the Same Time:  
*Distance Learning Meets Field Education*

KyungJa Oh  
Eileen Shanley-Roberts  
Contextual Learning  
Bexley Seabury Theological Seminary Federation

**Summary**

Field Education is a traditional apprenticeship-based practicum offered by theological schools and seminaries to give those training for professional ministry hands-on experience in faith community leadership. The use of online curricula has necessitated the development of effective strategies to manage and maintain what were once person-to-person relationships and interactions. Now distance learning is tasked with engaging a disbursed student body in didactic course work, partner and train field supervisors and guide and train core members of the field sites that are in different locations. The Contextual Learning Program (field education) at Bexley Seabury Theological Seminary has been redeveloping into a distance learning model that maintains the valuable practicum training of the past. The online course consists of synchronous meetings that allow students to engage in facilitated peer consultation around events arising in their local field sites and creates cohorts for support and learning in a disbursed context.

This ePoster will review the steps taken to transform a traditional didactic and practicum curriculum into an online platform by illustrating the Contextual Learning program at Bexley Seabury Seminary. The program has been developed over the past three years and demonstrates the ability to be present in the field while teaching didactic courses from the physical campus at the same time.

**About the Presenters**

**KyungJa Oh** is the Director of Formation and Contextual Learning, Assistant Professor in Practical Theology.

**Eileen Shanley-Roberts** is the Assistant Director of Formation and Contextual Learning, Lecturer in Practical Theology.

KyungJa and Eileen are on the faculty of Bexley Seabury Theological Seminary Federation, Chicago, IL, which has been redesigning of its Masters of Divinity degree program to an online format. Additionally, they both serve as priests of The Episcopal Church.

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Cheating and Impersonation Detection Technology in Distance Education

Jo Ann Oravec
Professor, College of Business and Economics
University of Wisconsin-Whitewater

Summary

Despite many conceptual and legal struggles, capabilities for detecting cheating and false impersonation have been integrated into various systems for distance education. Concerns about cheating in distance education have expanded, often resulting in societal responses that could be classified as a “moral panic.” As related in this presentation, some of these sociotechnical systems have dimensions that are problematic in terms of their demographic and cultural assumptions, and their use can have disparate implications for individuals’ life chances. Perceptions of cheating and deception in distance education contexts have given researchers a platform for experimentation with advanced surveillance technologies; in some contexts, they have supported opportunistic impositions of intrusive forms of surveillance which have profound cultural implications and potential negative impacts on personal autonomy. Establishment of such systems can often construct adversarial relationships among students, staff, and faculty as well as contribute to a “surveillance culture,” one that often includes the monitoring of faculty and staff members as well as students. The presentation shows how the reported epidemic of online cheating, along with administrative fears of institutional scandal, have stimulated research and development of an assortment of anti-cheating measures and strategies, creating situations in which extraordinary countermeasures are often deemed acceptable. Some of the deception-detection mechanisms involved capture student documents, profiles, and personal characteristics for later use in “big data” system analytics, strategies that have already led to some legal challenges. This presentation examines consent issues in relation to how these systems collect, store, sell, and subsequently utilize information from their subjects. The presentation also discusses emerging varieties of systems for deception detection (such as Converus Corporation’s EyeDetect and other “credibility assessment” technologies).

About the Presenter

Jo Ann Oravec is a full professor in the College of Business and Economics at the University of Wisconsin at Whitewater in the Department of Information Technology and Supply Chain Management; she is also affiliated with the Robert F. and Jean E. Holtz Center for Science & Technology Studies, UW-Madison. She received her MBA, MS, MA, and PhD degrees at UW-Madison. She taught computer information systems and public policy at Baruch College of the City University of New York; she also taught in the School of Business and the Computer Sciences Department at UW-Madison (artificial intelligence). She chaired the Privacy Council of the State of Wisconsin, the nation's first state-level council dealing with information technology and privacy issues. She has written books (including Virtual Individuals, Virtual Groups: Human Dimensions of Groupware and Computer Networking, Cambridge University Press) and dozens of articles on futurism, film, artificial intelligence, disability, mental health, technological design, privacy, management, and public policy issues. She has worked for public television and developed software along with her academic ventures. She has held visiting fellow positions at both Cambridge and Oxford, was interviewed in BBC News, and was recently a featured speaker at conferences in Japan and Australia.

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The secrets to making highly effective educational content

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Summary

All new technologies are initially (mis)used under the paradigm of the old technology, and online teaching was no different. The first online courses we just digital translations of face-to-face classes, either using videos of face-to-face lectures shot from the back of the lecture hall, or text translations. Higher education had yet to understand the web as its own communication medium with its own communication principles. Eventually a handful of faculty started making online teaching content that was designed for the web by using communication principles that were developed in the private sector. Come learn these principles that will radically improve your online teaching content. The technology is available to anyone for free or little cost. The critical element is understanding how to communicate in an online setting. Drawing on examples from the private sector and higher education, this presentation will provide simple and easy methods for transforming traditional online teaching content into a format that produces deep and long-lasting learning.

About the Presenter

John Orlando, PhD, is an associate director of faculty support and professor at Northcentral University. He is a sought-after speaker who has published over 70 articles and delivered over 60 presentations, workshops, and keynote addresses on online education and teaching with technology. Dr. Orlando is also the editor of Online Classroom Newsletter and has created and taught numerous courses for faculty on teaching with technology.

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Planning for Programmatic Course Revision

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Summary

This session describes how primary personnel built a course revision schedule for the M.Ed. in HIED program that incorporated the needs of both academic and online learning units as well as the various dimensions that needed to be considered when planning course revision for a program. The three presenters will provide a step-by-step analysis on how we -- the academic program coordinator, the instructional designer, and the program manager -- waded into the unknown, made assumptions, made decisions, were corrected, and moved forward. The result was a working course revision plan.

About the Presenters

Karen Paulson is the program coordinator and teaches in the online M.Ed. in HIED program as well as the Institutional Research certificate at Penn State.

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Making Online Course Development a Transformative Experience

Eric Peloza, BS
Instructional Designer
University of Wisconsin Extended Campus

Melinda Verdone, Ed.D.
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Inside Higher Ed’s “2019 Survey of Faculty Attitudes on Technology” revealed an interesting statistic: 77% of instructors who have taught online believe it made them better teachers by refining their pedagogical skills and practices (Jaschik & Lederman, 2019). Online teaching helps instructors think more critically about ways to engage students, utilize technology, and align course content and assessments with learning objectives. Moreover, the proportion of instructors who have taught online has grown steadily over the last five years. Though the number of faculty teaching online is increasing, faculty state that a sense of community is lacking from their online course developments despite their desire for a larger supportive online community (Terosky & Heasley, 2015). In addition, faculty report a need for more administrative support for their online courses (Kampov-Polevoi, 2010). Because faculty perceive improvement in pedagogical skills and indicate a desire for community through online education, their online teaching practices should be addressed and supported.

The University of Wisconsin Extended Campus has a unique structure to facilitate faculty’s online course development within its degree programs. A highly involved administrative team oversees the implementation of courses. Campus and enrollment advisers assist with the admissions process, and student success coaches support students as they progress through their courses. Academic directors at each campus serve as points of contact for students to have a seamless experience regardless of which campus they attend. A program manager oversees each degree program to make sure there is continuity across all support teams and campuses. Regular meetings with administrative teams assure flow between program courses, alignment with learning competencies and outcomes, and adequate support for students in the program.

At the program level, faculty are directed in the use of best practices in online education (University of Wisconsin, 2017). Competencies are measurable and directly linked to assessments that are authentic and mirror real-world applications. Feedback is provided to students through well-defined rubrics and personalized comments from instructors. Learning resources are varied in format, allowing students to engage with coursework through multiple learning modalities. Media and technology are integrated throughout each course to enhance and support the online learning experience.
At the course level, instructional designers guide faculty through the course development process through a defined developmental structure. Instructional designers provide timelines with set deliverables, media support, LMS expertise, and regular one-on-one meetings. Because professional development is essential for faculty to teach online (Mohr & Shelton, 2017), instructional designers also offer faculty numerous professional development opportunities, such as training, webinars, e-newsletters, symposia, and other learning supports.

The MS in Applied Biotechnology program is used as an exemplar for UW Extended Campus’s course development process. The process is described in detail by the program’s manager and instructional designer. Feedback from faculty who have recently undergone online course development in this program demonstrates how their teaching practices have changed as a result of the experience. Responses from faculty who are new to online instruction and those with previous experience are also provided.

References


About the Presenters

Eric Peloza is an instructional designer at UW Extended Campus. He has two professional development certificates in online education from UW-Madison Division of Continuing Studies: Foundations of Online Teaching and Professional Certificate in Online Education. He has worked as an intern with UW Extended Campus, focusing on the UW Flexible Option’s Bachelor of Science in Business Administration competency-based program. As an instructional
designer, he has worked on the asynchronous UW Independent Learning program specializing in science-focused courses. One such course, Legendary Performers, won the Association for Distance Education and Independent Learning College-Level Course Award 2018. He currently works as an instructional designer for the UW Master of Science in Applied Biotechnology Degree.

**Melinda Verdone** is a Program Manager at UW Extended Campus. She has an M.A. in Teaching and Learning and an Ed.D. in Higher Education Leadership. She has previously taught online courses in graduate-level biochemistry and designed blended courses in introductory biology and microbiology.
Designing a New Digital Learning Environment - The Wisconsin Story

Renee Pfeifer-Luckett
Director, Learning Technology
Stacy Scholtka
DLE Project Manager
University of Wisconsin System Administration

Summary

The University of Wisconsin System (UWS) challenged the traditional role of an LMS as "the" platform for managing content for teaching and learning. Shifting our perspective from a proprietary, one-stop vendor controlled LMS that holds the keys to our data to an information-creating digital environment allows us to realize the many benefits of an interoperable and agile suite of services and tools that maximizes student access and success. Learn how deep stakeholder engagement uncovered the five key needs to support student success and how a fixed yet flexible learning technology ecosystem design opened the door to needed access to data.

This session demonstrates what a successful change in technology platforms looks like, as well as what is possible when a proper needs analysis process is undertaken before any decisions are made. Attendees will be able to evaluate the potential for applying the principles of a fixed/flexible learning technology ecosystem design to their own institution.

About the Presenters

Renee Pfeifer-Luckett is the Director, Learning Technology Development for the University of Wisconsin System Administration, where she is the strategy builder and service owner of the UW System Digital Learning Environment (DLE). Renee has been a leader in higher education learning technology for the past 10 years, as well as 8 years of teaching experience in face-to-face, blended/hybrid and online environments. Renee earned a Master of Business Administration degree with emphasis in Marketing and Technology Training and a Bachelor of Arts degree in French.

Stacy Scholtka is the Digital Learning Environment (DLE) Project Manager where she enjoys working with teams to create business benefit using methodologies that drive and sustain change. Stacy is an operationally focused professional with more than twenty years of management and consulting experience across a variety of industries and technologies. Stacy, a Six-Sigma Blackbelt, earned a Master of Science degree in Project Management and a Bachelor of Business Administration degree in Finance and Management Information Systems.

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“Leveraging Universities and Local Employers to Engage Students”

Yvonne Phelps ~ Michelle Palaroan ~ Summer Van Pelt
University of Phoenix

An opportunity exists for Universities to partner with employers to help support strategic student career choices and uncover employment laddering options to lay the foundation for students to up-skill in select occupational career categories. Studies indicate that students often lack the skills, knowledge or opportunities to strategically align career goals with educational aspirations and relevant job pathing. In prior work, the researchers conducted a literature review and solicited limited qualitative feedback and experience from educators within the University system. This expanded research triangulates information through the use of surveys utilizing academic directors, campus leaders, and community partners. The goal is to uncover opportunities, options and perceptions of the potential value of linking students to relevant local career options within their community. Many people opt to attend college with the idea that college will lead him or her to a future career. Not all students are focused on what that future career may be, while others are focused; however, are unable to break through their chosen career field or obtain a job after graduation. As stated in University Wire, 2014, for some students it’s tough to find jobs after graduation (para 1). Professors and University administrators alike realize that the path to employment can be uncertain and are struggling with the challenge on how to increase student’s connections to employers, either during or after graduation. The researchers will triangulate information by conducting qualitative research to address these concerns using an open-ended survey to multiple audiences (including business and academic leaders at both the University and the business community). These results will be shared and provide the foundation for discussion at the conference session.

This panel discussion will address the following questions: 1) How can Universities adapt to the changing workforce needs to support students in career readiness and career choices? 2) What role could a University play in connecting students to career options and market employers? 3) What role could a University faculty member play in connecting students to career options and local market employers? 4) How could a University support local employers? How can market employers leverage partnerships with Universities? 5) What tools or techniques can Universities employ to help support student career advancement? After attending this session, attendees will gain insight into the influence community partners can have on applicable student job experience and student academic success.

Yvonne Phelps, PhD is the Vice President of Academic Affairs for Campus Services at the University of Phoenix; she has been involved in distance education for over two decades. She holds a PhD in Organization and Management from Capella University. Dr. Phelps is also a Certified Life Coach.

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Dr. Michelle Palaroan has been with the University of Phoenix since 1999. She is currently the Director of Academic Affairs for the Las Vegas Campus. She completed her Ed.D. degree in Educational Leadership from University of Phoenix.

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Dr. Summer Van Pelt has been involved in higher education for 18 years. Currently she is the Campus Director in Hawaii for the University of Phoenix as well as an Associate Faculty member. Dr. Van Pelt holds a Doctorate in Management in Organizational Leadership from the University of Phoenix.

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Designing from the Heart! Learner Empathy and the User Experience

Debra Jensen  
Senior UI/UX Designer  
Reflection Software

Alicia Raff  
Account Manager  
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Summary

Getting to know your learner and wanting to design the best training you can for them is at the heart of a human-centered design practice called Learner Experience (LX) design. Learner Experience design focuses on developing empathy for your learners, understanding their needs, and creating a training experience that supports those needs. This practice can aid instructional designers, trainers, and developers to create more relevant and engaging trainings for their audience. However, in order to truly develop empathy for your learners, it is important to understand who they are in a way that goes beyond basic demographics. Creating Learner Personas to serve as specific representations of general groups of learners allows you to dive into their motivations, outlooks, and personalities so you can deepen your understanding and connection.

In this session we will define Learner Experience and human-centered design and discuss how it can be applied to the training lifecycle. We will also examine how Learner Personas can take audience analysis even further by cultivating a deeper understanding of your learners, which will foster empathy within your design team to help create training that is intentional and truly meaningful.

About the Presenters

Debra Jensen designs learning experiences and development solutions as the Senior User Interface/User Experience Designer at Reflection Software. Through her background in design and computer programming she has developed a passion for usability, good design, and user empathy.

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Increasing Motivation through Flexible Learning Pathways

Jessica Rebstock            Sara Hanson
Instructional Designer     Director of Career Development
Learning Tech Link          Edgewood College

Summary

In fall of 2019, Edgewood College launched the Inclusive Internship Project, which supports student internships that would otherwise be unpaid. To prepare for these internships, students are required to take an Internship Preparation course. Both for credit and non-credit versions of this preparation course are available. This session focuses on the instructional design of the non-credit Internship Preparation course. While the non-credit course offers students more flexibility, it also raised new considerations about how to keep students motivated as they worked more independently.

Learner motivation was a key focus during course design discussions. The following questions were considered:

- What motivates self-directed learners?
  
  *Design Decision:* Incorporate motivational principles that support independent learners into the course design.

- How to best keep self-directed learners moving towards their goals?
  
  *Design Decision:* Offer learning pathways that support both learner choice and provide scaffolding so that learner confidence remains high.

- How can we maintain focus on increasing learner motivation?
  
  *Design Decision:* Develop an instructional design planning tool that specifically focuses on increasing learner motivation in the course; develop a visual map for students that helps them more clearly identify a relevant learning pathway.

When considering the design of a course for self-directed learners, one must consider a learner’s motivation for taking the course. Developing learning pathways and targeted motivational strategies help students stay engaged in the course and reach their learning goals. Learners need to feel free to make choices yet also be properly supported so they stay on track.

About the Presenters

Jessica Rebstock is an independent consultant for her own business, Learning Tech Link. She specializes in the areas of instructional design, graphic design, web design, and technical training. Her passion is creating meaningful, technology-enhanced learning experiences for diverse types of learners.

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Sara Hanson is the Director of Career Development at Edgewood College. Areas of specialty include career development, career transition, professional training and development, and online and face-to-face instruction.

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The Evolution of a Faculty Development Program for Online Education

Elizabeth Rice
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Summary

A growing body of research is available on evidence-based practices in higher education. As educational costs increase, expectations for the use of impactful teaching methods are expected by students. Methods of instruction faculty were taught are no longer sufficient for today's classroom and learners. Despite this, most faculty during their education spent little to no time on educational topics and how to be an excellent teacher. Faculty development is becoming more crucial for student success to ensure that students are highly engaged in their own learning and can translate their education to the work environment.

Developing programs that are successful in engaging faculty with online learning is challenging. This presentation will present a model that has been successful, while also outlining some of the perils and pitfalls that occur with a new program so the audience can learn from these mistakes and avoid them. This program will spark ideas among faculty and other educational professionals to improve ways to engage educators in their own learning.

About the Presenter

Elizabeth Rice is the Associate Dean of Student and Faculty Success at the University of California-Davis Betty Irene Moore School of Nursing. She has been involved in the development of several online programs in nursing education and the faculty development to support online learning.

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Set the Bar: Establishing Learning Expectations on Day 1

Katherine M. Robbins
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SYKES TalentSprout

Summary

It is common on Day 1 to do things like ice breakers and have students create house rules. Those are explicit rules we establish that focus on community and how to behave together. What is less common is that on Day 1 we as teachers set expectations about the learner’s role in their own education, a critical step for creating ownership.

In my current job as an Instructional Designer, I learned the value of how setting those expectations upfront create a better experience throughout. For one, setting an expectation of accountability on Day 1 can help build motivation to stay engaged; however, that accountability has to happen from the beginning and be applied consistently throughout.

Given my own experiences learning the value of setting expectations, I created this 90-minute workshop called “Set the Bar: Establishing Learning Expectations on Day 1.” This is a Design Thinking approach rather than a more traditional workshop structure as it is meant to get everyone participating the whole time. Participants will use a modified Lightning Decision Jam structure to help each other brainstorm problems and solutions for setting learning expectations. At the end, every participant will come out of the workshop with actionable ideas they can implement in their own classes starting in the fall of 2020.

About the Presenter

Katherine Robbins is a Senior Instructional Design at SYKES TalentSprout, a company that specializes in re-imagining corporate training to follow an active-learning approach. Before being an instructional designer, she taught writing, literature, film, and teacher education courses in higher education for 8 years. She is also finishing up her dissertation, a content analysis of digital Shakespeare editions.

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When We Assume… We Cause Confusion: Ensuring technological success

Lamia Scherzinger
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Summary

It is estimated that we tap, swipe, and click on our phones 2,617 times per day (https://online.king.edu/news/cell-phone-addiction/). This seems especially true for college-aged students, who can often be found tweeting, snapchatting, IMing, and texting. Due to this observed obsession with their phone and/or computers, as instructors we often (wrongly) assume this means our students are tech savvy and will take to any new course technology we throw at them. But what happens then when they enter your class and can't figure out how to access the e-text? Or don't know how to format an Excel spreadsheet?

In this session, we will discuss how to organize your class and introduce digital tools to your students without the assumptions we sometimes can have due to the digital world they live in. A blueprint for a successful first day of classes, whether that is online or face-to-face, will be provided, as well as some tools audience members can take with them to use in their classroom, virtual or otherwise. An interactive discussion will also be included to see what tools the audience uses, what kind of feedback they have received on them, and how we can make those that met with less than enthusiastic responses more successful. Meeting students where they are also means understanding what tech knowledge they have; this session will provide the pathway to this.

Presenter Summary

Lamia Scherzinger is a lecturer with the Kinesiology Department at IUPUI where she teaches 100% online. She has been teaching in the online field since 2011 and has taught over 5,000 undergraduate students across all academic disciplines through her general education course.

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Quantum Promise of Online Learning

Ray Schroeder
Professor Emeritus and Associate Vice Chancellor for Online Learning
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Summary

Online learning emerged in the mid-1990s after the major technological advancement of public access to the Internet through the graphical browser Mosaic, followed shortly by Netscape. It was only with technology enabling broad and easy access that teaching and learning online could be realized. We are now on the verge of another revolutionizing technology that will have different, but equally important impacts on distance education. That technology is quantum computing. As we enter the Fourth Industrial Revolution, advancements on all fronts are fueled by the continuing development of artificial intelligence. AI is driving the descriptive, predictive and prescriptive analytics that are at the backbone of designing and implementing effective distance learning. Adaptive learning is advancing as we better utilize learner characteristics and performance to personalize learning. Virtual assistants are emerging for both teachers and learners. It is quantum computing that will give AI the processing power to seamlessly and intuitively enhance the teaching and learning process for all. Quantum computing is poised to enter the mainstream in the second half of this decade. We will examine the potential and promise of quantum computing and how to prepare to integrate this most powerful-to-date technology into our mission of distance teaching and learning.

About the Presenter

Ray Schroeder is Professor Emeritus and the Associate Vice Chancellor for Online Learning at the University of Illinois Springfield and Senior Fellow at the University Professional and Continuing Education. He has been engaged in leadership, online teaching, research and publication in the field over the past 25 years. Schroeder is the 2016 recipient of the Mildred B. and Charles A. Wedemeyer Excellence in Distance Education Award.
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The Power of Theory and Research to Impact our Field: Asking the Hard Questions

Rick L. Shearer

The Pennsylvania State University

Often in our rush to address our day-to-day design challenges we may ignore the theoretical underpinnings of the field and not stop to ask why we are implementing a particular design. While there is great value in practical articles and publications like the best 10 of X or the 101 Tips for Y to get us moving forward with our design and development, we must step back and ask why am I doing this, what is the impact on our learners and how do our theories of distance education assist in my understanding about the design decisions. Ours is a field based on the systematic design of education and learning grounded in our theoretical underpinnings. It is one that uses technology to facilitate learning and the overall distance education system of an organization. Thus, before we launch into a new design or technology we need to step back and ask why and explore the question through a systems lens.

This is not to say we do not experiment with new ideas and technologies in order to move our practice forward, but we need to stay grounded in our theories and continue to question them and revisit them. Also, as we examine our design decisions it is important to remember that most simple questions are always more complex than they appear and may involve exploration across several disciplines.

Further, we need to determine as best we can the attributes of our audiences. We need to look beyond the broad characteristics of adult learners, and our learners in K-12 programs, and to the context of the learning situation. Who is our audience? Is it strictly a local or national audience? Is it truly an international audience or is it a unique audience within a corporation? We have to remember that each learner is unique and therefore how do we provide a structure that allows a degree of personalization for them in their learning path. These learner characteristics should also guide our thinking around assessment strategies and help us move beyond the one size fits all approaches.

Therefore, as designers work in partnership with faculty to design and develop distance education courses it is a great time to come together to think about the why, and how our distance education theories, learning theories, and adult learning theories may help guide our questions. It is often at these moments that powerful research questions emerge and take us on interesting journeys through the literature across academic disciplines, and into areas that may be unique to certain disciplines. Also, as technologies continue to evolve, we need to revisit our theories and continue to re-examine the underlying premise of the theories and models. Do they still hold true, are their different nuances to the theories that we need to examine, and has our recent work made us question the current operational definitions within the theories?

Beyond the course level, we need to explore the coherence of our curriculum and if possible, a true cohort model that moves through courses together that ultimately may lead to greater learning outcomes. We also need to continue to examine the great work that is happening in the field around student support for our adult learners and find ways to better personalize these responses.

There are many deep questions that continue to present themselves and we need to look at these through our pragmatic and theoretical lens and ask the deeper and harder questions.

To examine how our theories of transactional distance (Moore, 1993) and the community of inquiry
model (Garrison, et al., 2000) can impact our research questions, a few recent studies that started with simple questions that turned into hard questions are highlighted below.

1. What students want in a future learning experience?

This is a study that spanned several years and started with a simple question based on the notion of needing to move away from our replication of face-to-face courses to online courses. At many conference events in the early part of this decade, including EDEN, scholars were presenting on the need to move beyond our early design approaches. In general, we recognized that as a field we had done a good job in the first phase of online DE, but should we be doing something different to truly take advantage of emerging technologies?

The research group exploring this question did not want to focus on technology but learning, and after many discussions we moved to an idea of letting our students and faculty truly drive our thinking. Thus, the resultant research question of ‘What do students want in a future online learning experience?’

What ensued was several months of faculty and student focus groups which used a very interesting technique known as the ZMET method. Through this methodology a trained facilitator uses images chosen by the focus group participants to explore the meaning and their feelings behind the images. Using this technique, we were able to take a deep dive into what our audiences really wanted in their learning experiences. The result led us to a view of a more personalized negotiated learning path with evolving community of inquiries, and a very different way of looking at our curriculum and assessment strategies.

The results supported the notion of reduced structure and high dialogue as related to the transactional distance theory, and an interesting view of social presence and teaching presence as discussed in the Community of Inquiry model. Further, it highlighted how both the faculty and students wanted to step outside our current models and practices in higher education and to a more personalized approach that reflects some of the thoughts presented in the recent work by Saba and Shearer (2018).

So, what started as a very simple question evolved into a complex study over several years as we took a deep dive into the question that really looked at the harder notion of what we mean by learning in our online courses and how to best facilitate this in the future.

Further information on this study can be located by accessing the article: Shearer, R.L, Aldemir, T., Hitchcock, J., Resig, R., Driver, J., & Kohler, M. (2020). What Students Want: A Vision of a Future Online Learning Experience Grounded in Distance Education Theory. *The American Journal of Distance Education*. 34(1) 36-52.

2. Cognitive Load and the Impact of Computers and Tablets

This study evolved out of a conversation that a small group of GA/Research Assistants and the research director were having, where they were discussing a recent article in the news that indicated that the use of computers in class actually gets in the way of learning when compared to those who took notes on paper. As the group reflected on the article they hypothesized when using the newer tablets that have digital pens (i.e. iPads), that using the digital pen would be more natural and similar to taking notes on paper. Thus, there would not be the cognitive load issues that were present with computers. While the original study was focused on face-to-face learning
environments it had major implications for distance education as we rely on technology to facilitate the learning process and bridge the psychological and communication gaps as discussed in the theory of transactional distance.

As the group began to explore what seemed like a relatively simple question it became more complex as they examined the notions of cognitive load, an important theoretical construct for designers that actually sits on top of another theoretical construct related to working memory. The exploration took the research team down a path of connecting the knowledge base around working memory (Baddeley, 2012) to that of cognitive load theory (Sweller, 2011), and subsequently to the idea that we were dealing with a dynamic system and one that could be modeled through Stella, a system dynamic modeling tool.

After connecting the theoretical premises between cognitive load and working memory the research team set out to develop and test a possible model of how working memory/cognitive load changes during a routine exercise of reading course web pages that contain text, images, and video.

System dynamic modeling is a series of trial and error, so as the research team explored relationships between multiple variables this led to many conversations and attempts at constructing the feedback loop diagrams (Figure 1) before moving to the actual modeling stage. So, again what started as a simple question transformed into a multi-year study that eventually involved the creation of the Stella model, the creation of a sample lesson around climate change, the use of eye tracking technology, and pilot testing of participants, before moving onto collecting data from a larger sample.

![Figure 1](image-url)

**Figure 1**
Sample Negative Feedback Loop
As Temperature Increases – Heating Decreases in System to Maintain a set Temperature

The resultant analysis of the videos from the pilot study when feed into the model showed support for how the model emulated the working memory/cognitive load changes as a learner moves through a small sample lesson.

Key to this study and future iterations is although the research team did not get back to the original question, the field has the beginnings of a process that may now allow us to answer the question related to cognitive load and the impact of note taking on tablets vs. computers.
While these are just two examples of how our theories can help direct us in our questioning of concepts and impact our studies, as mentioned above there are a number of other areas within the systematic design of distance education that we need to continue to examine. We need to continue to examine the notion of autonomy and re-examine our thinking around self-directed learning. We need to explore how we can move learners to deeper levels of learning in our designs and need to examine our evolving thinking around social presence and socially constructed knowledge within a more personalized approach in our designs for the learners. Further, as a field we need to explore beyond the course and continue to connect our theories to our work in student support services (advising, counseling, health services, etc.), curriculum planning, faculty development, budgeting and others. Through these explorations tied to our theories we can examine hard questions that move beyond the simpler cause and effect thinking and to a system thinking approach that will expand the fields knowledge base and move us all forward.

References


About the Presenter

Dr. Rick Shearer has served in several administrative roles within distance education operations, and faculty and design roles over the past 35 years. He continues to teach within the Lifelong Learning and Adult Education department for The Pennsylvania State University.

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Measuring the effectiveness of do-it-yourself course design training

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Summary

Institutions are utilizing quality assurance frameworks to ensure that online courses meet the needs of students and faculty. These institutions can develop in-house training or utilize pre-develop training workshops developed by quality assurance organizations such as Quality Matters (QM).

The purpose of this study was to compare the quality of online courses developed before and after course developers received QM training. This research examines (a) the impact of quality assurance training on the rubric scores, and (b) the impact of quality assurance training on course evaluations. Session participants will discuss the implementation of quality assurance training for online courses. Participants will leave with a framework for evaluating the effectiveness of in-house QM training, along with a checklist for creating an in-house training program.

About the Presenters

Dr. Robert Shields serves as Director of Curriculum Development for California Baptist University's Online and Professional Studies Division. Prior to his current role, he served as Online Learning Systems Administrator, where he managed the university's learning management system. Dr. Shields has more than 15 years of experience in online teaching. He earned his doctorate in educational leadership from California State University at Fullerton.

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Building a Successful Professional Development Curriculum

Nedim Slijepcevic
Faculty Development Program Manager
Eastern Kentucky University

Summary

Online teaching requires technical and pedagogical expertise that higher ed. faculty often do not receive as a part of their graduate studies. When presented with online teaching opportunities, instructors often resort to merely converting their face-to-face classroom into an online format. This approach often does not produce optimal online teaching experiences for faculty or learning experiences for students. In this presentation, we will demonstrate and discuss the necessary steps for developing a comprehensive professional development (PD) curriculum for 750+ online instructors to prepare them to be better online teachers. The curriculum encompasses pedagogical, technical, and instructional design tracks, with eight PD components whose delivery length ranges from one to sixty training hours. We will also present the results of a case study that evaluated how our flagship, eight-week online PD course influenced faculty and their approach to online course design, course instruction, and instructor engagement to the benefit of online learners. The results of the study are statistically significant in the areas of course design and course instruction and offer insight at what works for online faculty PD programs.

About the Presenter

Nedim Slijepcevic is a Faculty Professional Development Program Manager at Eastern Kentucky University, where he oversees faculty training programs for e-Campus online learning. He has been involved with online learning for over 15 years and holds a doctorate in Instructional Design Systems from the University of Kentucky.

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The Effects of a Pedagogical Agent with Dual-channel Emotional Cues on Online Learner Performance

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Shen Ba
Student, School of Educational Information Technology, Central China Normal University

Summary

In the past two decades, there has been an increasing trend of applying pedagogical agents to online and multimedia learning. Originated from the idea computer agent, the pedagogical agent carries an educational purpose and is defined as an embodied character which performs various anthropopathic behaviors (Heidig & Clarebout, 2011). Social Agency Theory claims that using a pedagogical agent to deliver instructional messages in a virtual learning environment can activate learner’s social response (Mayer, 2005). Specifically, social cues carried and transmitted by the pedagogical agent could potentially convince the learner that he/she is interacting with a real human being. Thus, the learner will become more active in processing messages from the pedagogical agent, which leads to better performance. As an important social function, emotion has received a lot of attention in the design of a pedagogical agent. However, research has not reached an agreement on the effects of emotion (Kim, Thayne, & Wei, 2017; Krämer et al., 2016; Harley et al., 2016; Liew, Zin, Sahari, & Tan, 2016). Through examining designs of pedagogical agents in these studies, it was found that most studies have used the visual channel to deliver emotional cues such as facial expressions. Although some studies paired emotional texts to pictorial cues, seldom have studies considered audio emotional cues. Therefore, this study aimed at designing a pedagogical agent capable of presenting emotional cues via facial expressions and a machine-generated voice and examining its effects on learning performance.

Study Background

Design

This study employed a between-subjects experimental design. The first group of students was assigned a pedagogical agent that delivers emotional cues via its facial expressions and machine-generated voice. The second group of students was assigned with the same pedagogical agent except its emotion kept at a neutral state. The third group of students was assigned only with a neutral voice.

Participants

This study recruited 62 sophomores who were registered in the Modern Educational Technology course from a major Chinese normal university. They were from 9 different majors ranged from chemistry,
mathematics to physical education and art. All participants possessed basic computer skills and certain online learning experience. Participants were randomly assigned to three groups.

**Procedures**

Each student participated in the experiment individually. The researcher first explained the purpose and process of the experiment to the student for his/her oral consent. Then, the student was guided to a pre-loaded web page and start watching the tutorial. After he/she finished, the student was presented with the retention and transfer tests in a Word document. At last, he/she completed a survey on emotion and cognitive load.

**Data Analysis**

The study used IBM SPSS 22 to perform all statistical analyses. Before comparing the dependent variables of each group. This study employed Levene’s test of homogeneity of variances to examine variances equivalence. Results from each test showed that no significant difference was found. Therefore, the analysis of variance (ANOVA) method was suitable for the proposed analysis.

**Findings**

In this study, three groups of students participated and completed a survey on their emotion and cognitive load, a retention test on their memory of learning contents, a transfer test on their ability to apply the knowledge to a different context. EPA group refers to the one assigned with the pedagogical agent with dual-channel emotional cues. NPA group refers to the one assigned with a pedagogical agent with dual-channel neutral cues. NV group refers to the control group with an only neutral voice.

**Emotion**

Statistically significant differences were found among three conditions in terms of enjoyment (F (2, 59) = 3.26, p = 0.046) and pride (F (2, 59) = 3.52, p = 0.036). However, three conditions presented no statistically significant difference in anxiety (F (2, 59) = 1.77, p = 0.180) and hopelessness (F (2, 59) = 1.48, p = 0.236) tests. Therefore, Tukey’s post hoc test was performed on enjoyment and pride respectively. There was no statistically significant difference among multiple comparisons for enjoyment. As for pride, the EPA group was significantly higher than the NPA group (Md = 0.95, p = 0.041). Other than this, no other statistically significant difference was observed.

**Cognitive Load**

A statistically significant difference was found among three conditions for perceived mental effort (F (2, 59) = 3.19, p = 0.048). There was no statistically significance for perceived task difficulty (F (2, 59) = 1.52, p = 0.227). Therefore, a Tukey’s post hoc test was performed for perceived mental effort. Results indicated that NPA group perceived significantly higher mental effort than NV group (Md = 0.97, p = 0.040).

**Knowledge Retention and Transfer**
There was no statistically significant difference among three conditions (F (2, 59) = 0.40, p = 0.672). As for knowledge transfer, a statistically significant difference was found among three conditions (F (2, 59) = 4.19, p = 0.020). Then, a Tukey’s post hoc test indicated that the average transfer score of the EPA group was significantly higher than the NPA group (Md = 1.55, p = 0.034). Also, EPA group was significantly higher than NV group (Md = 1.45, p = 0.044). However, there was no significant difference observed between the pedagogical agent without emotional cues with the control group (Md = 0.10, p = 0.984).

Conclusion

Considering previous mixed effects of pedagogical agents’ emotional cues on learning outcomes, this study proposed that pedagogical agents with dual-channel emotional cues could promote social response which leads to more active learning than pedagogical agents without emotional cues. The statistical findings provided several conclusions. First, the pedagogical agent with dual-channel emotional cues increases learners’ sense of pride in terms of their learnings. However, using a pedagogical agent with dual-channel emotional cues does not influence learners’ enjoyment, upset, or hopelessness. Second, the pedagogical agent with dual-channel emotional cues does not cause cognitive overload. However, a pedagogical agent without any social functions may increase the perceived mental efforts of learners. Third, a pedagogical agent with dual-channel emotional cues does not cause any difference in learners’ retention of knowledge. However, it does help learners perform better on the transfer test compared to the other two situations.

The results of this study suggest that pedagogical agents with social cues indeed lead to better learning outcomes such as knowledge transfer. Our study findings also suggest that when instructors designing digital learning resources such as videos or mini lectures, they should not only consider incorporating a pedagogical agent as a content deliverer but also enabling the pedagogical agent to exhibit emotional cues through both visual and audio channels.

References


**About the Presenter**

David Stein is an associate professor of the Department of Educational Studies in Ohio State University. His work centers on three elements important to the working adult, adult-centered of formal learning organizations, i.e. postsecondary, access and availability, and use of formal learning opportunities.

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Shen Ba is a doctoral student at the School of Educational Information Technology in Central China Normal University. He is also a visiting scholar professor at the Department of Educational Studies in Ohio State University. His research concerns the design and application of pedagogical agents in the online learning environment.

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Using the Many Facet Rasch Model (MFRM) to Identify and Hire High Quality Online Instructors

Steve Stokes, MPP PhD
Online Institutional Researcher, Brigham Young University-Idaho

Chad McLane
Online Instructor Developer, Brigham Young University-Idaho

Summary

As the demand for online education grows around the world, so does the demand for qualified and high-quality online instructors. To meet that demand, many colleges and universities rely heavily on remote adjunct instructor pools. In 2018, remote adjunct instructors met 47% of the instructional staff needs in higher education (Snyder, T., de Brey, C., & Dillow, S., 2019). However, identifying and hiring remote adjunct instructors that are highly qualified, and that fit well within an institution’s online model and organizational structure is challenging. Teaching online is a complex task that requires a unique skillset above and beyond technical subject matter expertise. The goal of hiring processes should be to identify individuals who not only possess the technical qualifications, but who also possess the unique skills and abilities to succeed in an online teaching environment. Institutional scope and mission may also be relevant factors when recruiting and hiring remote online instructors.

The purpose of this research was to help our Employment & Scheduling (E&S) team improve their ability to identify and hire high-quality online instructor candidates. Our organization uses an online Candidate Assessment Course (CAS) to evaluate and screen candidates. During this course, online instructor candidates have the opportunity to perform several instructor-related tasks in a simulated environment, and become acquainted with the goals, processes, and expectations of BYU-Idaho Online. While E&S liked the idea of observing and then rating the performance of candidates in a simulated online classroom environment, they felt as though the CAS course was too long, and they lacked confidence in the final rating outcomes.

Our objectives and research questions were as follows:

1. Can the Many Facet Rasch Model (MFRM) successfully be used to measure online instructor candidate performance in a simulated online course environment?
2. What benefits do we realize from using MFRM, as opposed to methods that do not account for variance across facets?

Study Background

To improve the quality of their remote online instructor pools, many colleges and universities have employed systematic approaches to recruitment, screening, interviewing, and hiring (Sixl-Daniell, Williams, and Wong, 2006; Patrick and Yick, 2005; Schnitzer and Crosby, 2003). Barrett (2010) concluded that hiring qualified remote online instructors may require more applicant data and screening than face-to-face instructor hiring processes because of the unique skill sets required to teach online and the importance of identifying applicant fit into an online program. Sixl-Daniell, Williams, and Wong (2006) found that the recruitment of high-quality online instructors improved the training and subsequent success of new online instructors once they were hired. In sum, with the growth and proliferation of online education, institutions have a strong interest in ensuring their applicant evaluation processes are efficient and effective.
A critical part of the hiring process for remote adjunct instructors at BYU-Idaho is the evaluation, or CAS course. Previously, this course lasted for 2 weeks, and candidates were given an overall performance rating by online instructor managers at the conclusion of the experience. This process worked reasonably well, but many instructor managers felt as though the process was long and cumbersome for candidates. Instructor managers and hiring coordinators also lacked confidence in the reliability and validity of the final candidate rating outcomes. As a result, a taskforce was created for the purpose of shortening and simplifying the experience for candidates and raters and improving the reliability and validity of the resulting candidate scores.

Participants

The MFRM was used in conjunction with a revised course and rubric to evaluate 208 online instructor candidates during the Winter 2020 semester. Candidates were not compensated for their time, but satisfactory completion of the CAS course would place them into the university’s hiring pool for upcoming semesters. Each candidate was enrolled in one of three sessions of CAS during March 2020 and were evaluated by at least one of ten CAS evaluators. The ten CAS evaluators were experienced online instructors at our institution with strong performance records and had taught online for an average of over 22 semesters. CAS evaluators were compensated for ten hours of work to evaluate up to 25 candidates each.

Method

The first goal was to shorten and simplify the CAS process for candidates, and for raters. To do this, we first needed to identify the essential abilities and traits that needed to be assessed through a rating process, and that could not be assessed in other ways. For example, it is unnecessary to use a rating process to determine if a candidate holds an appropriate degree, or if they have teaching experience in their field. These attributes and qualifications can be directly observed in resumes and application materials. Only candidates who meet minimum technical qualifications are enrolled into CAS (e.g., they hold an advanced degree in their field, have teaching experience, etc.).

Being a private religious university, the online instructor standards we chose to assess in CAS were (a) Build Faith in Jesus Christ, (b) Develop Relationships, and (c) Inspire Love for Learning. We also assessed the candidates’ ability to accurately follow assignment instructions.

After identifying those essential traits and abilities, we condensed the CAS course into a one-week experience with five activities: (1) self-introduction, (2) foundational principles discussion, (3) sample student email response, (4) teaching demonstration, and (5) providing student feedback. These activities were designed to give candidates the opportunity to demonstrate their fit for our program, and to familiarize themselves with our processes and expectations.

At the same time, we re-developed the scoring rubric to focus more explicitly on the three instructor standards, and to align with the activity content and instructions. After testing several different scales, we settled on a four-point scale: (0 - red) did not participate in or complete the activity, (1 - yellow) candidate should not be recommended to teach at BYU-Idaho, (2 - green) candidate exhibits sufficient capability, and (3 – gold star) candidate exhibited excellence in this area. A team of high-performing adjunct instructors was contracted and trained to rate candidates on each activity using the updated rubric and rating scale.
Once the data were collected, they were analyzed using the MFRM. The MFRM is part of a family of item response theory (IRT) models designed to account for error variance associated with various facets of performance or assessment ratings (i.e., rater severity or ease of question). While MFRM analysis is commonly reserved for educational settings where ratings are required (e.g., language or writing assessment, etc.; see Aryadoust, 2012), we applied it in a novel way to ratings of online instructor candidate performance. The MFRM is useful in this context, because it explicitly accounts for the variance associated with each rating facet (e.g., rater, rating occasion, item, standard), places each level of each facet on a common “ability” scale, and produces a weighted ability score for candidates that accounts for the variation in each facet (Myford & Wolfe, 2003). When the data are sufficiently connected, or crossed, the resulting MFRM scores are directly comparable, given what we know about the facets in the model. In other words, the MFRM calibrates ratings to be comparable, regardless of which rater reviewed an individual’s candidate’s performance. It also provides model-data fit statistics that can be used for the purpose of rater training and calibration.

Whenever the goal of a rating system is to generate a set of scores that are directly comparable across raters, or other facets, the rating system design is critical. In order for candidate scores to be comparable across raters, activities, etc., the resulting facet elements must be sufficiently connected (Eckes, 2011). Indeed, “lack of connectedness among elements of a particular facet (e.g., among raters) would make it impossible to calibrate all elements of that facet on the same scale; that is, the measures constructed for these elements (e.g., rater severity measures) could not be directly compared” (Eckes, 2001, p. 152). Because fully crossed data (i.e., where every candidate is rated by every rater) is costly and time-consuming, we developed an R script to assign candidates to raters in way that was incomplete, but sufficiently connected or crossed (see Appendix, Table 1).

At the conclusion of each CAS session, the resulting ratings data were analyzed with the MFRM using the Facets software (Linacre, 2020). We analyzed 3 facets, including (a) candidates, (b) raters, and (c) rubric items. We did not experience any convergence issues, and always reached normal model termination.

**Findings and Conclusions**

1. **Can the Many Facet Rasch Model (MFRM) successfully be used to measure online instructor candidate performance in a simulated online course environment?**

   Using the MFRM, we were able to confidently differentiate between high and lower quality online instructor candidates, controlling for the severity or leniency of the rater, as well as the easiness or difficulty of specific rubric items. The chi-squared value for global data-model fit was 8,408.7 (df = 4,822, p < 0.0001), indicating a significant lack of global data-model fit, other indicators of model usefulness were much more positive (see Eckes, 2011). For example, out of the 5,102 responses used for estimation, only 20 (< 1%) had (absolute) standardized residuals ≥ 3.

   In addition, the weighted “fair average” scores that controlled for variation across facets, and the raw “observed average” scores for each candidate, were very highly correlated (r = 0.95; see Appendix, Figure 4). This gave our hiring team more confidence in the candidate scores they were using to make high-stakes employment decisions. In sum, we realized that with the shortened CAS course, improved rubric, and focused rater calibration, our raters could produce raw scores that were very highly correlated with the weighted “fair average” scores.
2. What benefits do we realize from using MFRM, as opposed to methods that do not account for variance across facets?

The MFRM gave us unique insight into evaluator performance (e.g., leniency vs. severity, see Appendix, Figure 1), and item performance (e.g., relative ease or difficulty, see Appendix, Figure 2). It also provided output on “unexpected responses,” which occur when a rating from a particular evaluator for a specific candidate and item are statistically extreme or abnormal (see Appendix, Figure 3).

The MFRM evaluator output was particularly useful because it allowed us to determine which evaluators were overly severe and which were too lenient, and to focus our training and calibration efforts on specific evaluators and specific areas of the CAS course. The unexpected responses output also gave us the opportunity to be much more focused and deliberate in our evaluator training and calibration efforts. Indeed, we learned that we have room for improvement in terms of rater consistency, calibration, and training.

References


Table 1. Example of incomplete crossed design.

<table>
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<tr>
<th>Candidate</th>
<th>Rater1</th>
<th>Rater2</th>
<th>Rater3</th>
<th>Rater4</th>
<th>Rater5</th>
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Note. 1 indicates a rating-candidate assignment. This incomplete design connected every rater to every other
rater 3 times in the most efficient way possible.

### Table 7.1.1 Evaluator Measurement Report (arranged by #).

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<th>Total Score</th>
<th>Total Obsvd</th>
<th>Fair(M)</th>
<th>Model Infit GZEST</th>
<th>Outfit GZEST</th>
<th>Estim. Discrn</th>
<th>Correlation P &amp; P</th>
<th>Exact Agrees (%)</th>
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Model, Popula: RMSE :0.0 Adj (True) S.D. :64 Separation 7.72 Strata 10.62 Reliability (not inter-rater): .98
Model, Fixed (all same) chi-square: 687.5 d.f.: 9 significance (probability): .00
Model, Random (normal) chi-square: 8.9 d.f.: 8 significance (probability): .35
Inter-Rater agreement opportunities for 281 exact agreements: 548 = 59.7% Expected: 523.3 = 48.4%

---

**Figure 1. MFRM sample evaluator facet output.**

<table>
<thead>
<tr>
<th>Total Score</th>
<th>Total Obsvd</th>
<th>Fair(M)</th>
<th>Model Infit GZEST</th>
<th>Outfit GZEST</th>
<th>Estim. Discrn</th>
<th>Correlation P &amp; P</th>
<th>Exact Agrees (%)</th>
<th>Disagrees %</th>
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<td>523</td>
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<td>1.79</td>
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<td>0.00</td>
<td>0.96</td>
<td>1.08</td>
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</table>

Model, Popula: RMSE :10 Adj (True) S.D. :55 Separation 5.72 Strata 7.96 Reliability :97
Model, Sample: RMSE :10 Adj (True) S.D. :57 Separation 5.91 Strata 8.22 Reliability :97
Model, Fixed (all same) chi-square: 582.7 d.f.: 55 significance (probability): .00
Model, Random (normal) chi-square: 14.6 d.f.: 14 significance (probability): .41

---

**Figure 2. MFRM sample item facet output.**

---

100
Figure 3. MFRM unexpected responses output.

Figure 4. Weighted “fair average” scores vs. raw “observed average” scores.
About the Presenters

Steve Stokes earned a Master’s of Public Policy (MPP) at the University of Chicago and PhD at Brigham Young University in Educational Inquiry, Measurement, and Evaluation. Currently, he is an Online Institutional Researcher at Brigham Young University-Idaho specializing in online distance learning, scale development, psychometrics, and educational measurement.

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Engage students in active learning with predictable design and Rise360

Jane Sutterlin
Learning Designer
Penn State University

Maria Scalzi Wherley
Learning Designer & Writer-in-Residence
Penn State University

Summary

A predictable course design helps students focus their attention on content, leading to energy spent on learning. Adding practice and formative assessment activities to online courses helps students master skills and provides them with feedback and guidance. Using Rise360, instructors can effortlessly build predictable, visually appealing experiences based in Learning Science and incorporate them within a Learning Management System (LMS) without the need for servers or webpage expertise. Students are easily able to navigate the responsive content and practice or test their understanding as they engage in the learning process.

Active engagement with course content requires student participation and has been proven to boost learning. Rise 360 allows users to create beautiful, mobile-friendly, responsive and engaging content. Rise 360 is a web-based tool that facilitates the incorporation of Learning Science elements without a need for web development expertise. Students will not need to leave the LMS to engage with the content, either. Users can export content as a SCORM package (Shareable Content Object Reference Model) that can easily be embedded into an LMS, such as Canvas. Participants in this session used their own devices to individually interact with our course (Materials Science Glass Studio Safety Training), which lives in Canvas and provides a responsive, on-the-go experience. These participants saw how straightforward it is to add stackable, flexible blocks of content, media, and interactive elements, and how effortless it is to build with predictable design. They experienced that this responsive content can be accessed via a computer or mobile device for learning or for later reference. Rise 360 makes it easy for instructors to incorporate evidence-based learning science elements into their content, such as retrieval practice, spaced practice, and feedback that will hold student attention. Provide your students with predictable design and low stakes learning opportunities to help them better understand their learning progress and to move forward with confidence.

About the Presenters

Jane Sutterlin is a Learning Designer in the John A. Dutton e-Education Institute in the College of Earth and Mineral Sciences at The Pennsylvania State University. Since 2005, Jane has collaborated with content experts and designed courses that utilize technology as a tool for learning while implementing current learning science research strategies. Jane earned a master’s degree in Learning, Design and Technology from Penn State University.

Maria Scalzi Wherley is a Learning Designer and Writer-in-Residence with the John A. Dutton e-Education Institute. She has over a decade of teaching experience, serving a wide variety of learners a diverse range of subjects and currently works to design and maintain online courses and to tutor students.
Maria holds an M. Ed. in Curriculum and Instruction from Penn State University.

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Preparation Faculty to Design and Develop Accessible Online Courses

Kristlyn Thomas  
Instructional Designer  
Loyola University Chicago

Summary

A benefit of online, blended, and hybrid courses is their ability to reach a diverse student population. However, if an instructor does not design an online course with accessibility in mind, it can alienate part of the student population. Further, course accessibility has become a standard in online course quality assessments, including Quality Matters. As the demand for online, blended, and hybrid courses grows how can we ensure that faculty are adequately prepared to design and develop accessible online courses? Today faculty seem to have a never-ending workload and many faculty members are never physically present on campus. This presents a challenge when planning faculty development opportunities. At our university, we developed a self-paced online training designed to guide faculty members through how to make their online courses accessible. This training allows faculty to access the training at a time that is convenient to them and review training materials when necessary.

In this ePoster, I will share information on the training design including training learning outcomes, an outline of the training, and the technology used to create and deliver the training. I will also discuss faculty participation: how we track faculty participation, current participation rates, how we gained administrative buy-in, and other ways we have encouraged faculty participation. Then I will cover our training evaluation results, comparing evaluation results from our pilot to the current version of our training.

About the Presenter

Kristlyn Thomas is an Instructional Designer at Loyola University Chicago in the Office of Online Learning, where she assists faculty as they design and develop online, blended, and hybrid courses. Additionally, she helps prepare faculty to teach online by hosting professional development opportunities including teaching Online Teaching Course: Facilitate each semester. Kristlyn has been involved in faculty development since she began her career at Eastern Illinois University where she supported faculty in the Center for Academic Technology as a Graduate Student and earned a Master of Science degree in Technology, a Master of Science degree in Elementary Education, and a certificate in Training and Development.

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12 Things You Thought You Knew About Online Education but Might Not

Brian Udermann
Director of Online Education
University of Wisconsin-La Crosse

Summary

Many individuals think that offering online courses and degree programs is a relatively recent phenomenon, however, colleges and universities have been offering high quality online programming since the early 1990’s. There is no question that many people have strong opinions and often misunderstandings and misconceptions about online education. This session will address some of those misconceptions.

Topics covered during this session will include what percentage of students in higher education take at least one online course, overall enrollment trends in higher education vs. enrollment trends specific to online education, employer perceptions of online degree programs, if online course development and teaching is more work than face-to-face like many faculty say it is, and if it really is harder to retain online students.

The session will also explore if academic outcomes are lower for online courses and degrees, if taking online courses decreases students time to graduation, the proportion of online learners studying at the undergraduate level, how many faculty within higher education are teaching online, and how online learners are spread across various institutions.

This interactive session will be conducted in a quiz type format with each topic first being presented as a question participants will be asked to answer. Then the correct answer will be given, and information will be shared supporting the correct answer.

About the presenter

Brian Udermann has over 20 years of teaching experience in higher education, started teaching online in 2005, and has served as the Director of Online Education at the University of Wisconsin-La Crosse since 2007. He earned his Bachelor’s degree in Sports Medicine from St. Cloud State University, and earned both his Masters and Doctoral degrees in Applied Exercise Physiology from Syracuse University. Brian has published over 70 peer-reviewed scientific manuscripts, five-book chapters and two books. He also has over 200 national and international presentations.

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Innovative Approaches to International Virtual Learning Exchange.

Isidore A. Udoh, Ph.D.*** and Margaret Workman, Ph.D.**

* Department of Health Sciences and Physical Education, Northeastern Illinois University ** Department of Environmental Science, DePaul University

This session presents a comparative review of two innovative virtual education exchanges between partners at DePaul University in Chicago and the University of Uyo in Nigeria. The first collaboration between DePaul’s Master of Public Health program and Refugees and Forced Migration Studies, and the University of Uyo’s Faculty of Law examined the similarities and differences in approaches to refugees and internally displaced persons resettlement in the United States and Nigeria. The second collaboration between DePaul’s Department of Environmental Science/Studies and the University of Uyo’s Department of Environmental Studies examined patterns of environmental pollution from oil production in Nigeria’s Niger Delta and coal marketing and consumption in Chicago. These collaborations were conducted under DePaul’s Global Learning Experience, with the purpose of developing shared curricula between the partners and engaging students across cultures and continents using technology. The learning outcomes of this presentation are to:

1) Identify the activities that support the formation of virtual collaborations between academic colleagues in the United States and Nigeria.
2) Examine instructional and technological methods for building and strengthening learning partnerships between US-based universities and universities in Africa.
3) Recommend pedagogical processes for developing shared curricula that promote global citizenship and engage students from different cultures.
4) Discuss the potential impacts of social and cultural differences on international course collaboration and communication

Although the two collaborations were anchored on varied themes – from environmental pollution, sustainability, and climate change to health and humanitarian protection in complex emergencies – similar technology platforms were used to deliver course contents and resources to students. The creative utilization of technological platforms such as Google Docs, Drive, Zoom, and WhatsApp for hosting and delivery of course materials (e.g., lectures, readings, videos, and assignments), asynchronously and synchronously, transformed the traditional approach to online learning. It also revealed challenges and opportunities that relate to capabilities for implementing virtual education between a developed and a developing country. Course-end surveys revealed most students agreed the collaboration increased their knowledge of the contents covered in the United States and Nigeria. They also agreed that the collaborations increased their competency with cross-national communication, empathy, and ability to engage with people from a different culture.
BioSpine: Designing an Online Adaptive Biology Program

Peter van Leusen, Ph.D.
Manager of Instructional Design
Arizona State University

Renee Deljon
Sr. Instructional Designer
Arizona State University

Summary

Adaptive platforms are moving beyond the boundaries of individual courses to adaptive programs. To successfully align curriculum and generate faculty buy-in, instructional designers at Arizona State University implemented substantial faculty engagement strategies and design processes to develop an online adaptive biology program which incorporates instructional resources from multiple courses.

Engaging close to 50 faculty and 10 staff members, the BioSpine Initiative is a project in the School of Life Sciences (SOLS) to develop, implement, and evaluate an integrated undergraduate curriculum in the biological sciences. This project leverages adaptive courseware for engaging students in frequent formative activities and assessments that adapt to the needs of individuals. In class and online, instructors use evidence-based methods of teaching to engage students in real-world scenarios and problem-solving, helping students apply biological models in a collaborative setting.

The BioSpine Initiative will produce an evidence-based, faculty-generated curriculum that evolves with the changing needs and priorities of the degree program in biological sciences. The success of the initiative will be judged by the persistence of students within the program, the rates of graduation from the program, and the knowledge and skills demonstrated by our graduates. Initial data suggests that students have performed better in courses after SOLS adopted adaptive courseware and problem-based learning.

About the Presenters

Peter van Leusen (Peter.van.Leusen@asu.edu) is managing the adaptive initiatives at Arizona State University. He collaborates closely with faculty, staff, and vendors to develop the adaptive strategy, new courses, and educational technologies. In the 2017-2018 academic year, enrollment in adaptive courses at ASU grew to over 27,000 learners. Peter holds a PhD in Instructional Systems Technology from Indiana University.

Renee Deljon (Renee.Deljon@asu.edu) is a learning designer with over 20 years of experience in higher education. Passionate about educational access and quality, she has taught at the college level, managed publishing programs for McGraw-Hill and Cengage Learning, and led instructional design initiatives at ASU. Renee holds a Master’s degree in English and specializes in emerging pedagogies, including adaptive learning.
Oh, the Places You'll go! Design Online Learning for Global Audiences

Peter van Leusen, Ph.D.
Manager of Instructional Design
Arizona State University

Renee Deljon
Sr. Instructional Designer
Arizona State University

Summary

As the promise of providing affordable and accessible education via global online courses continues to spur institutions to expand their offerings (Xu & Xu, 2019), the need for addressing cultural differences and developing inclusive learning experiences becomes increasingly apparent. With enrollment of international students declining in the U.S. (iie.org, 2019) and the majority of online learners still residing within a 100-mile radius of U.S. institutions (Inside Higher Ed, 2019), we can expect an acceleration of these efforts to tap into additional revenue streams. Already, several large U.S. universities are partnering with companies founded as MOOC providers to engage with diverse global audiences (EdSurge, 2019).

Arizona State University (ASU) is among those institutions. Beginning in 2015, building on its longstanding commitment to international development, ASU entered into a partnership with edX (ASU Now, 2015). Since then, ASU’s global initiatives have grown to include undergraduate and graduate degree programs with over 30 credit-bearing courses on multiple platforms as well as partnerships with humanitarian and philanthropic organizations. Designing online learning experiences for global audiences is not, however, a straightforward task.

In an effort of making course content comprehensible and meaningful for all, instructional designers face many challenges, such as including cultural considerations when using backward design (Wiggins & McTighe, 1998). In this role, it is essential to develop non-U.S.-centric learning experiences, increase cross-cultural awareness and identify effective solutions to meet the myriad challenges that come with designing online learning experiences for global audiences.

About the Presenters

Peter van Leusen (Peter.van.Leusen@asu.edu) is managing the adaptive initiatives at Arizona State University. He collaborates closely with faculty, staff, and vendors to develop the adaptive strategy, new courses, and educational technologies. In the 2017-2018 academic year, enrollment in adaptive courses at ASU grew to over 27,000 learners. Peter holds a PhD in Instructional Systems Technology from Indiana University.

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2020 Online Education Trends: Student and Administrator Insights

Melissa A. Venable, PhD
Online Education Advisor
BestColleges

Summary

The BestColleges sixth annual Online Education Trends Report provides insights gleaned through feedback provided by students and school administrators. This year, our fourth year of reporting original data, the project includes participation from 398 school administrators and 1,500 students (prospective students, current students, and online program alumni). This data was collected from October through December 2019. Findings are presented in five categories: online learner demographics, the online learning experience, online program marketing and recruitment, online program design and development, and online student satisfaction. Key findings include:

• Online students are getting older and younger. 47% of school administrators report trends in student demographics related to age – 25% see students trending older, 20% see them trending younger.
• It may be time to reassess outreach efforts. The two primary sources of information for prospective online students are contacting schools directly (19%) and rankings websites (19%). Only 3% cited social media posts.
• Common roadblocks to graduation often impact each other. Finances, unexpected life events, and staying on track are online students’ biggest challenges to reaching graduation.

This year, the BestColleges trends initiative expanded to include additional data collection. In March 2020, a separate survey sought to assess the impact of campus closures and the shift to remote learning on students. In May 2020, another survey gathered information about the perception of online education as compared to on-campus education in the context of employment.

This presentation will include an overview of this year’s trends in online education through data gathered both before and after the coronavirus pandemic. It will identify specific strategies for improving current online programs and making decisions about new online programs, as well as discussion about how the trends shared in this presentation align or don’t align with those experienced by attendees at their institutions.

About the Presenter

Melissa A. Venable, PhD is an online education advisor for BestColleges.com where she leads an annual survey project reporting trends in online education. She is an adjunct faculty member and online course designer at Saint Leo University and the University of South Florida and a certified career coach with a background in career development services. Melissa currently serves on the National Career Development Association board and is an associate editor for eLearn Magazine. She earned her doctorate in instructional technology at the University of South Florida with research interests in distance education and support services for online students.

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Paradigm Shift: Reconsidering Best Practices for Online Discussion

Brian N. Verdine, Ph.D.
Yellowdig - Head of Client Success
University of Delaware - Affiliated Assistant Professor of Education

Many courses include online discussions to engage students, promote critical thinking, increase topic relevance, and help students’ network. Instructors and course designers expend considerable effort creating assignments to motivate quality participation, typically in some form requiring “1 post and 2 comments.” These efforts rarely spur real conversations or meet the intended educational aims. Our data indicate that this well-worn framework actually creates a cascade of unintended but self-reinforcing and highly damaging behavior patterns. Importantly, these problems are endemic to the pedagogy itself; they are present regardless of the quality of prompts, the skill of the instructor, the student population, or the chosen technology platform. The primary issues created by this standard discussion pedagogy are:

1. Grades measure post quality as assessed by the instructor. Therefore, students write for the wrong audience: their instructor rather than their classmates. Accordingly, assignments and grading do not spur good conversations. Yellowdig’s data clearly indicate that a higher proportion of commenting drives voluntary participation (e.g., Kampa & Verdine, 2020; Verdine, 2018). Importantly, commenting and behaviors indicative of more reading, not posting, are most associated with better course grade outcomes, student satisfaction, and student persistence and retention (e.g., Martin, Martin, & Feldstein, 2017; ASU Efficacy Report, 2019).

2. In the Community of Inquiry (CoI) Framework there are three required elements for a strong community: Cognitive, Social, and Teaching Presence. Social Presence is defined as “the ability of participants to identify with the community (e.g., course of study), communicate purposefully in a trusting environment, and develop inter-personal relationships by way of projecting their individual personalities” (Garrison, 2009). In standard discussion pedagogy, building Social Presence is typically ignored and assignment rules often implicitly, if not explicitly, forbid student interactions that would create it. This removes most of the social motivation to participate.

3. Unlike most assignments where completing the task poorly or procrastinating to a deadline only influences the experience of the individual student behaving this way, in peer-to-peer assignments the behavior of each student impacts the learning experience of every other student. Standard discussion pedagogy encourages procrastination and once-per-week participation, rather than fighting it.

4. Restricting discussions to one topic per week constricts the integration of topics across the course. This is educationally indefensible. It erodes most of the fundamental advantages of discussing course content: reviewing, sharing, struggling with, and combining ideas. Uncertainty about the direction of conversations is also part of what makes them fun. Uncertainty inspires curiosity and FOMO (fear of missing out), both of which motivate students to come back to their community often.

Due to the above issues created by this paradigm, traditional discussion forums are not engaging, dynamic, or thought-provoking places. Because they offer little interest and educational value to students, they are widely regarded with scorn by both students and instructors. This session is focused on appreciating these challenges, creating a different model for discussions that avoids the negative behavior patterns they produce, and sparking new conversations about course design in light of the acknowledged limitations of the dominant paradigm.
About the Presenter

Brian Verdine received his Ph.D. in Psychology from Vanderbilt University and completed a postdoc in the School of Education at the University of Delaware, where he is an Affiliated Assistant Professor. He oversees support at Yellowdig, collaborates with partner institutions, and completes internal research on community formation. Email: brian.verdine@yellowdig.com or verdine@udel.edu.
Making Them Feel at Home: Connecting Students to Learning with Empathy

Elizabeth Walker-Papke
Librarian, Online & Distance Learning
Spring Arbor University

Summary

Today's distance students are pulled in many directions, from career to family life to educational attainment. In order to get a student to spend their valuable time resources on yet another course, workshop, or seminar, educators must show students how this learning opportunity would actually be applicable to their lives. With so many things vying for students’ attention, how can educators attract students to their specific course offerings? Through empathetic marketing! Empathetic marketing is a tool that any educator can use, whether through more traditional means or even in their own course descriptions to entice student buy-in. This can be disseminated through more traditional means (email, mail) or in creative ways (course listings, course management systems). This ePoster presentation will define empathetic marketing and illustrate how one librarian used it to draw students to their library resources, which include library instruction sessions as well as online research materials. After viewing this presentation, participants will be able to take the ideas shared and apply these principles to their own course outreach as the principles of empathetic marketing are universal and useful across areas of study.

About the Presenter

Elizabeth Walker-Papke is the Online and Distance Learning Librarian at Spring Arbor University in Spring Arbor, MI. She has worked with the non-traditional and/or online student population in the university setting for the past 15 years: the first seven years was spent as a staff member at a prior institution. She has served in her present position as a faculty member/librarian since June 2012 after she earned her MLS from Indiana University. Elizabeth currently works with both traditional and non-traditional students and wears several different hats: collection developer and liaison for 8 subject areas; supervisor of a project production lab; reference librarian; educator in information literacy/research; and manager of her library’s 24/7 chat participation in an academic library consortium.

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Fun, Small Steps Towards Human-Centered Digital Learning Communities

Katalin Wargo
Learning Design Manager
William & Mary

Summary

This year, I have taken a game-based approach to professional learning that playfully engages instructors in small, practical teaching strategies they can use in their courses to take steps towards creating human-centered digital learning communities. In this interactive session, we will walk through some of the steps I take towards empowering faculty with strategies they can implement towards making meaningful, human-centered changes to their classes, specifically diving deeply into maintaining flexibility and building community as human-centered approaches to teaching and learning online.

Throughout this session I will highlight resources and activities the Studio has created to help instructors negotiate providing flexibility and building community online as well get participants to try small strategies to use with students that make great impact.

About the Presenter

Katalin Wargo is the Learning Design Manager at the Studio for Teaching and Learning Innovation at William & Mary. The Studio coordinates university-wide initiatives to engage faculty, students and staff as learning partners to meaningfully engage students in learning. In her role in the Studio, Katalin designs and facilitates professional learning opportunities for instructors, focusing on human-centered innovations that leverage student interaction and voice. This past year, she has worked to empower faculty with small strategies to work towards big change.

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Cranky Colleagues v. Killer Robots: Helping Others Embrace Technology

Thomas Royce Wilson
Director of Online Learning
Azusa Pacific University

Summary

We all know co-workers who resist using technology. When fellow educators refuse to fully adopt technology, their resistance can limit their effectiveness and negatively affect their students, their colleagues, and you. Research indicates that your efforts to help those individuals can often exacerbate the problem.

This exploratory session invites your input as we discover strategies derived from psychological, marketing, and educational research. Learn how your strategic, peer-to-peer interactions can influence even the most resistant colleagues. Receive user-friendly, online resources that you can share with others to generate immediate results. Whether you’re a technophobe, a techno-maniac, or somewhere in between, you and your workplace will benefit from the strategies revealed in this session.

About the Presenter

Thomas Royce Wilson leads a dual life as Director of Online Learning at Azusa Pacific University and as a humorist whose website CaptainBigIdea.com features a free library of #CognitiveCartoons for educators. He has an MS and PhD in instructional design and technology.

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Can we meet all of the learning outcomes in an online laboratory class

Margaret Workman
Instructor
Department of Environmental Science and Studies
DePaul University

Summary

Online teaching has become an important modality in higher education, in general, and at DePaul University, specifically. In the spring of 2018, our University began to consider if it was possible for an online-only class to meet the learning outcomes for the science laboratory course designation in the Undergraduate Liberal Studies Program. A pilot, online-only version of an existing Environmental Science laboratory class was designed and implemented in the fall of 2018. Lab Kits designed by the instructor were purchased by the students from a third-party vendor. These activities were true laboratory experiments and not merely computer simulations. An assessment instrument was sent to the online pilot class and one face-to-face class (both ENV 102, Introduction to Environmental Science with Laboratory) at the end of the fall quarter. In the spring of 2019, the survey was sent to all scientific inquiry laboratory classes. The survey was based on an existing, published instrument: The Test of Scientific Literacy Skills (TOSLS) by Gormally, Brickman, and Lutz. The test measures skills related to major aspects of scientific literacy: recognizing and analyzing the use of methods of inquiry that lead to scientific knowledge and the ability to organize, analyze, and interpret quantitative data and scientific information. The survey results show that there was no significant difference between online and face-to-face scores.

About the Presenter

Margaret Workman is an instructor in the Department of Environmental Science and Studies at DePaul University. She teaches courses in Environmental Science, Chemistry, and Energy Studies. She is a co-author of a Laboratory Manual titled "Introduction to Environmental Science with Lab." She is a pioneer in online learning in the sciences. She has developed a series of 15 online Environmental Science instructional laboratory experiences (both in the field and in the lab). She runs a successful Collaborative Online International Learning program between her students and sub-Saharan African students.

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