13th Annual – 2017

TEACHING WITH
TECHNOLOGY
CONFERENCE

ACTIVATING STUDENT LEARNING

PROGRAM

March 1 & 2, 2017
2400 Memorial Student Center
Texas A&M University

Coordinated by

A|M | INSTRUCTIONAL TECHNOLOGY SERVICES

Schedule at a Glance • Day 1, Wednesday, March 1

Time	Room 2400 (Main Assembly)	Room 2500	Room 2501
8:00-8:30	Registration & Breakfast *Sponsored by Skyepack*		
8:30-8:45	Welcome Address *Snell*		
9:00-9:45 Concurrent Session 1		Design Strategies for Supporting Creative Thinking Online *Juntune & Sweany*	VENDOR PRESENTATION Merging Technology and Pedagogy: Team-based Course Development with Skyepack to Create a Media-Rich, Custom-Designed Learning Experience *Nelson & Bates*
10:00-10:45 Concurrent Session 2		10 Tips for Increasing Instructor Presence in the Online Classroom *Riley*	VENDOR PRESENTATION Online Proctoring at Texas A&M: A Comprehensive Solution from Examity *Leer*
11:00-11:45 Concurrent Session 3		Pedagogical Strategies to Motivate and Engage Online Learners *Bakir*	VENDOR PRESENTATION Tips & Tricks for Teaching Online *Vela & Arnett*
12:00-1:30	FIRST KEYNOTE PRESENTATION & LUNCH *Sponsored by Blackboard* The 25 by 25 Transformational Education Program *Banks*		
1:45-2:30 Concurrent Session 4		Modern PowerPoint Design *Huston & Martin*	VENDOR PRESENTATION i>clicker and REEF Polling: Active Learning Simplified *Wu & Fariss*
2:45-3:30 Concurrent Session 5		SPECIAL PRESENTATION Continuing Conversation about the 25 by 25 Transformational Education Program *Banks*	Introduction to Collaborate Ultra *Wilson*
3:30-3:45	Afternoon Refreshments *Sponsored by Examity*		
3:45-4:30 Concurrent Session 6		SPECIAL PRESENTATION Making Digital Content More Accessible *Miller*	Digital Playgrounds as Learning Spaces: Leveraging Gamification and Digital Games *Poling*

Room 2502	Room 2503	Room 2504
Use of 3D Virtual Reality to Enhance Student Learning Experiences in Materials Science Courses *Mansoor, Abdelgawad, Ozkan & Ali*	Core Curriculum Technology Enhancement Grant Participant(s) Presentation *Miller*	How to Move Your Face-to-Face Course Online *Martin*
Uses and Demos of Virtual Reality in Higher Education *Clayton*	TAMUS Distance Education Networking Group Meeting *Mancuso*	Core Curriculum Technology Enhancement Grant Participant(s) Presentation *Shaw*
Library Resources for Teaching and Learning *Graves, German, Herbert & Hawkins*	Integration of Virtual Dissection Table into Undergraduate Anatomy Courses *Lane*	Developing Cross-Course Collaboration: Round 1 *Davis & McPherson*
Keep Calm, Build On: Towards a Learning Accessible Campus *Zimmermann & Hodgson*	Using Knowledge Surveys as Roadmaps to Promote & Assess Student Learning *Martindale Leighton*	OFFSITE LAB PRESENTATION Pedagogical Aspects of Virtual Reality Implementation in Mechanical Engineering Materials and Manufacturing Labs *Afsar Kazerooni, Rebagay, Ozkan & Srinivasa*
How Chromebooks and Google Apps are Revolutionizing Student Learning in Education *Hawkins*	Strategies and Best Practices for Distance Learning *Stewart & Stubblefield*	Core Curriculum Technology Enhancement Grant Participant(s) Presentation *Vionnet-Bracher, Cecchini, Waugh, Passmore, Arfaoui & Dong*
Using Poll Everywhere to Engage Students in a Large Class *Laporte*	Using Video Response and Messaging Apps to Engage and Assess Student Learning *Martindale Leighton & Cherry*	Tales from the Cube: Creating a Virtual Advising Space *Bustos-Rios & Olivarez*

Schedule at a Glance • Day 2, Thursday, March 2

Time	Room 2400 (Main Assembly)	Room 2500	Room 2501
8:00-8:30	Registration & Breakfast *Sponsored by i>clicker*		
8:30-10:00	SECOND KEYNOTE PRESENTATION Creative Teaching Approaches: Global Examples of Engaging Students with Technology *Miller & Chalex*		
10:15-11:00 Concurrent Session 7		Active Learning Tools Used in Medical Education *Brandt & Luna-Arvizu*	VENDOR PRESENTATION Managing Exams from Your Desktop: From Scantrons to eCampus Using Digital Desk *Dorsey, Gomm & Sifuentes*
11:15-12:00 Concurrent Session 8		Quality Matters Overview *Nagarathnam, Muthukrishnan & Gibson-Mainka*	VENDOR PRESENTATION The Future of Goals: Using EAC Visual Data for Course Statistics, Program Review, and Institutional Assessment *Walker & Heisen*
12:00-1:00	Grab & Go Lunch: Relax and Network with Colleagues		
1:15-2:00 Concurrent Session 9		Broadening Your Reach: Using Tutorials to Develop First-Year Students' Research Skills *Stephens, LeMire & Perez*	Procurement of Accessible Products to Improve Learning Outcomes *Kauder, Watkins & Gaddam*
2:15-3:00 Concurrent Session 10		Video Captioning: The Good, the Bad and the Ugly *Chilek & Jahedkar*	VENDOR PRESENTATION Engaging Students and Scaling Learning with Peerceptiv *Coates & Limbach*
3:15-3:30	Door Prizes & Adjourn **Note:** *Must be present to win giveaways*		

Room 2502	Room 2503	Room 2504
Freshman Physics Classroom: First Results *Bassichis, Erukhimova & Perry*	Developing Augmented Reality Tools to Enhance Learning Experiences *Kakosimos, Salama, Kozusznik & Castier*	Activating Student Learning through Adaptive Learning Case Studies and Digital Badging *Heseltine, Ritter & Nabity*
Enhancing Blended and Active Learning in a Large Ecology Course *Wu, Mateos, Briske & Jaime*	Using Problem-based Learning in Online Science Courses *Allard*	Technology-Enhanced Instruction: Real-Time Student Collaboration Using Google Docs *Montague*
Online and Face-to-Face Collaboration Tools *Rose, Hargrove & Molinari*	Engaging Students with Online Evaluations *Dorsey & Pottberg*	Wikispaces *Milstein & Singh*
Applications of 3D Modeling in Veterinary Medical Education *Saunders, Tayce & Timperman*	The Role of Technology in the Implementation of an Innovative, Research-Informed Spanish Curriculum *Zapata & Ribota*	Social Constructionism and Tools within a Learning Management System *Mahfouz*

Welcome to the 2017 Teaching with Technology Conference

We are pleased to once again welcome you to our annual TAMU System-wide spring event! We hope you make valuable connections with colleagues and take advantage of this fantastic learning and networking opportunity.

Over the next two days, you'll learn about emerging teaching techniques, the best resources for enhancing student learning, and tips for effectively and efficiently accomplishing your teaching objectives.

The registration table, located outside Room 2400 (Gates Ballroom) in the lobby, is your central hub for the most up-to-date event information. Feel free to ask ITS staff members for directions, technical help, or simply more information about a teaching tool that interests you.

Parking
Parking is available at the University Center Garage along Houston and Throckmorton Streets. To keep the Conference a no-cost event, we unfortunately cannot validate parking for attendees. Attendees may park at the University Center Garage at the current rates. Exceptions will be made for presenters and exhibitors who request parking validation during the event. Please visit the registration table for more information.

Wireless
Texas A&M attendees may use their NetIDs and passwords to access TAMULink, the campus wireless network. The MSC uses TAMU_Visitor access through a self-enrollment process for guests. Visit the registration table for assistance in setting up a guest account. Visitors from participating institutions may also connect through Texas A&M's eduroam network.

Live Streams & Recordings
We will live stream the keynote presentations as Blackboard Collaborate Ultra webconferences. Links to the Collaborate sessions will be made available at **its.tamu.edu/twtc**.

Evaluation Forms
Please remember to complete an evaluation form and place it in a designated box. Even if you only attend a few sessions or leave early, your feedback helps us improve our events.
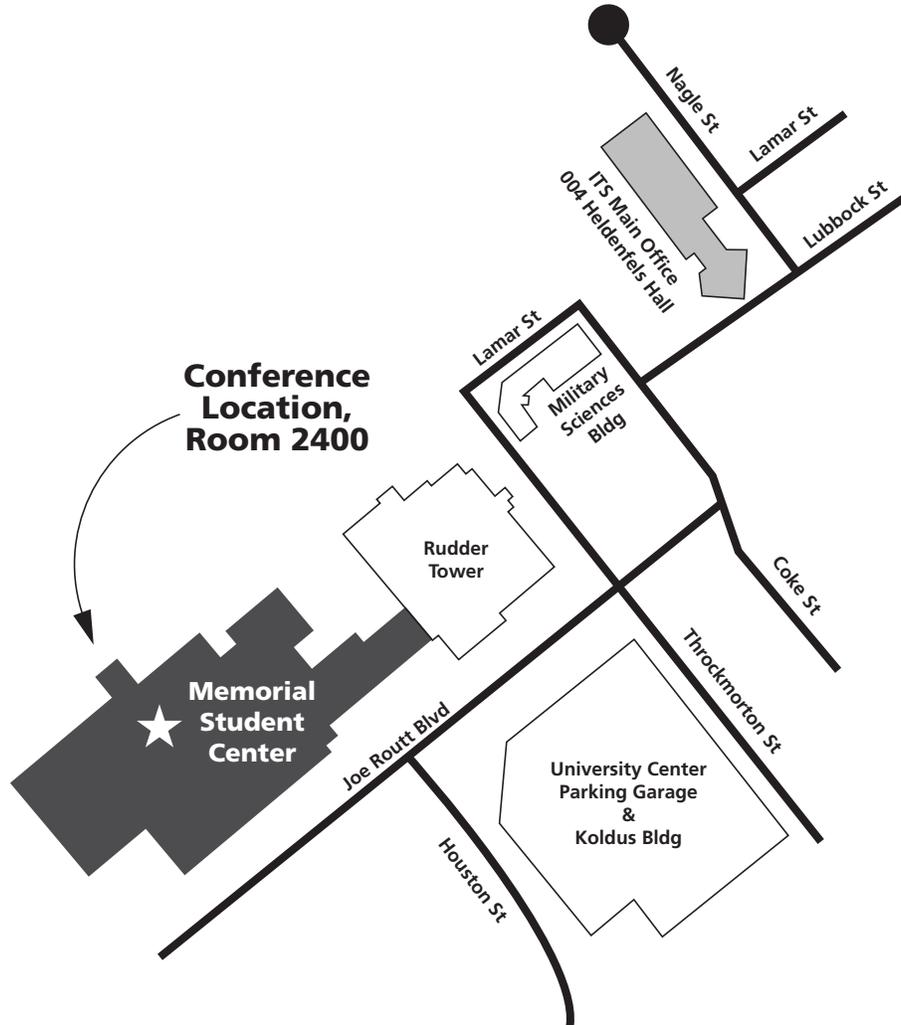
Thank you for attending the Conference!

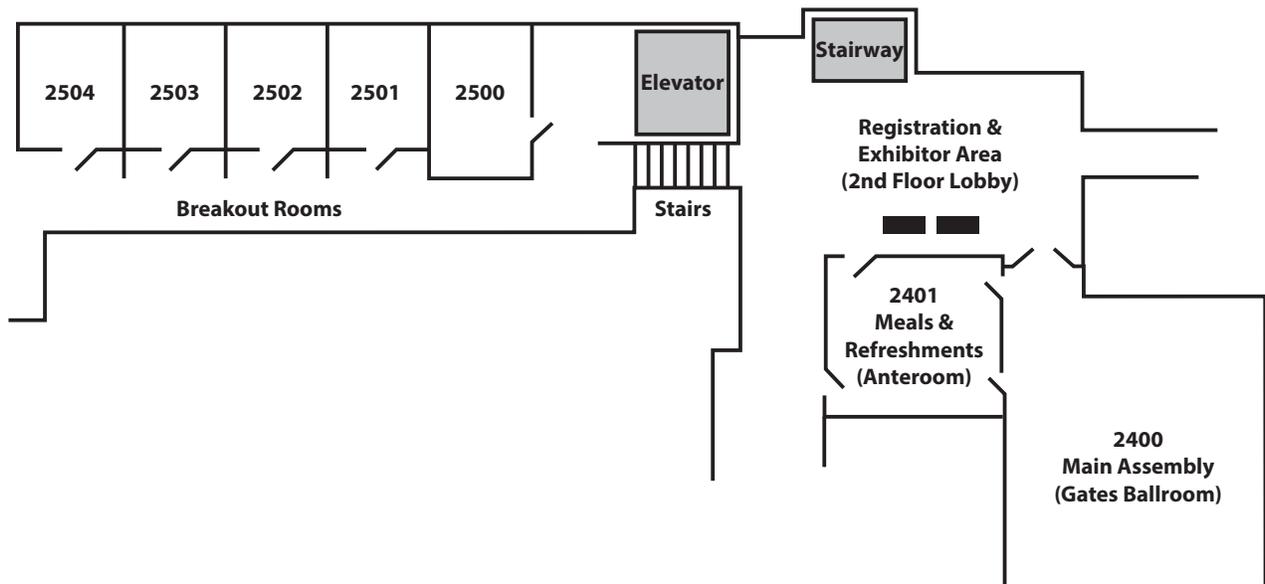## We Gratefully Acknowledge Our Exhibitors & Sponsors

Conference Maps

Building

Conference Location, Room 2400

ITS Main Office
004 Heldenfels Hall

Nagle St

Lamar St

Lubbock St

Lamar St

Military Sciences Bldg

Coke St

Rudder Tower

Throckmorton St

Memorial Student Center

Joe Routt Blvd

University Center Parking Garage
&
Koldus Bldg

Houston St

Rooms

2504	2503	2502	2501	2500

Breakout Rooms

Elevator

Stairway

Stairs

Registration & Exhibitor Area
(2nd Floor Lobby)

2401
Meals & Refreshments
(Anteroom)

2400
Main Assembly
(Gates Ballroom)

Detailed Schedule

Wednesday 8:00-8:30	**Registration & Breakfast** *Sponsored by Skyepack*

8:30-8:45	**Welcome Address**

Room 2400 (Main Assembly)	**Welcome Address** Jim Snell Director, Instructional Technology Services Texas A&M University

9:00-9:45	**Concurrent Session 1**

Room 2500

Design Strategies for Supporting Creative Thinking Online
Joyce Juntune & Noelle Sweany
Educational Psychology
Texas A&M University

One of the areas of focus in education today is the development of creative thinking abilities in our students. With the growth in online education, it is important to consider how instructors can effectively support creative thinking in online environments. This presentation will define and highlight characteristics of creative thinking and outline the corresponding design strategies that have benefitted our own online courses. We will demonstrate the use of various digital tools to support these strategies (including VoiceThread, Voki, Chatterpix, Padlet, Adobe Spark) and discuss new ideas for supporting creative thinking online.

Room 2501

VENDOR PRESENTATION
Merging Technology and Pedagogy: Team-based Course Development with Skyepack to Create a Media-Rich, Custom-Designed Learning Experience
Chad Nelson & Austin Bates
Health & Kinesiology
Texas A&M University and Skyepack

Leveraging technology to enhance the learning experience while using pedagogical best practices is challenging. A collaboration between Texas A&M University's Department of Health and Kinesiology (HLKN) and Skyepack yielded media-rich, customized course materials that are fairly priced for students. By following a creative instructional design approach, HLKN is utilizing the technology students want while delivering a pedagogically sound course experience.

Room 2502   **Use of 3D Virtual Reality to Enhance Student Learning Experiences in Materials Science Courses**
Bilal Mansoor, Marwa Abdelgawad, Tanil Ozkan & Sheharyar Ali
Mechanical Engineering
Texas A&M University–Qatar

Immersive Virtual Reality (VR) is an emerging tool in the field of education and involves completely engaging users in a virtual world designed using a computer-generated simulation of a 3D image or environment. Moreover, a fundamental aspect of materials science is the ability to visualize the structure of materials. The main goal of this presentation would be to show how VR will be used to simplify 3D visualization using low cost VR tools, i.e. Google Cardboard, while having a positive influence on students' motivation and educational effectiveness. Stingray will be used to build 3D models of different structures while allowing users to interact with the models through rotation, zooming in and out, taking measurements and accessing additional information. The models will be accessed through an application that can be installed on any smart phone and then viewed through Google Cardboard. A keyboard or game controller will be used to help users manipulate through the different models.

Room 2503   **Core Curriculum Technology Enhancement Grant Participant(s) Presentation**
Glen Miller
Philosophy & Humanities
Texas A&M University

Participants in the Office of the Provost's Core Curriculum Technology Enhancement Grant Program are partnering with ITS to develop high-quality, high-enrollment core curriculum courses that use technology to enhance Texas A&M University's undergraduate learning outcomes. Learn about the deliverables they are creating and how they are assessing student learning in their updated courses.

Room 2504   **How to Move Your Face-to-Face Course Online**
Jernaley Martin
Instructional Technology Services
Texas A&M University

Transitioning from a face-to-face to an online course can be challenging. For some who are not familiar with technology, it can even be a little scary. Yet whether teaching online is a delivery method you have volunteered to do or has been asked of you to do, there are barriers to overcome and greater rewards for tackling those obstacles. This session is ideal for any educator responsible for designing and/or teaching an online course. Even if you are not teaching online and want to know what goes into the transition, join us as we provide tips to think about when designing or improving an online course. Who knows? Maybe you will have some ideas to share with the group—and many more ideas to walk away with.

| 10:00-10:45 | Concurrent Session 2 |

Room 2500

10 Tips for Increasing Instructor Presence in the Online Classroom
Jacqueline Riley
Curriculum and Instruction
Texas A&M University–Commerce

Learn and share tips for using Skype, Google Docs, podcasts, videos, discussion boards, emails and more to increase instructor presence. We will explore how an instructor who is perceived as present and approachable helps to establish an inviting, engaging learning environment. Participants will leave the presentation understanding how to implement and modify the strategies and tools presented in their own online classes.

Room 2501

VENDOR PRESENTATION
Online Proctoring at Texas A&M: A Comprehensive Solution from Examity
Ryan Leer
Examity

Examity is the leader in online test integrity solutions—offering the most flexible and highest quality proctoring and authentication services in the industry. Come learn more in our session led by Ryan Leer, Texas Director of Business Development, why Examity is a selected partner for Texas A&M System and other regional institutions that place a premium on integrity within distance education. Included in the discussion will be an overview of the online proctoring landscape, available options in the marketplace, and how Examity can work within your programs to meet and exceed your test integrity goals.

Room 2502

Uses and Demos of Virtual Reality in Higher Education
Wendy Clayton
Instructional Technology Services
Texas A&M University

Virtual Reality (VR) is providing opportunities to our teaching community that we have never known before. Users can visit different lands, cultures, planets, and even different time periods throughout history. Come explore how to use this new technology and expand learning experiences for your students.

Room 2503

TAMUS Distance Education Networking Group Meeting
Donna Mancuso
Office of the Provost
Texas A&M University

Come join the Distance Education Networking Group to share news about State Authorization and additional information related to distance education throughout the Texas A&M University System and beyond. This session is for anyone who has anything to do with distance education in an academic environment.

Room 2504	**Core Curriculum Technology Enhancement Grant Participant(s) Presentation** Brian Shaw Plant Pathology & Microbiology Texas A&M University

Participants in the Office of the Provost's Core Curriculum Technology Enhancement Grant Program are partnering with ITS to develop high-quality, high-enrollment core curriculum courses that use technology to enhance Texas A&M University's undergraduate learning outcomes. Learn about the deliverables they are creating and how they are assessing student learning in their updated courses.

11:00-11:45	**Concurrent Session 3**

Room 2500	**Pedagogical Strategies to Motivate and Engage Online Learners** Nesrin Bakir Computer Information Systems West Texas A&M University

As the number of online courses and students increase, the design and facilitation of online learning environments remains important. Particularly, the design of online environments can contribute to or hinder learning. This presentation will provide how design strategies such as setting the tone, goal setting, peer engagement, authentic activities, online community, and autonomy can enhance the online experience. The presentation will showcase how specific technologies and curriculum examples can be used to design a motivating and engaging online learning environment.

Room 2501	VENDOR PRESENTATION **Tips & Tricks for Teaching Online** Rita Vela Blackboard

We will discuss different tips and tricks for teaching online. This will include items related to the Blackboard Learn LMS, but also general tips regarding course design, time management, and communication. Come join the conversation and share your own tips and tricks!

Room 2502	**Library Resources for Teaching and Learning** Stephanie Graves, Elizabeth German, Bruce Herbert & Michael Hawkins University Libraries Texas A&M University

A panel from Texas A&M Libraries will showcase technologies and services that support teaching and learning initiatives, including those that support information literacy, high-impact instructional strategies, and scaling innovative practices to large (and sometimes online) classes. Participants will learn about changes to OERs (Open Educational Resources), freely available educational resources, and open access textbooks that faculty can use for their courses. Panelists will discuss strategies for embedding library resources into eCampus, including which roles librarians can play to help support students. Panelists will

also demonstrate an augmented reality library tour that was created for ENGL 104, which could be adapted for other courses.

Room 2503 **Integration of Virtual Dissection Table into Undergraduate Anatomy Courses**
Cleveland Lane
Biology
Prairie View A&M University

The learning landscape of undergraduate education has become more dynamic, requiring instruction to be creative, engaging, and inquiry-based. Studying the human anatomy has often been limited to 2D images and models. The integration of a 3D dissection table provides students the opportunity to be active in their learning and instructors to use interactive methods in assessing students' conceptual understanding. In a pilot study, undergraduate students used a 3D dissection table to understand anatomical structures. The presentation will discuss best practices with the innovative technology.

Room 2504 **Developing Cross-Course Collaboration: Round 1**
Lacy Davis & Cynthia McPherson
English
Tarleton State University

This session describes a cross-course collaboration between upper level technical editing students and freshman composition students in the development, writing, and revising of the first essay in the composition class and the repurposing of the essay into a practical document for a public audience. Participants will 1) understand the value of cross-level and cross-course collaboration, 2) acquire techniques for conducting such a collaboration, 3) improve their creativity in developing assignments, 4) be encouraged to step outside of their comfort zones in the classroom and tackle innovative teaching strategies.

| 12:00-1:30 | **First Keynote Presentation & Lunch – *Sponsored by Blackboard*** |

**Room 2400
(Main Assembly)**

The 25 by 25 Transformational Education Program
Katherine Banks, Vice Chancellor for Engineering for The Texas A&M University System and Dean of the College of Engineering

View a progress report of the "25 by 25" growth initiative, which has the goal of enrolling 25,000 engineering students by 2025. 25 by 25 is a transformational education program designed to increase access for qualified students to pursue engineering education at Texas A&M. This includes students at the College Station, Galveston, Qatar, and McAllen campuses, online master's degree students, and students in statewide engineering academies. Learn the approaches, strategies, and logistics for transforming the college's educational experiences and enabling students to address the future needs of engineering industries. The college is increasing accessibility to world-class, cost-effective engineering education—while at the same time maintaining academic rigor and quality—by using flipped/inverted courses; creating active learning spaces with smaller class sizes; implementing the latest in instructional technology; improving student retention; and involving "professors of practice" and additional industry leaders to share real-world experiences.

| 1:45-2:30 | **Concurrent Session 4** |

Room 2500

Modern PowerPoint Design
Sharon Huston & Jernaley Martin
Instructional Technology Services
Texas A&M University

Bring your slide presentations out of the 1990s by learning new, modern design techniques that will help you avoid common problems with presentations. We'll discuss how to break down information to avoid text-heavy slides, how to legally source images, and how to use creative tools in PowerPoint. Some content will be specific to PowerPoint, but most of the principles shared can be generalized to all presentation packages.

Room 2501

VENDOR PRESENTATION
i>clicker and REEF Polling: Active Learning Simplified
X. Ben Wu & Patrick Fariss
Ecosystem Science & Management
Texas A&M University and i>clicker

The ability to engage students and provide formative assessment are key components of an active learning environment. This session will explore how to use i>clicker and REEF Polling (mobile devices) to increase student engagement, attendance, and performance. Join us to discover how i>clicker and REEF Polling are helping instructors and students transform teaching and learning. i>clicker is Texas A&M's supported student response system, and it offers instructors and students the choice of a physical remote or their personal device through REEF Polling. See how these tools integrate with Blackboard Learn for seamless uploading of grades and registration of devices. This interactive session will

examine strategies for active learning as well as best practices for using student response systems. Bring Your Own Device (BYOD) if you'd like to join in the fun!

Room 2502

Keep Calm, Build On: Towards a Learning Accessible Campus
Phylis Zimmermann & Ryan Hodgson
Instructional Technology & Distance Education
Texas A&M International University

In a time when accessibility in education is highlighted, especially in distance and hybrid learning, we will present how Texas A&M International University has implemented accessibility standards, universal design principles, and diversity appreciation to enable learning for all. We will walk through the process steps used on our campus demonstrating the utilization of various technologies providing captions and transcripts for audio and video files. The presentation goal is to share our progression and methods used to handle diversity needs in a Universal Design for Learning fashion. This unique session will address the course of action taken—from start to finish—from receiving standalone audio/video files, ultimately integrating fully captioned/transcribed files to your Learning Management System. Participants will takeaway ideas and process steps for their campuses.

Room 2503

Using Knowledge Surveys as Roadmaps to Promote and Assess Student Learning
Rebecca Martindale Leighton
Instructional Technology
Texas A&M University–Texarkana

This presentation introduces Nuhfer & Knipp (2003) knowledge survey tool used in an online course as a way to assess changes in student learning of course content. The knowledge survey tool can be used as a roadmap to guide student learning as well as providing information on summative assessments of learning. An introduction to the tool, an overview of the implementation and data collected are provided.

ENPH 307

OFFSITE LAB PRESENTATION
Pedagogical Aspects of Virtual Reality Implementation in Mechanical Engineering Materials and Manufacturing Labs at Texas A&M
Nazanin Afsar Kazerooni, Rachel Rebagay, Tanil Ozkan & Arun Srinivasa
Mechanical Engineering
Texas A&M University

Location: James Cain '51 (ENPH) Building, 180 Spence St, Room 307
http://aggiemap.tamu.edu/index.html?bldg=0391

In MEEN 361, Materials and Manufacturing in Design Laboratory, which is a course offered by the Department of Mechanical Engineering at Texas A&M University, new training modules facilitated by AR/VR and virtual prototyping tools were developed and implemented to enhance reverse engineering, rapid prototyping, and manufacturing skills of students. Pedagogical aspects and challenges of this emerging technology-based teaching approach will be

presented. Preliminary analysis of blindfolded educational impact assessment survey performed with 157 students indicates 63% of all students think that VR-based experimental modules are very helpful and accelerate their learning process. An interesting outcome of the same study is that when it comes to female students, this figure increases to 86%, which is an important pedagogic outcome considering projected changes with the gender structure of the technical workforce in the US. It is hypothesized that the immersive environment provides the opposite gender with a more egalitarian perception of the psycho-dynamical surrounding in fields traditionally associated with a certain gender and triggers such a response overlapping with the outcomes of earlier experimental studies in the field of cybernetics. More evidence will be needed to prove this hypothesis in the broad field of engineering pedagogy. Another important result of the survey conducted by the authors relates to success metrics: For students with GPAs less than 3.0, the positive feedback for virtual reality tools is 72%, whereas this drops to 61% for students with GPAs greater than 3.0. The implications of these results will be interpreted from the holistic pedagogical perspective so that advancing instructional technology-driven learning objectives can be integrated efficiently into existing mechanical engineering curriculum. **Note:** This presentation will be held in James Cain '51 (ENPH) Building, 180 Spence St, Room 307. The room will accommodate 20 people.

2:45-3:30	Concurrent Session 5

Room 2500

SPECIAL PRESENTATION
Continuing Conversation about the 25 by 25 Transformational Education Program
Katherine Banks, Vice Chancellor for Engineering for The Texas A&M University System and Dean of the College of Engineering

Join us as we continue the conversation about the 25 by 25 Transformational Education Program. Discuss in further detail the approaches, strategies, logistics, and university-wide impacts for transforming the College of Engineering's educational experiences and enabling students to address the future needs of engineering industries.

Room 2501

Introduction to Blackboard Collaborate Ultra
Jacob Wilson
Instructional Technology Services
Texas A&M University

Blackboard Collaborate is a robust webconferencing system that works seamlessly with eCampus (Blackboard Learn) to conduct online, interactive instruction and meetings of all types. Collaborate Ultra is now available university-wide as of this spring semester. Collaborate Ultra features simple, intuitive deployment with nothing additional to install, so participants can get connected quickly. It also delivers high-quality HD audio and video along with a thoroughly redesigned and streamlined user interface with an optional "follow the speaker" layout. Use Collaborate Ultra to deliver presentations, moderate breakout groups and chat, share your desktop or applications, and record meetings for later viewing.

Room 2502   **How Chromebooks and Google Apps are Revolutionizing Student Learning in Education**
Michael Hawkins
University Libraries
Texas A&M University

Chromebooks have been making an impact in education over the last few years from their low cost, collaborative apps, mobility, accessibility, and security from IT management. In this presentation, participants will learn about how collaboration and interaction are used in real time through apps and multi-user editing. Real time syncing and access to content anytime and from several platforms and operating systems for full collaboration. The audience will learn about the security and management of devices from an IT management side, in how easy Chromebooks can be configured for deployment. Along with security, computer-based assessments are easily deployable for secure assessments with Chromebooks. Chromebooks lower costs, save money on infrastructure, reduce maintenance, and are sustainable. The discussion will include how Chromebooks are being used in higher education and throughout the state of Texas.

Room 2503   **Strategies and Best Practices for Distance Learning**
Major Stewart & Charlene Stubblefield
Distance Learning
Prairie View A&M University

In a world where the change in technology is never ceasing, there are strategies and best practices to ensure distance learning is the best it can be! Learn how to include faculty, administration and—most importantly—students in the planning, design and implementation of your distance learning course content. Even though distance learning now includes a combination of hybrid, blended and completely online classes, there are several strategies that have stood the test of time. Join us as we combine research from leading experts regarding industry standards for both distance learning and teaching innovation.

Room 2504   **Core Curriculum Technology Enhancement Grant Participant(s) Presentation**
Francoise Vionnet-Bracher, Fabiana Cecchini, Yuki Waugh, Ashley Passmore, Lamia Arfaoui & Shi Wei Dong
International Studies
Texas A&M University

Participants in the Office of the Provost's Core Curriculum Technology Enhancement Grant Program are partnering with ITS to develop high-quality, high-enrollment core curriculum courses that use technology to enhance Texas A&M University's undergraduate learning outcomes. Learn about the deliverables they are creating and how they are assessing student learning in their updated courses.

3:30-3:45	Afternoon Refreshments, Room 2401 (Anteroom) – *Sponsored by Examity*

3:45-4:30	**Concurrent Session 6**

Room 2500

SPECIAL PRESENTATION
Making Digital Content More Accessible
Phillip Miller, Vice President of Teaching and Learning
Blackboard

Digital content is proliferated across the campus and sometimes hard to manage. During this session, we will talk about making digital course content more accessible. We will discuss tools to help instructors gain detailed insight into the accessibility of their course content, provide guidance to teachers about how to improve the accessibility of their content, and automatically provide students with a range of more accessible alternative formats.

Room 2501

Digital Playgrounds as Learning Spaces: Leveraging Gamification and Digital Games for Engagement, Collaboration, and Learning
Nate Poling
Center for Teaching Excellence
Texas A&M University

Technological advances and the increasingly mainstream acceptance of digital games have exciting implications for teaching and learning. As a higher percentage of the population gains experience playing digital games, digital game-based learning (DGBL) has the potential to provide new ways for educators to facilitate learning for a population increasingly accustomed to digital media, tech gadgets, and interactive entertainment. This participatory interactive workshop will focus on some of the general theoretical and research perspectives on DGBL, demonstrate some games, and also model some possible approaches in the classroom.

Room 2502

Using Poll Everywhere to Engage Students in a Large Class
Catharina Laporte
Anthropology
Texas A&M University

Poll Everywhere is an alternate to i>clickers using students' existing devices (smartphones, laptops, and tablets). This interactive session will demonstrate how I used this impressive technology to engage Engineering students in a large class and the valuable lessons I learned along the way. BYOD!

Room 2503   **Using Video Response and Messaging Apps to Engage and Assess Student Learning**
Rebecca Martindale Leighton & Rachael Cherry
Instructional Technology
Texas A&M University–Texarkana

This presentation introduces Swivl Recap, a free video response and reflection app for gaining insights into student thinking. An overview of the tool and how it was used in an online graduate course will be provided. Examples of student work will be presented as well as discussion on the use of the tool for formative assessment. In addition, three messaging tools will be shared that are used in an online course for instructor-to-student and student-to-student communication. The three tools used are Piazza, Slack, and Remind applications. Communication in online courses is important in helping students learn and stay engaged in cyberspace. Several apps will be demonstrated with audience participation.

Room 2504   **Tales from the Cube: Creating a Virtual Advising Space**
Bonnie Bustos-Rios & Laura Olivarez
Engineering Academic & Student Affairs
Texas A&M University

A recent, temporary office relocation has caused space constraints to meet academic advising demands of first year undergraduate engineering students. This scenario has led to opportunities to develop enhanced academic advising practices through online-mediated advising including on-demand advising videos, virtual real-time advising appointments, interactive large group advising sessions, and distance-student advising using the WebEx platform. This session will showcase the application of virtual advising techniques used by a large volume first year program advising office, and will allow session attendees to engage in small group best practice sharing related to the use of virtual and online spaces to engage students.

Thursday   **Second Keynote Presentation & Breakfast**
8:30-10:00   *Sponsored by i>clicker*

Room 2400   **Creative Teaching Approaches: Global Examples of Engaging Students with**
(Main Assembly) **Technology**
Phillip Miller, Vice President of Teaching and Learning
Jim Chalex, Senior Director of Product Management
Blackboard

At Blackboard, we are able to take a broader view across institutions, systems, and countries. We see examples of new and innovative teaching methodologies that use technology to drive deeper engagement for the personalized needs of students. This session will highlight some major themes and examples of best practices to spur new ideas and creative approaches for improving the learning experience. Take a deep dive look at the most recent releases of Blackboard Learn and Collaborate, with a specific focus on the design thinking processes used to build powerful features in the simplest way possible.

Room 2500   **Active Learning Tools Used in Medical Education**
Paul Brandt & Patty Luna-Arvizu
College of Medicine – Academic Technology
Texas A&M Health Science Center

The College of Medicine is obliged by our accreditation body to use active learning teaching modalities. To this end, we have engaged in developing active learning pedagogies for our curriculum. Our earliest use of active learning was with audience response systems followed by a backchannel communication tool. These are still used in large class sessions. We have also developed online, interactive self-directed learning modules. These come with varying degrees of active learning ranging from simply watching a presentation with quizzes at the end to modules coupled with adaptive release that is tied to attainment of learning objectives as evaluated by embedded assessments. Assessments within some of our module are now starting to use adaptive testing strategies in which assessment items increase in difficulty as the student progresses through the assessment. This presentation will discuss specific tools, how they are used, and the successes and problems that have been encountered.

Room 2501   VENDOR PRESENTATION
Managing Exams from Your Desktop: From Scantrons to eCampus Using DigitalDesk
Alicia Dorsey, Greg Gomm & Matt Sifuentes
Office of Institutional Effectiveness & Evaluation and Instructional Technology Services
Texas A&M University and Digital Desk

DigitalDesk is a software platform that gives instructors more power and flexibility over their Scantron tests. By transitioning the processes to a digital platform, faculty now have the power to manipulate test keys, run a wide range of analytics, send scores directly to students, and load grades into eCampus with a click of a button from any computer. Through Instructor Tools, the online portal through which faculty access scanned exams, instructors have easy access to managing student information, adding bonus points, weighting answers, awarding partial credit, rescoring exams, and running various exam analyses. We will demonstrate the functionality and ease of access to Instructor Tools as well as the interface between Instructor Tools and eCampus. Representatives from both the Office of Institutional Effectiveness & Evaluation and Instructional Technology Services will give the presentation and be available for Q&A.

Room 2502   **Freshman Physics Classroom: First Results**
William Bassichis, Tatiana Erukhimova & Jonathan Perry
Physics & Astronomy
Texas A&M University

Use of videos as an additional component of education has been on a continual rise in recent years. Video engagement as an instructional technique can be beneficial if the material is designed at an appropriate level and presented in an

accessible manner. Many existing, popular resources have content designed for algebra-based courses, which are not suitable for STEM majors in calculus-based introductory physics. This work consists of the development of a new set of online video resources being developed at Texas A&M University to exhibit the fundamental physical concepts, laws, and equations in a manner appropriate for calculus-based physics courses of any institution. Preliminary assessment on the effectiveness of the modules, and user surveys concerning them, will be presented for modules deployed during the spring and fall terms of 2016.

Room 2503   **Developing Augmented Reality Tools to Enhance Learning Experiences**
Konstantinos Kakosimos, Ghada Salama, Marcin Kozusznik & Marcelo Castier
Chemical Engineering
Texas A&M University–Qatar

The increase in the popularity of modern technologies among students is increasingly challenging the status quo of the educational system. Pairing teaching and learning strategies with appropriate technology trends can greatly enhance the motivation to learn. Ergonomics and human factors can play a critical role in analyzing the abilities and behaviors of students and employing the gained knowledge in designing tools, products, and systems that more effective for accomplishing a given task. Wearable technologies equipped with augmented reality capabilities offer a lot of promise for education and training especially for the applied science disciplines. In this work, we utilize wearable technologies, namely the Google Glass and Microsoft HoloLens, to immerse students in an augmented reality environment that guides actions at every step of the experiment via intelligent audio-visual feedback. In addition, we share our experiences over the tools development and first pilots.

Room 2504   **Activating Student Learning through Adaptive Learning Case Studies and Digital Badging**
Johanna Heseltine, Nicola Ritter & Mary Nabity
College of Veterinary Medicine
Texas A&M University

Adaptive learning case studies are an inclusive teaching strategy that assigns clinical cases based on an individual student's level of competency. We expect a personalized learning path, coupled with digital badges, to activate student learning by identifying students' areas of weakness, directing students' learning time on their weaknesses, and motivating students to practice beyond minimum competencies in the areas in which they are interested. The goal of this presentation is to share how a series of adaptive learning case studies can enrich students' course experiences. Attendees can take away strategies on how to design and develop adaptive case studies and implement motivational tools, such as digital badges, into a college curriculum. Participants will review the design documents used to create this series of cases, explore the efficiencies of the authoring tool, StepStone, used to create these cases studies, and discover ways to implement digital badges in an online course.

Room 2500   **Overview of Quality Matters**
Bharani Nagarathnam, Deepak Muthukrishnan & Sharon Gibson-Mainka
Engr. Technology & Industrial Distribution and Instructional Technology Services
Texas A&M University

Quality Matters is recognized worldwide as an inter-institutional peer review process that uses a research-based set of standards known as the QM Rubric to assess the quality of the design of an online course. There are currently 800 subscribers in 46 states as well as several countries outside of the U.S. Research indicates that the QM process and QM Rubric are effective in producing quality online courses. Join us as we explore Quality Matters, learn how the QM Rubric can enhance the online presence of your course, and see what is involved in the QM Review process. The Master of Industrial Distribution Program now has five QM-certified courses with five additional courses to be reviewed in 2017. Their goal is to be the first degree program to be fully QM-certified at Texas A&M.

Room 2501   VENDOR PRESENTATION
The Future of Goals: Using EAC Visual Data for Course Statistics, Program Review, and Institutional Assessment
Darrell Walker & Christopher Heisen
Technology Management and Educational Assessments Corporation

This presentation will demonstrate the myriad uses of the EAC Visual Data course tool in eCampus for providing detailed exam and item reliability statistics, rubric data across courses & over time, and performance data on student learning objectives (SLOs), program competencies (PCs), and institutional learning outcomes (ILOs).

Room 2502   **Enhancing Blended and Active Learning in a Large Ecology Course**
X. Ben Wu, Mariana Mateos, David Briske & Xavier Jaime
Ecosystem Science & Management and Wildlife & Fisheries Sciences
Texas A&M University

The goal of this Core Curriculum Technology Enhancement grant project is to enhance blended and active learning in a large core curriculum course, Fundamentals of Ecology, to help students develop deeper understanding of ecology and the scientific process, and to enhance critical thinking and integrative learning skills. SimUText Ecology, an interactive system based on simulations, our own online modules, and authentic ecological inquiry projects were used for out-of-class learning activities. Peer instruction/think-pair-share activities based on key concepts and common misconceptions of ecology, case studies, and mini-lectures were used for in-class learning activities. Frequent formative and summative assessments, with both self-reflections and direct assessments, were used in assessments for and of learning, which showed significant learning gains and overall positive response of students to the new design of the course. We will engage the audience with small group activities to evaluate course design materials and assessment results and provide feedback for improving future implementations.

Room 2503   **Using Problem-based Learning in Online Science Courses**
David Allard
Biology
Texas A&M University–Texarkana

This session describes the use of problem based learning in online biology courses. The courses are Global Changed, Endangered Ecosystems and Atmosphere and Biosphere. Each course is divided into modules on a particular topic such as Amphibian Crisis or Rising Sea Level. Students must then work individually and in groups to understand the extent of the problem and propose a solution.

Room 2504   **Technology-Enhanced Instruction: Real-Time Student Collaboration Using Google Docs**
Marcia Montague
Educational Psychology
Texas A&M University

Case study approaches provide students with the opportunity to consider real-world challenges. Enhancing this already effective practice with technology allows for a real-time, exciting collaborative opportunity. In this presentation, I will describe and model the ways in which I have used shared Google documents with students in a senior-level pre-service teacher preparation course. Participants in this session will get the opportunity to practice the approach, in the role of the student, to witness first-hand the collaborative productivity of the process. As a group, we will problem-solve a case using shared Google documents. Session Goal: Participants will explore the use of shared Google documents via an in-session activity that provides a model for a case study class activity.

12:00-1:00	**Grab & Go Lunch, Room 2401 (Anteroom) – Relax and Network with Colleagues**

1:15-2:00	**Concurrent Session 9**

Room 2500   **Broadening Your Reach: Using Tutorials to Develop First-Year Students' Research Skills**
Jane Stephens, Sarah LeMire & Kathryn Perez
University Libraries
Texas A&M University

The TAMU Libraries will share their strategies for embedding information literacy concepts and skill development in a large-scale, first-year course without using class time. Presenters will share how they established a relationship with the partner unit, how they engaged all library stakeholders, and how they leveraged student expertise to create a set of high-quality, interactive, ADA-compliant tutorials. Presenters will discuss the storyboarding process and the development and revision stages. Presenters will engage the audience by polling them about the barriers they experience in using tutorials to deliver instructional content as well as to ask audience members to share their own success stories and strategies. At the end of this session, audience members will be able to describe

the tutorial storyboarding process as well as the stakeholders and resources that may be present in their own units in order to help them develop their own tutorials.

Room 2501	**Procurement of Accessible Products to Improve Learning Outcomes** Cynthia Kauder, Dawn Watkins & Puneet Gaddam IT Accessibility Services Texas A&M University

Ensuring the procurement of accessible Electronic and Information Resources (EIR) is the first step to enabling everyone—including those with disabilities—to perceive, understand, navigate, and interact with technology. The goal of this session is to provide tools necessary to evaluate EIR prior to procurement, and it will showcase the new Texas A&M IT automated exception workflow. The session will cover:

- Accessibility and learning outcomes
- Our responsibilities
- Procurement tips
- VPATs and vendor resources
- Exception requests (for EIR which are not accessible)
- FAQs

Participants will be asked to share their experiences in procuring EIR, offer questions, and analyze VPATs for several similar academic products in preparation for purchase/procurement. Additionally, we will walk through the new exception request process at Texas A&M University, the first in the System to be automated.

Room 2502	**Online and Face-to-Face Collaboration Tools** Glenda Rose, Debra Hargrove & AnneMarie Molinari Texas Center for the Advancement of Literacy & Learning and Educational Administration & Human Resource Development Texas A&M University

A four-year study of 2,212 freshmen from nearly 60 different colleges confirms that "active and collaborative learning" is "of immense benefit to students," improving their fourth year outcomes. In addition to the expected educational gains, active and collaborative learning also impacted openness to diversity and socially responsible leadership (Kilgo, Ezell Sheets, and Pascarella, 2015). To garner these benefits, we can use modern tech tools to foster meaningful collaboration both in the physical classroom and in the online environment. In this workshop, participants, guided by a rubric, work in pairs to evaluate productivity tools such as G-Suite apps, Office 365 apps, project management tools like Asana and Kanbanchi, and mind-mapping tools such as MindMup and Creately, to name a few. Groups share the findings of their explore-and-evaluate activity by adding their feedback in Google Sheets so that all participants walk away with an annotated starter list of apps and activities.

Room 2503   **Engaging Students with Online Evaluations**
Alicia Dorsey & Kimberlee Pottberg
Office of Institutional Effectiveness & Evaluation
Texas A&M University

In the twelve years since the introduction of online course evaluations at Texas A&M, more and more departments have moved from paper to online, often for reasons of cost and efficiency. In that time some common myths about online evaluations have emerged and been busted. Some common challenges and experiences have been identified. It is clear that online evaluations are not the same old evaluations in a different format. In fact, the change in delivery involves changes in policy and faculty/staff collaboration. Faculty ownership is a necessary element for success. Greater student engagement is an expected outcome of the online evaluation. The audience will learn ways in which data is improved by online delivery, how response rates should be interpreted, and how to communicate with students about the importance and impact of evaluations.

Room 2504   **Wikispaces**
Sloane Milstein & Saurabh Singh
Health & Kinesiology
Texas A&M University

Wikis are proving to be an impressive tool for collaborative learning. This presentation will cover the general pros and cons of using wikis, and then focus on the use of eCampus Wikis and Wikispaces, a free educational tool, by briefly covering the success and challenges of two assignments and providing related student samples. This presentation will server to enrich course experiences through technology-enhanced instruction while providing ideas and techniques for teaching with technology to enhance student learning.

2:15-3:00	Concurrent Session 10

Room 2500   **Video Captioning: The Good, the Bad and the Ugly**
Jennifer Chilek & Shireen Jahedkar
Organizational Development
Texas A&M AgriLife Extension

Join us to hear what we've tried, the hurdles we've encountered and the things we've learned as we've worked with faculty members and administrators to caption educational videos. Audience participation will be solicited as we share our experience and brainstorm with participants on tools and techniques to use to make captioning as painless as possible, conceptually and practically.

Room 2501   VENDOR PRESENTATION
Engaging Students and Scaling Learning with Peerceptiv
Craig Coates & Mark Limbach
Entomology
Texas A&M University and Peerceptiv

Peerceptiv helps engage students and scale learning through research-validated peer assessment. Especially in disciplines like the sciences, social sciences, engineering, and business, there are frequently too many students to assign the writing and other formative feedback tasks essential in building critical thinking and analytical reasoning skills. Learn how professors are using Peerceptiv to more easily assign and manage these tasks, using student accountability algorithms to motivate students and instructor metrics to validate outcomes. The discussion will include Peerceptiv's efforts to make assignment setup and management easier, including integration with eCampus (Blackboard Learn) and a Shared Assignment Library that guides professors to high-outcome assessments. Dr. Coates will be sharing his experience and perspective from using Peerceptiv over the last three semesters, as well as providing student feedback about their use of Peerceptiv.

Room 2502   **Applications of 3D Modeling in Veterinary Medical Education**
Ashley Saunders, Jordan Tayce & Lauren Timperman
College of Veterinary Medicine
Texas A&M University

A detailed knowledge of anatomy is critical to success in the medical field. Computed tomography (CT) angiography provides high-resolution images of the body structures, and reconstructed models can be rendered using a variety of software applications to produce three-dimensional (3D) images. The data sets are loaded and density thresholds applied to the tissues of interest to create and export a 3D model as an STL file that can be 3D printed. Virtual and printed models enhance visual and spatial understanding of complex anatomy at all levels of training for professional and graduate students. Models are useful for surgical procedural planning and for engineering medical devices. We will emphasize the educational applications of this technology and present a virtual reality system where a CT study can be imported minutes after it is acquired to view an interactive, patient specific, True 3D representation of the anatomy.

Room 2503   **The Role of Technology in the Implementation of an Innovative, Research-Informed Spanish Curriculum**
Gabriela Zapata & Alessandra Ribota
Hispanic Studies
Texas A&M University

ACTFL's World Languages and 21st Century Skills document states that the main goal of second language (L2) instruction is the "develop[ment] of students' language proficiency around modes of communicative competence reflecting real life [multimodal] communication" (2). Instructionally, this objective can be achieved through research-informed practices and assessment, materialized in curricula that motivate students and enrich their learning process by

promoting L2 use in "authentic tasks that mirror the real world" (Adair-Hauck et al., 2013: 25). Instructional activities and assessment tools that rely on the use of technology can facilitate this task. Through the discussion of the implementation of three Web 2.0-based projects, this presentation describes the role that technology has played in the curricular innovation that is taking place in the Spanish Program in the Department of Hispanic Studies, and that has resulted in the revamping of instruction in Spanish 101, 102, and 201.

Room 2504   **Social Constructionism and Tools within a Learning Management System**
Ahmed Mahfouz
Accounting, Finance & MIS
Prairie View A&M University

This seminar presents and facilitates a discussion about social constructionism within a learning management system (LMS). This learning theory was instrumental in the creation and design of a LMS, called Moodle. Three methods of learning based on social constructionism are demonstrated: reciprocal questioning, jigsaw classroom activities, and structured controversies. Several LMS tools based on the theory are discussed. Furthermore, the concept of "communities of practice" is integrated into the discourse to highlight the pragmatic approach of how Moodle's social learning features support social constructionism. This seminar is not a Moodle software training workshop, but rather a deeper perspective on and illustration of active social learning within a LMS.

3:15-3:30   **Door Prizes – Room 2400 (Main Assembly)**

Note: *Must be present to win giveaways.*

The Teaching with Technology Conference is coordinated by Instructional Technology Services.

Please remember to complete an evaluation form and place it in a designated box.

For comments or suggestions about future events, contact ITS at itshelp@tamu.edu or (979) 862-3977.

Thank you for attending the Conference!

About the Keynote Presenters

Dr. Katherine Banks is the vice chancellor for engineering for The Texas A&M University System and dean of the College of Engineering at Texas A&M University.

As vice chancellor, Banks oversees coordination and collaboration among the engineering, academic, and research programs at seven universities throughout the A&M System, as well as three state agencies: the Texas A&M Engineering Experiment Station (TEES), the Texas A&M Engineering Extension Service (TEEX) and the Texas A&M Transportation Institute (TTI). Banks also is TEES director, overseeing research administration of more than 4,838 projects and $208 million in sponsored research awards.

As dean of Texas A&M's College of Engineering and holder of the Harold J. Haynes Dean's Chair in Engineering, Banks leads one of the largest engineering schools in the country, with more than 17,000 students and 500 faculty. Banks leads the 25 by 25 initiative, a transformational education program designed to increase access for qualified students to pursue engineering education at Texas A&M University to an enrollment of 25,000 students by 2025.

Banks was previously the Bowen Engineering Head for the School of Civil Engineering at Purdue University and the Jack and Kay Hockema Professor at Purdue. She received her B.S.E. from the University of Florida, M.S.E. from the University of North Carolina, and Ph.D. in civil and environmental engineering from Duke University. For her research, Banks has received funding from the National Science Foundation, the U.S. Environmental Protection Agency, the U.S. Department of Defense, the U.S. Department of Energy and NASA, as well as industry and state government. She served as director of the EPA Hazardous Substance Research Center, associate director of the NASA Center for Advanced Life Support, and co-director of the 21st Century Center for Phytoremediation Research, all headquartered at Purdue.

Banks is a member of the National Academy of Engineering and Fellow of the American Society of Civil Engineers. She is a licensed professional civil engineer in Indiana and Kansas. She has received numerous awards including the ASCE Petersen Outstanding Woman of the Year Award, ASCE Rudolph Hering Medal, Purdue Faculty Scholar Award, Sloan Foundation Mentoring Fellowship and the American Association of University Women Fellowship. She is the author or co-author of more than 150 journal articles, proceedings papers and book chapters, and has made more than 200 scholarly or technical presentations before professional and related groups. Banks has served as editor-in-chief for the *ASCE Journal of Environmental Engineering* and associate editor of the *International Journal of Phytoremediation*.

With over 14 years of experience in education technology, **Phillip Miller** serves as vice president of teaching and learning at Blackboard. In this capacity, he is responsible for leading the product strategy, roadmap, management, and marketing for Blackboard's suite of world-class online teaching and learning solutions, including Blackboard Learn, Moodlerooms, Collaborate, Ally, and Safe Assign.

Prior to his current role at Blackboard, Miller was vice president and business line manager of Moodlerooms, the open source division of Blackboard. He joined the company

in 2012 with the acquisition of Moodlerooms, where he was vice president of product strategy. During his tenure at Moodlerooms, Miller helped to build an innovative software-as-a-service learning management system on a global, open source learning platform and invented cross-platform content sharing software for delivering open educational resources.

Earlier, Miller served as director of business development at Oxygen Education, LLC and as product manager/senior solutions architect at ANGEL Learning, Inc.

Miller holds a Juris Doctorate from Indiana University School of Law, a Master of Business Administration from Indiana University, and a Bachelor of Science in Computer Science/Information Systems from Ball State University.

Jim Chalex is senior director of product management for Blackboard Learn. He has managed the research, planning, and delivery for several educational technology products, with experience in learning management systems, learning analytics, and outcomes assessment and accreditation.

INSTRUCTIONAL
TECHNOLOGY
SERVICES

T E X A S   A & M   U N I V E R S I T Y