The League for Innovation is proud to present the second annual

STEM*tech* CONFERENCE

A conference designed to help increase student success in science, technology, engineering, and mathematics, and to explore the use of information technology to better serve students, campuses, and communities.

Hosted by Ivy Tech Community College

October 2-5, 2011
JW Marriott Indianapolis

League.org
FOR INNOVATION
IN THE COMMUNITY COLLEGE

Use this planner to design your 2011 STEM*tech* conference agenda.
Jot down page numbers of session descriptions for quick reference.
Pencil in meetings with colleagues.

	SUNDAY OCTOBER 2	MONDAY OCTOBER 3	TUESDAY OCTOBER 4	WEDNESDAY OCTOBER 5
8:00 a.m. - 9:00 a.m.			8:00 a.m. - 9:00 a.m. Track Keynote Session	
9:00 a.m. - 10:00 a.m.		9:15 a.m. - 10:15 a.m. Track Keynote Session	9:15 a.m. - 10:15 a.m. Track Keynote Session	
10:00 a.m. - 11:00 a.m.		10:15 a.m. - 12:00 p.m. Coffee Break in the Exhibition Hall	10:15 a.m. - 11:15 a.m. Coffee Break in the Exhibition Hall / 10:15 a.m. - 12:00 p.m. Exhibition Hall Open / 11:00 a.m. - 12:00 p.m. Track Keynote Session	10:30 a.m. - 12:00 p.m. Closing General Session
11:00 a.m. - 12:00 p.m.		11:00 a.m. - 12:00 p.m. Track Keynote Session		
12:00 p.m. - 1:00 p.m.			12:30 p.m. - 1:30 p.m. Track Keynote Session	
1:00 p.m. - 2:00 p.m.		1:15 p.m. - 2:15 p.m. Refreshment Break in the Exhibition Hall	1:30 p.m. - 2:30 p.m. Refreshment Break in the Exhibition Hall	
2:00 p.m. - 3:00 p.m.		2:15 p.m. - 3:15 p.m. Track Keynote Session		
3:00 p.m. - 4:00 p.m.	3:15 p.m. - 4:15 p.m. Refreshment Break in the Exhibition Hall	3:30 p.m. - 4:30 p.m. Track Keynote Session		
4:00 p.m. - 5:00 p.m.	4:30 p.m. - 6:00 p.m. Opening General Session			
5:00 p.m. - 6:00 p.m.		5:45 p.m. - 7:00 p.m. Reception in the Exhibition Hall		
6:00 p.m. - 7:00 p.m.	6:00 p.m. - 7:30 p.m. Opening Reception and Book Signing in the Exhibition Hall			
7:00 p.m. - 8:00 p.m.				

The following times are subject to change.

24-Hour Email and Internet Stations
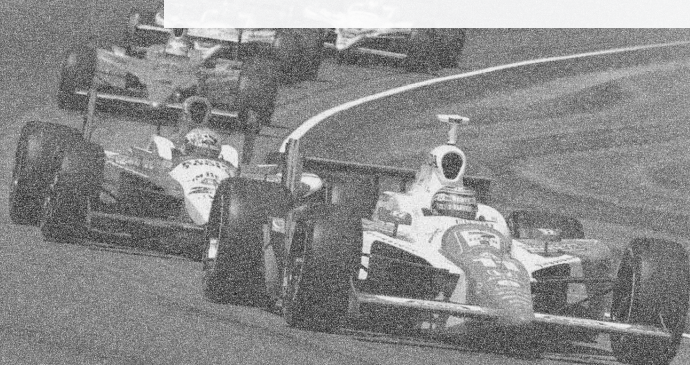1:00 p.m. Saturday through 12:00 p.m. Wednesday

SATURDAY	
1:00 - 7:00 p.m.	Registration

SUNDAY	
7:00 a.m. - 7:30 p.m.	Registration
8:30 - 9:30 a.m.	Special Session and Concurrent Sessions
9:00 a.m. - 4:00 p.m.	STEM*tech* Summits
9:45 - 10:45 a.m.	Special Session and Concurrent Sessions
11:00 a.m. - 12:00 p.m.	Special Session, Concurrent Sessions, and Poster Sessions
12:00 - 1:00 p.m.	Lunch Conversations
1:00 - 2:00 p.m.	Special Session, Concurrent Sessions, and Roundtable Discussions
2:15 - 3:15 p.m.	Special Session, Concurrent Sessions, and Poster Sessions
3:15 - 4:15 p.m.	Refreshment Break in the Exhibition Hall
4:30 - 6:00 p.m.	Opening General Session - David Thornburg
6:00 - 7:30 p.m.	Opening Reception and Book Signing in the Exhibition Hall

MONDAY	
7:00 a.m. - 7:00 p.m.	Registration
8:00 - 9:00 a.m.	Special Session, Concurrent Sessions, and Roundtable Discussions
9:15 - 10:15 a.m.	Track Keynote Session, Concurrent Sessions, and Roundtable Discussions
10:15 a.m. - 12:00 p.m.	Coffee Break in the Exhibition Hall
11:00 a.m. - 12:00 p.m.	Track Keynote Session, Concurrent Sessions, and Poster Sessions
12:00 - 1:00 p.m.	Lunch Conversations
1:15 - 2:15 p.m.	Refreshment Break in the Exhibition Hall
2:15 - 3:15 p.m.	Track Keynote Session, Concurrent Sessions, and Roundtable Discussions
3:30 - 4:30 p.m.	Track Keynote Session, Concurrent Sessions, and Roundtable Discussions
4:45 - 5:45 p.m.	Special Session, Concurrent Sessions, and Roundtable Discussions
5:45 - 7:00 p.m.	Reception in the Exhibition Hall

TUESDAY	
7:00 a.m. - 5:00 p.m.	Registration
8:00 - 9:00 a.m.	Track Keynote Session and Concurrent Sessions
9:15 - 10:15 a.m.	Track Keynote Session and Concurrent Sessions
10:15 - 11:15 a.m.	Coffee Break in the Exhibition Hall
10:15 a.m. - 12:00 p.m.	Exhibition Hall Open
11:00 a.m. - 12:00 p.m.	Track Keynote Session, Concurrent Sessions, and Poster Sessions
12:00 - 1:00 p.m.	Lunch Conversations
12:30 - 1:30 p.m.	Track Keynote Session and Concurrent Sessions
1:30 - 2:30 p.m.	Refreshment Break in the Exhibition Hall
2:30 - 3:30 p.m.	Special Session and Concurrent Session
3:45 - 4:45 p.m.	Special Session and Concurrent Sessions
5:00 - 6:00 p.m.	Special Session and Concurrent Sessions

WEDNESDAY	
8:00 - 9:00 a.m.	Concurrent Sessions
9:15 - 10:15 a.m.	Concurrent Sessions
10:30 a.m. - 12:00 p.m.	Closing General Session - Jim Brazell

STATE OF INDIANA
OFFICE OF THE GOVERNOR
State House, Second Floor
Indianapolis, Indiana 46204

Mitchell E. Daniels, Jr.
Governor

October, 2011

Greetings!

It is a pleasure to welcome you to the League for Innovation in the Community College's STEMtech Conference in our capital city. I hope those who have traveled from other states will enjoy our Hoosier Hospitality.

We appreciate any opportunity that we have to highlight the importance of science in our world and science education in our state and nation.

The State of Indiana has strong ties to the fields of science, technology, engineering, and mathematics. From the global pharmaceuticals of Eli Lilly to the powerful engines of Cummins, Indiana offers a myriad of career opportunities for students completing STEM majors.

While you are in our capital city I hope you will take time to visit one of our world-class museums, explore an art gallery, or just catch a carriage ride to explore our grand downtown and some of the city's many historic landmarks.

Thank you for positively impacting more than 10 million students served by two-year colleges every year.

Best wishes for an enjoyable and rewarding conference.

Sincerely,

Mitch Daniels

Dear Colleagues,

On behalf of the staff, faculty and students of Ivy Tech Community College, it is a pleasure to welcome you to Indianapolis. Ivy Tech is honored to host the second annual STEMtech conference at Indianapolis' new JW Marriott, the largest JW Marriott in the country.

You are joining other top educators and industry leaders to learn and discuss increasing student access and success in science, technology, engineering, and mathematics (STEM) majors and careers. We hope this conference will help you explore the strategic use of information technology to better serve your students, campuses and communities.

More than 400 sessions will be available to you and will cover everything from recruiting and retaining students for STEM-related programs using information technology to improve organizational and student learning.

We are certain you will walk away from this conference with a wealth of information to share with your home campus and community. Again, we welcome you to Indianapolis and hope you enjoy your stay in our beautiful city.

Sincerely,

Thomas J. Snyder, President
Ivy Tech Community College

The 2011 STEM*tech* conference is produced with the efforts of hundreds of individuals from **Ivy Tech Community College**. Our special thanks go to the volunteers who contributed countless hours to help plan, develop, and run this conference. Leading these efforts are the following members of the conference steering committee who contributed their time, expertise, hard work, and good spirits to bring this complex collaborative event to life.

Technical Consultants
David Jeffrey
CIO and Vice President, Community and Economic Development
Anoka Technical College

Rob Karnbach
Channel Senior Evangelist
Extreme Networks

Steering Committee Chair
Kathleen Lee
Vice Chancellor, Academic Affairs
Ivy Tech Community College–Central Indiana

Technical/Audiovisual Support Team Leaders
Abu Moniruzzaman
Director, Telecommunications
Ivy Tech Community College

Michael Hunsche
Director, Client Services
Ivy Tech Community College

Speaker Support Team Leader
Jessica Placke
Director, Library
Ivy Tech Community College–Central Indiana

Registration Support Team Leader
Sherris Johnson
Director, Special Events
Ivy Tech Community College–Central Indiana

Hospitality Support Team Leader
Jessica Armstrong
Director, Student Success and Retention
Ivy Tech Community College–Central Indiana

SPECIAL SUPPORT

League for Innovation Corporate Partners play a central role in maintaining the technical sophistication of this event and sponsoring ongoing League activities. The League for Innovation acknowledges and thanks the following organizations for their special support of the 2011 STEM*tech* conference. A complete listing of corporate partners participating in the 2011 STEM*tech* conference exhibition is provided in the companion document to this program, the *Guide to the Exhibition*.

Thanks to **CIM Technology Solutions** for providing the video data projectors for presentation rooms and to **Ivy Tech Community College** for providing the email stations and conference administration with multiplatform computing. Thanks also to **Extreme Networks** for supporting the conference network with high-speed internet access in presentation rooms, the wireless hot spot, and the exhibition hall.

The League for Innovation also extends a special thanks to the **JW Marriott Indianapolis**, **GES**, and **AV Images** for their assistance in making the 2011 STEM*tech* conference a success.

ADDITIONAL GRATITUDE GOES TO

Sunday's opening general session sponsor

Provider of the video data projectors in the presentation rooms

Sponsor of the Sunday evening exhibit hall reception and the conference pens

Sponsor of the mouse pads for the email/internet lab

Provider of conference network and high-speed internet access in presentation rooms, wireless hotspot, and exhibition hall and sponsor of the email and internet stations

Sponsor of the aisle signage in the exhibit hall

Sponsor of the post-conference evaluation email

Gold sponsor of the STEM*tech Online* conference

Sponsor of the conference notepads

Sponsor of the conference attendee bags

Sponsor of the wireless internet hotspot

Sponsor of the CIO Summit

Sponsor of the conference lanyards

Platinum sponsor of the STEM*tech Online* Conference

One fundamental feature of the 2011 STEM*tech* conference is the exhibition of hardware, software, services, and programs provided by League for Innovation Corporate Partners and Friends of the League. Corporate Partners and Friends of the League participating in the 2011 STEM*tech* conference exhibition are described more fully in the companion document to this *Conference Program*, the *Guide to the Exhibition*.

A great way to navigate the 2011 STEM*tech* conference exhibit hall is by participating in the Exhibition Hall Passport. Visit each of the exhibitors on your passport to receive their official stamp. Completed passports will be entered into a random drawing for great prizes.

2011 STEM*tech* CONFERENCE EXHIBITORS

Platinum Corporate Partners
Community College Week
CommunityCollegeJobs.com
Extreme Networks
Innovative Educators
League for Innovation in the Community College
National Repository of Online Courses
WebStudy, Inc.

Gold Corporate Partners
CIM Technology Solutions
National Institute for the Study of Transfer Students
Nova Southeastern University Fischler School of Education and
    Human Services
Spectrum Industries, Inc.
Technical Education Publishing

Silver Corporate Partners
American Education Corporation
Carnegie Learning
Certiport
Computer Comforts, Inc.
ConnectYard, Inc.
Dallas TeleLearning
Edvance360
Embanet-Compass Knowledge Group
EMC Corporation
Epsilen LLC
eScience Labs, Inc.
Films Media Group
Follett Higher Education Group
Governors State University
Hands and Minds, Inc.
Human eSources
Inside Higher Ed
ISE, Inc.
JIST Publishing
Kaltura
LanSchool Technologies
LEGO Education

Link-Systems International, Inc.
Maplesoft
Marshall Furniture, Inc.
MatchWare, Inc.
National Instruments
Paradigm Publishing
Pearson
Primal Pictures
Qwizdom, Inc.
SmartCatalog
SmarterServices
Smarthinking, Inc.
SoftChalk LLC
Sonic Foundry
SunGard Higher Education
TechSmith
Tegrity, Inc.
TestOut
Toolwire
Turning Technologies LLC
University of Phoenix
Vernier Software and Technology
Western Governors University
Worldwide Instructional Design System

Friends of the League
American Public University System
Annenberg Learner
CollegeAnywhere
CompTIA
Ferris State University
INTELECOM Intelligent Telecommunications
Ivy Tech Community College
MiCTA
National Institute for Staff and Organizational Development
    (NISOD)
National Science Foundation
National Science Foundation ATE Centers
Stevens Institute of Technology
University of Maryland University College

CONFERENCE REGISTRATION

Conference registration is located in the **Grand Foyer East (Third Level)** in the **JW Marriott**. Registration is the place for participants to get information about the program, leave or receive messages, make special arrangements, and ask questions about the League for Innovation. Conference registration is open from 1:00 p.m. Saturday to 5:00 p.m. Tuesday.

Registration fees provide admission to the Exhibition, General Sessions, Track Keynote Sessions, Special Sessions, Concurrent Sessions, Roundtable Discussions, Poster Sessions, Coffee and Refreshment Breaks, and the Evening Receptions. A conference registration badge is required for admission to all conference events. **Please wear your badge at all times.** Each registered conference participant receives a ticket for a complimentary beverage at the Sunday and Monday receptions.

CONFERENCE WEBSITE, EMAIL SYSTEM, AND INTERNET BROWSING

The **Technical/AV Support Team** and **Extreme Networks** have designed an email and internet browsing system that allows conference participants to send and receive messages within the conference and around the world. The 24-hour email stations are located in the **Grand Foyer East** area near registration (Third Floor) and is open to participants 24 hours a day, starting at 1:00 p.m. Saturday and ending at 12:00 p.m. Wednesday.

Conference participants with wireless network interface cards in their laptop computers or personal digital assistants are able to access the internet by using the complimentary wireless network available 24 hours a day, starting at 1:00 p.m. Saturday and ending at 12:00 p.m. Wednesday. The network name is "2011stemtech." If you have questions about or have problems with your wireless connection, contact a **Technical/AV Support Team Member** in **312, Third Floor, JW Marriott** for assistance.

Network performance can fluctuate due to the number of concurrent users.

SPECTRUM INDUSTRIES POWER STATION AREA

Spectrum Industries has sponsored a designated area in the **Grand Foyer East (Third Level)** where conference participants can charge their laptops and other portable digital devices while they check their email and surf the internet. The Power Station will be available 8:00 a.m. Sunday through 6:00 p.m. Tuesday.

2011 STEM*tech* CONFERENCE HOSPITALITY BOOTH

The 2011 STEM*tech* Conference Hospitality Booth is the place to ask questions about dining, shopping, tourist attractions, and local transportation in the Indianapolis area.

Grand Foyer East, Third Level
- Saturday, 1:00 - 7:00 p.m.
- Sunday, 7:00 a.m. – 7:30 p.m.
- Monday, 7:00 a.m. – 7:00 p.m.
- Tuesday, 7:00 a.m. - 5:00 p.m.

SPEAKER CHECK-IN

All speakers should check in at Speaker Support (**312, Third Floor**) as soon as possible after arrival to discuss technical support needs and other details related to their session(s).

Speaker Support Hours
- Saturday, 1:00 - 7:00 p.m.
- Sunday, 7:00 a.m. - 7:30 p.m.
- Monday, 7:00 a.m. - 7:00 p.m.
- Tuesday, 7:00 a.m. - 5:00 p.m.
- Wednesday, 7:00 a.m. - 12:00 p.m.

JW MARRIOTT FedEx OFFICE

The FedEx Office at the **JW Marriott** is located on the **Second Floor** and is equipped to accommodate the high-tech business traveler. The FedEx Office is fully staffed 7:00 AM – 7:00 PM Monday – Friday and 9:00 AM – 5:00 PM Saturday – Sunday. In addition, the FedEx Office offers 24-hour guest access to copying, printing, and faxing; large format color printing; signs and banners; pre-convention printing and file assistance; online order placement; and package receiving services. The JW Marriott Indianapolis FedEx Office can be reached at (317) 974-0378 and usa5527@fedex.com.

SMOKING

The League for Innovation maintains a smoke-free environment at all League-sponsored events. Smoking is not permitted in any of the meeting rooms or in the Exhibition Hall.

SECURITY/FIRST AID/EMERGENCIES

Should conference participants need to contact security, seek first aid, or have an emergency, they should go directly to the nearest house phone and dial extension 45530. Security will determine your needs

and respond immediately. Additionally, conference participants can seek aid at the Front Desk or from the Concierge available in the hotel lobby.

LOST AND FOUND

During the conference, all lost items turned in are held at the registration desk in the **Grand Foyer East**, **Third Floor**. Following the conference, all turned in items are returned to the League for Innovation office. Please contact Judy Greenfield at the registration desk while at the conference and at (480) 705-8200 x200 following the conference to investigate lost items.

RECORDING PRESENTATIONS

Recording of presentations by video, photography, audio, or other recording or reproduction mechanism is not permitted without the express written consent of the League for Innovation, except by presenters who want to record their own presentations. The League for Innovation reserves the rights to all recordings or reproductions at its conferences and meetings. Sanctions for noncompliance include being asked to leave the premises if this policy is violated.

AGE RESTRICTION

The 2011 STEM*tech* conference has been designed to be a professional development opportunity during which participants can exchange ideas about increasing the number of students entering and completing STEM programs and about using technology to improve teaching and learning, student services, workforce training, and institutional management. Consequently, no one under the age of 18 is allowed to attend the conference or the exhibit hall. Thank you for your cooperation.

WANT TO PRESENT AT THE 2012 STEM*tech* Conference?

If you or someone you know has a great idea for a presentation at next year's conference, go to *www.league.org/2012stemtech* and submit your proposal online. Proposals to present are being accepted now for the 2012 STEM*tech* conference, October 28-31, at the Westin Crown Center and the Sheraton Crown Center, Kansas City, Missouri.

FOLLOW THE STEM*tech* CONFERENCE ON…

twitter

www.twitter.com/LeagueSTEMtech

Keep up in real-time with what's going on at the STEM*tech* conference by following us on Twitter. Watch for:

- **schedule information,**
- **late-breaking news,**
- **conference buzz, and**
- **Twitter only giveaways!**

Use #11STIN to tweet about your experience and to see what everyone is saying about the conference. Or, just go to *www.twitter.com/LeagueSTEMtech* for up-to-the-minute information.

facebook.

WHILE YOU'RE AT IT, BECOME A FAN OF THE STEM*tech* CONFERENCE AT **www.facebook.com/LeagueSTEMtech**

We'll be posting pictures, more news, and updates about the STEM*tech* conference on facebook!

Perhaps the most challenging aspect of participating in the 2011 STEM*tech* conference is that it offers so much to do and learn at the same time! The 2011 STEM*tech* conference provides a dazzling array of simultaneous learning opportunities for participants: General Sessions, Summits, Track Keynote Sessions, Special Sessions, Concurrent Sessions, Roundtable Discussions, Poster Sessions, and internet and email access. In all, this is an exciting but potentially overpowering event. To keep your circuits from overloading and to move you smoothly through the conference program, we offer the following navigational tips:

All 2011 STEM*tech* conference events are at the JW Marriott. Maps are available in the back of this program.

The *Conference at a Glance* is included inside the front cover of this program to give you the big picture view.

A 2011 STEM*tech* conference *Personal Planner* inside the back cover helps you design your personal conference learning agenda.

We expect that participants have as many varied eating schedules as they do learning styles, and we encourage self-directed approaches to dining as well as learning. We offer appetizers and libations at Sunday and Monday evening receptions during the Exhibition, and morning Coffee Breaks and afternoon Refreshment Breaks on Sunday, Monday, and Tuesday in the Exhibition Hall. Satellite quick grab-and-go lunch stations will be available on Sunday, Monday, and Tuesday in the Grand Ballroom 5 – 6 Foyer, Third Floor.

All sessions are listed chronologically and are clustered by conference track and format within this *Conference Program*.

Sessions presented at the 2011 STEM*tech* conference fall into one of the following tracks:

STEM Tracks
- *Health and Science*
- *Energy, Environment, and Sustainability*
- *Mathematics, Engineering, and Architecture*
- *Manufacturing, Industry, Agriculture, and Aerospace*
- *Technology, Multimedia, and Telecommunication*
- *Recruiting, Retaining, and Transitioning Students Into STEM Programs*

tech Tracks
- *Technology Systems and Applications*
- *E-Learning Resources*

IVY TECH COMMUNITY COLLEGE VOLUNTEERS
Watch for Ivy Tech Community College volunteers with flashing lanyards and special ribbons on their name badge. The Ivy Tech Community College volunteers are available to assist you if you need help finding something.

SESSION FORMATS
All STEM*tech* conference sessions feature a successful practice, program, or key issue with a strong focus on STEM in general education and workforce training or the use of technology across the institution.

General Sessions provide an opportunity to learn from national experts who discuss topics of interest to all conference participants while setting the context and underlying tone for the conference.

Track Keynote Sessions are hand selected based on their overarching vision or strong alignment with the conference's eight tracks. There is one Track Keynote Session per conference track. No other sessions in the same track are scheduled against Track Keynote Sessions.

Special Session presenters are hand-selected, dynamic, and knowledgeable individuals who provide more detailed perspectives about practical and innovative solutions to today's STEM and technology challenges and opportunities.

Summits are fee-based, six-hour workshops that deliver a body of practical knowledge and applications by providing in-depth exposure to specific topics within each of the conference tracks. Summit facilitators help participants learn new concepts, draw on participants' expertise and prior knowledge, and have participants apply what they have learned. Summit participants are awarded a certificate of completion. Onsite registration for Summits is available for workshops not filled at the start of the conference.

Concurrent Sessions are traditional presentations that form the core of conference offerings. Presenters are expected to use active learning techniques to engage their audience, distribute materials, and respond to follow-up requests for more information.

Roundtable Discussions afford a personal and interactive setting for exploring key issues related to each of the conference tracks. Numerous Roundtable Discussions take place simultaneously in the same ballroom, **Grand Ballroom 3-4**, **Third Floor**.

Poster Sessions take the form of an exhibit and are delivered primarily through the use of graphs, diagrams, pictures, data, and narrative text on bulletin boards. Conference participants are free to move from one display to another. All Poster Sessions take place in the **Grand Foyer East**, **Third Floor**.

Lunch Conversations are ad hoc informal knowledge exchanges and professional networking opportunities for conference participants interested in a particular topic not included in the 2011 STEM*tech* conference *Conference Program*. The goal of Lunch Conversations is to encourage new collaborations and discussions and to nurture the development of new sessions, initiatives, and interactions at future STEM*tech* conferences. Other than having an interest in or curiosity about the topic, no preparation is required to participate. To schedule a Lunch Conversation, simply write your name, your affiliation, the Conversation's title, and, if you have one, its description, on one of the Lunch Conversation boards located in the registration area. A moderator must be identified at the time the Lunch Conversation is proposed.

The Exhibition Hall is an extensive display of publishing, furniture, hardware, software, communications, and other educational products and services of interest to conference participants.

Refreshment Breaks, Coffee Breaks, and **Receptions** provide an opportunity to enjoy complimentary snacks and drinks as you browse the Exhibition Hall. Mingle with colleagues and meet with experts to research and gather information about solutions to today's campus challenges.

PAPERLESS PRESENTATION EVALUATION

Participants in the 2011 STEM*tech* conference can evaluate presenters online at the conclusion of each session at *www.league.org/stemtech/evaluation*. The online session evaluation application includes a grading scale and the ability to post comments and suggestions. Your anonymous comments and suggestions will be beneficial to presenters when preparing for future speaking opportunities, and are the best way to help shape the program at future STEM*tech* conferences!

Presenters, please encourage participants in your sessions to fill out the online evaluation form at their earliest convenience. Soon after the conclusion of the conference, presenters will receive a report summarizing the results of participant evaluations.

iSTREAM identifies sessions that are being recorded for postconference on-demand viewing via iStream, the League for Innovation's valuable online resource bank, learning community, and professional development tool for faculty, staff, and administrators. To learn more about iStream and how colleges maximize its benefits, or to receive a guided tour of iStream resources, visit the League for Innovation's booth (#213) during open exhibition hours or contact Cheri Jessup at jessup@league.org.

LEARN to EARN identifies sessions that highlight affordable, practical education pathways that allow more students to earn a postsecondary credential that gives them a competitive edge in the workforce, especially programs and policies that enable students to concurrently work and earn their way toward a degree or credential.

DAVID THORNBURG AND JIM BRAZELL BOOK SIGNING

Stop by the Technical Education Publishing Booth (#105) immediately following the Sunday General Session to meet the opening and closing keynote speakers, David Thornburg, Founder and Director, Thornburg Center, and Jim Brazell, Technology Forecaster and Strategist. Books will be available for purchase in the exhibition hall during the opening reception.

DAVID THORNBURG

JIM BRAZELL

MC² STEM EARLY COLLEGE HIGH SCHOOL MOBILE FAB LAB HITS THE ROAD!

Event Center Drive, First Floor

In 2001, as the educational outreach component of an NSF grant, the MIT Center for Bits and Atoms developed Fab Lab, a digital fabrication facility that fosters the development of 21st century skills through international collaborations, internet-based communication, documentation and portfolio building, hands-on engineering, and interdisciplinary STEM literacy. A Fab Lab is an exceptional way to give users the ability to locally conceptualize, design, develop, fabricate, and test almost anything. These labs provide access to prototyping tools for personal fabrication that allow ordinary people to invent and create using advanced technologies. The League for Innovation and the Teaching Institute for Excellence in STEM are pleased to provide 2011 STEM*tech* conference participants with the ability to experience a Fab Lab first hand. Simply follow the footsteps from the registration area, located in the Grand Foyer East on the third floor, outside to the Event Center Drive to begin your journey into digital fabrication. Come experience the Fab Lab, 9:00 AM – 5:00 PM on Monday, and 9:00 AM – 3:30 PM on Tuesday.

INNOVATIONS PAVILION

Grand Ballroom 5-6 Foyer, Third Floor

As the need to craft a single community of practice around educating students and creating an innovative workforce grows, the opportunities for innovative programs, projects, and work increases greatly. The annual STEM*tech* conference is now the place where innovators gather and present their thinking and processes, and ultimately, their resulting innovations. Whether focused on innovations in developmental mathematics, advanced technologies, education, the role of fabrication in supporting STEM skills, or in driving research and development in energy for the global market, the Innovations Pavilion highlights the nation's foremost leaders and their accomplishments. The Innovations Pavilion invites STEM-related educators, researchers, businesses and industry partners, and other conference participants to view the cutting-edge work of colleagues, students, and mentors. The Innovations Pavilion is a rare opportunity to view the finest in STEM-related innovations from the National Science Foundation, Advanced Technological Education Centers, National Labs and Technology Centers, MIT Fab Labs, and Developmental Mathematics Innovators. Innovations Pavilion displays will be available for viewing from 8:00 AM Monday through 10:30 AM Wednesday. Display facilitators will be available for discussion 12:00 – 1:00 PM Monday.

In addition to over 300 informative presentations from more than 400 excellent speakers this year, below are several special events and other exciting networking opportunities also available at the 2011 STEMtech conference!

SUNDAY

3:15 - 4:15 PM
Refreshment Break in the Exhibition Hall
Grand Ballroom 5-6, Third Floor

4:30 - 6:00 PM
Opening General Session
White River Ballroom A-F, First Floor
KEYNOTE SPEAKER:
David Thornburg,
Founder and Director, Thornburg Center

6:00 - 7:30 PM
**Opening Reception and Book Signing
in the Exhibition Hall**
Grand Ballroom 5-6, Third Floor

MONDAY

10:15 AM - 12:00 PM
Coffee Break in the Exhibition Hall
Grand Ballroom 5-6, Third Floor

1:15 – 2:15 PM
Refreshment Break in the Exhibition Hall
Grand Ballroom 5-6, Third Floor

5:45 - 7:00 PM
Reception in the Exhibition Hall
Grand Ballroom 5-6, Third Floor

TUESDAY

10:15 - 11:15 AM
Coffee Break in the Exhibition Hall
Grand Ballroom 5-6, Third Floor

10:15 AM - 12:00 PM
Exhibition Hall Open
Grand Ballroom 5-6, Third Floor

1:30 - 2:30 PM
Refreshment Break in the Exhibition Hall
"Last Chance to Visit the Exhibition Hall"
Grand Ballroom 5-6, Third Floor

WEDNESDAY

10:30 AM - 12:00 PM
Closing General Session
White River Ballroom A-F, First Floor
KEYNOTE SPEAKER:
Jim Brazell,
Technology Forecaster and Strategist

GET CERTIFIED AT THE 2011 STEMtech CONFERENCE FOR FREE

Rise to the challenge with Certiport! Visit Certiport's exhibition hall booth #206 to find out how you can earn any of the following credentials for free!

- Microsoft Office Specialist: Word, Excel, PowerPoint, Access, and Outlook (2007 or 2010 versions)
- Microsoft Technology Associate: A new entry-level credential from Microsoft that validates essential technology knowledge
- Internet and Computing Core Certification: Three exams that validate basic digital literacy
- Intuit QuickBooks Certified User: One exam that validates your proficiency using QuickBooks managerial accounting software
- Adobe Certified Associate: Adobe Flash Professional, Adobe Dreamweaver, Adobe Photoshop, and Adobe Premiere Pro
- CompTIA Strata IT Fundamentals: A certificate validating your broad understanding of computing technology
- Autodesk Certified User: One exam that validates your proficiency using Autodesk software

The Certiport testing lab, located in room 109 on the first level, is open during the following hours.

Sunday:	9:00 AM - 4:00 PM
Monday:	9:00 AM - 5:00 PM
Tuesday:	9:00 AM - 5:00 PM

SATURDAY, OCTOBER 1, 2011

1:00 - 7:00 PM **Registration**
Grand Foyer East, Third Level
JW Marriott Indianapolis

SUNDAY, OCTOBER 2, 2011

7:00 AM - 7:00 PM **Registration**
Grand Foyer East, Third Level
JW Marriott Indianapolis

▶▶ 8:30 AM - 9:30 AM

SPECIAL SESSION

▪ Recruiting, Retaining, and Transitioning Students Into STEM Programs

Community College to Four-Year STEM Transfer Pathways
Grand Ballroom 1-2, Third Floor
During this session, participants are introduced to the idea of creating a statewide one-year STEM block transfer, brainstorm what that would look like, and discuss issues of feasibility and anticipated impacts on high school preparation. Participants also discuss how to aggregate commitments and design next steps for future planning discussions.
Deborah Boisvert, Director, Boston-Area Advanced Technological Education Connections, University of Massachusetts - Boston, MA; W. Richards Adrion, Professor Emeritus, Computer Science, University of Massachusetts - Amherst. MA; David Cedrone, Associate Commissioner, Economic and Workforce Development, Massachusetts Department of Higher Education, MA

innovation STREAM

CONCURRENT SESSIONS

▪ Health and Science

Rural Secondary Teachers' Alliance Encourages Success in College Health Care Programs
Room 108, First Floor
Does your college work with its local high schools? Come learn how we plugged rural schools into current technology and college health program curriculum. Finally, see how we continue this effort with limited funds.
Jodi Long, Chair, Sciences for Health Programs; Billie Monroe, Coordinator, Perkins Grants, Santa Fe College, FL

▪ Mathematics, Engineering, and Architecture

Creating a Community Technical Playground Design and Build Space
White River Ballroom I, First Floor
The Central Piedmont Community College Engineering Academy continually redevelops a technical playground as a community outreach initiative to promote STEM education collaboration. Persons interested in an innovative outreach STEM environment to strengthen programs should participate in this session.
Terence Fagan, Chair, Engineering Technology, Central Piedmont Community College, NC

▪ Technology, Multimedia, and Telecommunication

Teaching Problem Solving: Core to All STEM Learning
Room 107, First Floor
Solving problems is core to success in any STEM discipline. Explore an approach that can be used in any discipline. Try your hand at solving problems and learn how to apply this approach to programming, chemistry, architecture, manufacturing, or any STEM subject area.
Linda Rumans, Faculty, Information Technology; Sylvia Unwin, Faculty and Program Chair, Information Technology, Bellevue College, WA

▪ E-Learning Resources

Digital Help Sessions to Enhance Chemistry Courses
Room 106, First Floor
Digital help sessions provide students with more opportunities for contact with difficult material. Digital help sessions are available to students for the duration of the course to increase student understanding of course materials.
Robert Klepper, Professor, Chemistry, Iowa Lakes Community College, IA

▪ Recruiting, Retaining, and Transitioning Students Into STEM Programs

Rigor and Relevance: Developing Underrepresented Students for STEM Workforce
Room 103, First Floor
Participants discuss why best practices that lead to student success are not always effective in the STEM disciplines. This session provides information about how to create a seamless web of teachers, technology, rigor, and relevance to prepare historically underrepresented students for today's STEM careers.
Lucy Casale, Senior Associate Director, Washington MESA; James Dorsey, Executive Director, Washington MESA, University of Washington, WA

An App for Nursing Education in a Flash
Room 104, First Floor
This presentation introduces, familiarizes, and integrates the use of iPod touch devices into education pedagogy. Participants learn to access a variety of e-books and web-based materials while learning how this technology engages students anywhere, anytime.
Connie Beal, Professor, Nursing; Molly Roll, Assistant Professor, Nursing, Sinclair Community College, OH

▶▶ 9:00 AM - 4:00 PM

STEM*tech* SUMMITS

■ **Recruiting, Retaining, and Transitioning Students Into STEM Programs**

The Role of Faculty and Staff in Private Fundraising, Grant Development, and Grant Management

ADDITIONAL FEE REQUIRED

Room 102, First Floor
This hands-on workshop consists of two critical sections—grant opportunities and private fundraising opportunities—and is interactive and engages participants in substantive work that provides them with practical skills they can immediately apply. During the first part, participants review the basic elements of most grant proposals and learn how to identify appropriate grantors, followed by participants breaking into teams and working through an actual Request for Proposals (RFP). Each team develops an outline for responding to an RFP, identifying in detail what information must be included in the response to meet the selection criteria and garner all available points. Time does not permit participants to actually write a narrative, but they do develop a concept and flesh it out while simultaneously creating a template for writing the narrative. One team's work is then critiqued by the entire group. The second part of the workshop involves an exploration into the role of faculty and STEM leaders in private fundraising, including the basic principles of private solicitation. Participants again break into teams to develop case statements and design solicitation plans. Participants critique case statements and engage in a major gift solicitation role play. Participants are encouraged to bring their laptops on which to conduct and save their work. Although the workshop is targeted toward faculty members, they are encouraged to bring members of their resource development team.
Mike Gaudette, President, Lighthouse Consulting, OR; Perry Hammock, Executive Director, Ivy Tech Foundation Community College, Ivy Tech Community College, IN

■ **Technology Systems and Applications**

CIO Summit: The Impact of Mobile Information and Communication Devices on the Institution

ADDITIONAL FEE REQUIRED

Room 101, First Floor
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iPads, iPhones, and other mobile information and communication devices, some of which didn't even exist just a few years ago, are clearly changing the way faculty, staff, and students learn, work, and communicate. Even as the potential value of these devices for instructional, operational, and other purposes is being explored, campus technology leaders are being asked to accommodate them in a constantly changing environment. Resource-constrained college leaders are seeking affordable, flexible, and easy-to-maintain solutions that benefit all parties. Consequently, developing an effective mobile information and communication strategy that can adapt to changing technologies and shifting end-user needs is becoming increasingly mission critical. During this CIO Summit, participants explore several important factors that must be addressed when developing effective and sustainable strategies to accommodate the increasing number of mobile devices being used on and off college campuses. Facilitated by experienced community college CIOs, Summit participants discuss best and promising practices that meet the unique and changing needs of faculty, staff, students, and the surrounding community. Topics include obtaining faculty, staff, and administrator buy-in; managing end-user expectations; privacy and security implications; budgetary and time investments; app development and control; roles and responsibilities; infrastructure capabilities; regulations and policies; and loss prevention. While each of the seasoned facilitators shares his or her knowledge and experiences, Summit participants are strongly encouraged and fully expected to share their expertise and experiences as well. Register today for what are sure to be lively discussions about how to make certain your campus is ready for the mobile information and communication devices headed its way!
Todd Jorns, Senior Director, Instructional Technology, Illinois Community College Board, IL; Kimberley Conley, Chief Information Officer, Henderson Community College, KY; Timothy Nesler, Chief Information Officer and Associate Vice President, Information Technology Services, Santa Fe College, FL; Kenneth Moore, Senior Vice President and Chief Information Officer, Information Technology, Sinclair Community College, OH; Bill White, Chief Information Officer, Valencia Community College, FL

▶▶ 9:45 AM - 10:45 AM

SPECIAL SESSION

■ **Recruiting, Retaining, and Transitioning Students Into STEM Programs**

Broadening Participation in Science, Technology, Engineering, and Mathematics
Grand Ballroom 1-2, Third Floor
Presented are findings from a mixed-methods study conducted by the American Institutes for Research and Institute for Higher Education Policy on the role of the NSF in diversifying undergraduate STEM education.
Lorelle Espinosa, Director, Policy and Strategic Initiatives, Institute for Higher Education Policy, DC

INNOVATION
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CONCURRENT SESSIONS

■ **Health and Science**

Climbing to the Top of a Career Ladder
Room 105, First Floor
Learn how Ivy Tech Community College was able to use its Video-Interactive-Learning-Object (VILO) project to bridge learning gaps in displaced workers and accelerate placement in new health care careers. Students confidently take the first step in a new career path! This session is designed for educators interested in technology which addresses learning styles and gaps.
Patricia Ley, Assistant Professor and Chair, Medical Assisting; Charlene Mantock, Chair, Nurse Aide; Tova Wiegand-Green, Dean, Health Sciences,

▶▎ 9:45 AM - 10:45 AM *(continued)*

Ivy Tech Community College, IN

Energizing Applied Physics Education With Projects
Room 108, First Floor
Discover how physics projects can engage and inform physics students. The legacy of a physics class can be demonstrations and presentations from which future physics students can learn.
Dorian McIntire, Program Coordinator, General Engineering Technology, Tri-County Technical College, SC

▪ Mathematics, Engineering, and Architecture

3D Printing: Creatively Connecting Students to Current Technology
White River Ballroom I, First Floor
State-of-the-art equipment and technologies are challenging to maintain. Discover how creatively connecting students to advanced technologies to stay current is a resource for disciplines to sustain and grow enrollment.
Robert Lowe, Professor, Architecture and Interior Design; Michael Ryan, Professor, Architecture, Anne Arundel Community College, MD

Student Success in an Emporium-Style Classroom
White River Ballroom G, First Floor
Join the presenter as he discusses how he successfully redesigned his course using ALEKS.
Robert Moore, Director, Developmental Mathematics, Missouri Western State University, MO

▪ Technology, Multimedia, and Telecommunication

Program Assessment Using Microsoft Technology Associate Certification
Room 107, First Floor
Participants consider an assessment framework based on a plan-do-check-act quality cycle. Evaluating IT programs is discussed, and the new Microsoft Technology Associate (MTA) certification is presented as a toolkit. Learn about MTA certification and consider the applicability of certification exams in your program assessment process.
Keith Kelly, Program Coordinator, Computer Information Technology, Northwestern Michigan College, MI

Security Education Trends for Community Colleges: National Standards 4011 and 4013
White River Ballroom H, First Floor
Discussed is the alignment of the NIST-NICE initiative as it applies to the standardization of concepts and skills at the community college level. Included is a review of how to become an NSA two-year Center of Excellence.
John Knight, Assistant Professor and Program Chair, Information Security, Ivy Tech Community College, IN

▪ E-Learning Resources

Blackboard vs. Moodle: The Decision Process
Room 106, First Floor
Learn about the process that Carl Sandburg College went through to pick a new learning management system for the institution. The collaborative process involved faculty members, staff, and administrators working together for over a year to choose the best system that would improve student learning and success.
Linda Lee, Coordinator, Online Distance Education; Michael Paris, Coordinator and Assistant Professor, Mathematics and Natural Sciences; Samuel Sudhakar, Vice President and CIO, Information Technology Services, Carl Sandburg College, IL

▪ Recruiting, Retaining, and Transitioning Students Into STEM Programs

Creating Science Investigators (CSI): It's Not Just for TV
Room 104, First Floor
Participants learn how recruiters from Santa Fe College provided high school guidance counselors with a day of hands-on training in clinical lab science, biotechnology, and biomedical engineering technology.
Stacey Ledvina, Recruitment Specialist, Admissions; Gayle Davis, Coordinator, Admissions; Kelly Gridley, Dean, Health Sciences, Santa Fe College, FL

Boost Nontraditional Enrollment With the STEM Equity Pipeline Project
Room 103, First Floor
The STEM Equity Pipeline Project points the way to increased nontraditional enrollment. Participants leave with a draft outline for their own nontraditional enrollment plan.
Jennifer Spegal, Assistant Dean, Life and Health Sciences; Beverly Smith, Program Manager, STEM, Sinclair Community College, OH

▶▎ 11:00 AM - 12:00 PM

SPECIAL SESSION

▪ Energy, Environment, and Sustainability

Green Economy Workforce Development Practices to Ensure Skilled STEM Workers
Grand Ballroom 1-2, Third Floor
The American Association of Community College's Sustainability Education and Economic Development Initiative helps community colleges build green workforce development programs to ensure students have the skills, competencies, and credentials sought by employers.
Jerry Weber, President, College of Lake County, IL; Shelly Jewell, Director, Grant Initiatives and Special Projects; Cheryl Ordway Putnam, Coordinator, STEM Project, Connecticut Community Colleges, CT; Todd Cohen, Manager, Sustainability Initiatives, American Association of Community Colleges, DC

CONCURRENT SESSIONS

▪ Health and Science

The Ultimate Inquiry: Lessons From the Genetically Engineered Machine Competition
Room 108, First Floor
Participants learn how student success in the International Genetically Engineered Machine Competition exceeded expectations for technology learning outcomes at undergraduate and high school levels.
George Twaddle, Assistant Professor and Program Chair, Biotechnology, Ivy Tech Community College, IN

■ Mathematics, Engineering, and Architecture

Math FIRS³T
White River Ballroom I, First Floor
Discover how a traditional mathematics classroom can be transformed into an environment to help increase access into STEM programs using Focused Individualized Resources that Support Student Success with Technology.
Robyn Toman, Professor, Mathematics; Beth O'Reilly, Instructor, Mathematics, Anne Arundel Community College, MD

■ Technology, Multimedia, and Telecommunication

Smart Classroom in a Carry-On
Room 107, First Floor
Watch us go from nothing to a fully-functional smart education space in a matter of minutes as we demonstrate how easy it is to use basic affordable hardware to construct a learning space of the future.
D.I. von Briesen, Instructor, Information Technology; Felesia Stukes, Instructor, Information Technology, Central Piedmont Community College, NC

■ Technology Systems and Applications

Geoinformatics in Geoscience Education: The Use of ENVI and GIS
White River Ballroom G, First Floor
Participants discuss integrating remote sensing and GIS software to develop multidisciplinary teaching modules for science labs and workforce programs. The model can also be applied to other STEM fields.
Sergio Sarmiento, Professor, Geology; Buck Buchanan, Professor, Geography; Michel Konvicka, Professor, Geosciences, Lone Star College System, TX

■ E-Learning Resources

E-Education: E-Tools for E-Learning and E-Teaching in an E-Environment
Room 106, First Floor
Today's students, digital natives, are web-based learners and no longer the pupils our educational system was designed to teach. Consequently, educators must be prepared to manage the e-learning economy. Learn how to deliver instruction using free and user-friendly e-tools. This session will benefit all educational professionals.
Elke Milton, Student, Education, Walden University, MN

Predictors of Online Student Non-Success
Room 105, First Floor
Predictive analytic methods can turn demographic, behavioral, and assessment data into a powerful predictor of success in online courses. This session describes Sinclair Community College's use of these methods to improve online offerings.
Karl Konsdorf, Manager, Research, Analytics, and Reporting, Sinclair Community College, OH

■ Recruiting, Retaining, and Transitioning Students Into STEM Programs

Gaming STEM and Mobile Apps: California High School
Room 104, First Floor
Participants learn how to build a gaming lounge designed to increase the number of successful students aspiring to STEM careers through gaming and programming Apps for the Android and iOS operating systems.
Henry Danielson, Director, Information Technology, Coast Unified School District, CA

A Leadership Commitment to Underserved Students in STEM
Room 103, First Floor
College leaders play a critical role in encouraging students into STEM programs, especially from underserved and hard-to-reach groups. Learn how San Diego Community College District has made this a strategic priority for women, minorities, and military personnel with successful outcomes.
Otto Lee, Vice Chancellor, Instructional Services, San Diego Community College District, CA

Connecting Stakeholders to Create a Successful Emerging Technology Program
White River Ballroom H, First Floor
Learn how our nanotechnology hub model that links K-12, industry, community college, and university partners applies to various STEM disciplines to recruit, retain, train, and place students in STEM career pathways.
Maureen Devery, Outreach Coordinator, Mathematics and Science, North Seattle Community College, WA

POSTER SESSIONS

All Poster Sessions take place in the Grand Foyer East, Third Floor

■ Health and Science

Electronic Cardiovascular System Model: Merging Biology, Art, and Engineering
The presenter built and displays an interactive model of the cardiovascular system with electronic controls to simulate blood distribution under different physiologic conditions. This model will interest instructors who teach undergraduate human biology.
James Cronmiller, Instructor, Biology, Monroe Community College, NY

■ Technology, Multimedia, and Telecommunication

Lights, Camera, Success! Multimedia Skills Can Help Non-Media Majors
Educators in non-media disciplines discover how their students can become more employable by learning basic multimedia production skills to use in their profession. Curriculum design elements are discussed as well.
Andy Curran, Associate Professor, Interactive Multimedia Technology, Clermont College - University of Cincinnati, OH

⏭ 12:00 PM - 1:00 PM

LUNCH CONVERSATIONS
Grand Ballroom 3-4, Third Floor

⏭ 1:00 PM - 2:00 PM

SPECIAL SESSION

■ **Energy, Environment, and Sustainability**

Troops to Energy Jobs Initiative
Grand Ballroom 1-2, Third Floor
Veterans are an excellent match for energy employers because of their extensive military training and experience. Come learn about an initiative that offers veterans a roadmap for entry into skilled utility technician and engineering positions.
Ann Randazzo, Executive Director, Center for Energy and Workforce Development, DC; Joe Cisneros, Director, Workforce Diversity, American Electric Power, OH; Jerome Richard, Program Strategist, Workforce Development, Southern Company, GA

INNOVATION STREAM   LEARN EARN

CONCURRENT SESSIONS

■ **Health and Science**

Stackable Certificates, CBOs, and Workforce Training: Building Pathways for Success
Room 108, First Floor
LEARN EARN   Boston-area community colleges, BATEC, Microsoft, and the Boston Foundation delivered short-term workforce certificates at community-based organizations that feed into an associate degree that transfers to the University of Massachusetts-Boston.
Paula Velluto, Professor, Computer Information Technology, Bunker Hill Community College, MA; Deborah Boisvert, Director, Boston-Area Advanced Technological Education Connections, University of Massachusetts - Boston, MA

■ **Energy, Environment, and Sustainability**

Collaboration and Carbon Neutrality on Someone Else's Campus
White River Ballroom H, First Floor
Hands-on carbon neutrality exercises and recommendations for the University of Michigan's Biological Station's remote, wooded, and lakeside campus buildings. Recreate Michigan

Community College students' collaboration with each other and with the University of Michigan.
John Dingens, Instructor, Architecture Technology, Lansing Community College, MI

■ **Mathematics, Engineering, and Architecture**

Steers Need Hay for Winter: Spreadsheets to the Rescue!
White River Ballroom I, First Floor
Participants discuss how a teacher-authored, rigorous problem engages students in a real-life decision routinely made on a farm as they use spreadsheets to apply rich mathematical content.
Paula Keesling, Teacher, Nettlecreek School Corporation, IN

■ **Technology, Multimedia, and Telecommunication**

Creating Partnerships That Are Game Changers
Room 107, First Floor
LEARN EARN   Pensacola State College developed industry partnerships for a Department of Labor (DOL) Community-Based Job Training Grant that won praise from the DOL for its partnerships and collaborative organization. Explore the story and how to duplicate it at your institution.
Sue Halfhill, Director, Center for Information and Engineering Technology; Debbie Douma, Dean, Institution Effectiveness and Grants, Pensacola State College, FL

■ **Technology Systems and Applications**

Clicking Your Way to Student Engagement
White River Ballroom G, First Floor
This session introduces participants to the use of student response systems (clickers) in the college classroom. Participants learn why clickers work and how to effectively use them. Any faculty member who wants to increase student engagement will benefit from this session.
Ken Knox, Assistant Professor, Business Technologies, Eastern Gateway Community College, OH

■ **E-Learning Resources**

Dream It, Design It, Sketch It!
Room 105, First Floor
Using Google SketchUp, K-12 students can develop their visual and spatial skills and learn about measurement, geometry, physics, geolocation, and design principles as they create interactive 3D models that can be shared.
Rebecca Stacey, Teacher, Technology, McKeel Academy of Technology, FL

3D Chemistry: Teaching Molecular Structure and Motion With Models 360
Room 106, First Floor
Using the Models 360 visualization and periodic table resources of the ChemEd Digital Library, learn how molecular structure and motion from Valence Shell Electron Pair Repulsion theory can increase student learning in chemistry classes.
James Powell, Dean and Professor, Liberal Arts and Sciences, Ivy Tech Community College, IN

■ **Recruiting, Retaining, and Transitioning Students Into STEM Programs**

Bridging From the Other Side of Looking Glass to Java
Room 104, First Floor
This session addresses introducing students to programming using Alice 2.2 and 3.0 to encourage recruitment and

retention. Students gain problem-solving confidence with Alice 2.2 and transition these techniques using Alice 3.0 and NetBeans to bridge Alice concepts to writing code in Java.
Leslie Spivey, Associate Professor, Computer Information Technology, Edison Community College, OH

Catch Them Being Great! Recruiting STEM Learners Using Service Projects
Room 103, First Floor
EMPACTS, a successful inquiry-based program, has hooked many students through its team-, technology-, and STEM-based service projects. The presenters share the program's impressive recruitment and retention secrets.
Marvin Galloway, Dean, Mathematics and Science; Dianne Phillips, Coordinator, Mathematics and Science; Regina Ryel-Thomason, Program Coordinator, Teacher Education, NorthWest Arkansas Community College, AR

ROUNDTABLE DISCUSSIONS

All Roundtable Discussions take place in Grand Ballroom 3-4, Third Floor

Health and Science

Incorporating Writing Into Non-Majors Science Classes
Science teachers in particular can learn strategies for incorporating written tasks into topics such as climate change, astronomy, alternative energy sources, and poorly understood natural phenomena.
Daniel Robertson, Assistant Professor, Chemistry and Geosciences; Michael Doolin, Professor, English and Philosophy, Monroe Community College, NY

Technology, Multimedia, and Telecommunication

Students and Technology Change: Change Your Room Layout Already!
Active learning labs are a complete overhaul of the classroom layout with the focus not in front of the class, but all around. Student collaboration has never been easier or more effective.
Kyle Morrison, Learning Technology Specialist, eServices, Kirtland Community College, MI

E-Learning Resources

Benchmarking Learning Without Standardized Tests Using the ProfNet
Discuss and share ideas for assessing student learning and benchmarking without resorting to standardized tests. Learn about a faculty-driven, grass-roots pilot project to share and compare learning assessments electronically.
James Luke, Professor, Social Science, Lansing Community College, MI

Recruiting, Retaining, and Transitioning Students Into STEM Programs

Providing Educational Opportunities and a Community for Talented Technology Students
Through scholarships, team building exercises, and mentoring, The Community College of Baltimore County is helping low-income, academically talented technology students succeed. Discuss ways to develop a sense of community and a support system.
Laura LeMire, Coordinator, Engineering, The Community College of Baltimore County, MD

⏭ 2:15 PM - 3:15 PM

SPECIAL SESSION

Recruiting, Retaining, and Transitioning Students Into STEM Programs

Opportunities and Obstacles to Collaboration: A Conversation Between Business and Education
Grand Ballroom 1-2, Third Floor
Experience a conversation between business and community college leaders regarding the characteristics of strong Learn and Earn partnerships with an emphasis on the opportunities for and obstacles to collaborating to create and grow models of talent development.
Peggy Walton, Senior Director, Workforce Readiness; John-Anthony Meza, Vice President, Workforce Readiness, Corporate Voices for Working Families, DC

CONCURRENT SESSIONS

Health and Science

Ten Tips to Teaching Science Totally Online
White River Ballroom I, First Floor
The presenter, a pioneer in teaching science totally online, provides effective, creative strategies faculty can use to engage students.
James Brown, Associate Professor, Science, Ocean County College, NJ

Technology, Multimedia, and Telecommunication

Create Flash, Web, and CD-ROM Design in All STEM Classes!
Room 108, First Floor
Mediator is an icon-based authoring tool that will create Flash and HTML websites and auto-run CD-ROMs in minutes with interactive navigation, object animation, and more. Mediator is also great for e-portfolios! No programming or prior experience is necessary.
Dave Hamilton, Educational Advisor and Trainer, Sales and Training, MatchWare, Inc., FL

Technology Systems and Applications

Integrating iPad 2 Into STEM Curricula, Including Security and Provisioning
White River Ballroom G, First Floor
This session provides skills for using and managing iPads, including app selection and purchasing, mobile lab units, and security to anyone teaching or supporting STEM-related disciplines in the classroom.
Catherine Bosse, Team Leader, Business Computing and Technical Studies, Anne Arundel Community College, MD

⏩ 2:15 PM - 3:15 PM *(continued)*

▪ E-Learning Resources

Professional Development: Innovation and Engagement Using the iPhone and iPad
Room 105, First Floor
Are you ready for the future? Come and explore using the iPhone and iPad to create, deliver, and interact with professional development. This session will interest faculty members, administrators, and faculty development professionals.
David Peter, Director, Center for Teaching and Learning, Vincennes University, IN

Preparing 21st Century Business Intelligence Students Through 21st Century Approaches
Room 106, First Floor
The presenters share the curriculum, program support, and industry engagement elements needed to prepare 21st century business intelligence students supported through modular, digital, and virtual approaches.
Linda Rumans, Faculty, Information Technology; Sylvia Unwin, Faculty and Program Chair, Information Technology, Bellevue College, WA

Guiding Student Learning in Online Environments
Room 107, First Floor
Western Governors University (WGU) offers flexible online study to prepare science teachers. Participants review a science course that refers students to e-learning resources and focuses student learning. Participants also discuss WGU's model and the challenges of guiding student learning in online environments.
Jackie Rahsaz, Subject Matter Expert, Education, Western Governors University, UT

▪ Recruiting, Retaining, and Transitioning Students Into STEM Programs

High School Enterprise: Collaboration Between College and High School Teams
Room 104, First Floor
This session presents a proven model for colleges to recruit and retain students in STEM. High School Enterprise is a program designed to attract students to and retain them in STEM studies and careers. Students engage in project work and link to higher education.
Doug Oppliger, Program Director, Engineering Fundamentals, High School Enterprise Program - Michigan Tech, MI

POSTER SESSIONS

All Poster Sessions take place in the Grand Foyer East, Third Floor

▪ Health and Science

Chemical Undergraduate Research at Metropolitan Community College
Shared are a sample syllabus and outline used to guide students through the research process, time commitments, student performance assessment, and problems relevant to freshman general chemistry, methodology, and data collection and analysis.
Jo Conceicao, Professor, Mathematics and Natural Sciences, Metropolitan Community College, NE

▪ E-Learning Resources

Online Science Videos: Design, Production, and Impact on Student Learning
Participants learn methods and tips for designing instructional videos and the measured impact they can have in online science courses. Instructional technologists and designers, science educators, and online educators will benefit from this display, which is visually aided by charts, tables, graphs, and original video samples.
Patrick Boggs, Instructional Technologist, Information and Academic Technology, Ivy Tech Community College, IN; James Brinson, Assistant Professor, Science and Technology, American Military University, WV

▪ Recruiting, Retaining, and Transitioning Students Into STEM Programs

Internship, Field Study, and Community Partnerships Transfer to Four-Year Institutions
This poster session showcases the extremely successful internship program initiated at El Centro College. Displayed are how real-world experiences in science influence student transfer decisions.
Bryan Reece, Project Director, Resource and Community Development, El Centro College, TX

A STEM Without a Flower Is All But a Twig
See how a STEM event blossomed from an annual activity with a small group of girls to a flowering event that included over 70 participants in a successful hands-on career exploration day. The target audience was middle school to high school girls.
Jose Velarde, Associate Dean, Engineering, Mathematics, and Physical Sciences; Kendra Charts, Career Programs Recruiter, Enrollment Services, College of Lake County, IL

⏩ 3:15 PM - 4:15 PM

REFRESHMENT BREAK IN THE EXHIBITION HALL
Grand Ballroom 5-6, Third Floor

⏩ 6:00 PM - 7:30 PM

OPENING RECEPTION AND BOOK SIGNING IN THE EXHIBITION HALL
Grand Ballroom 5-6, Third Floor

DAVID THORNBURG   **JIM BRAZELL**

OPENING GENERAL SESSION

4:30 PM - 6:00 PM • WHITE RIVER BALLROOM A-F, FIRST FLOOR

innovation STREAM

CHAIR

Gerardo E. de los Santos, President and CEO, League for Innovation in the Community College

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WELCOME AND INTRODUCTION

B. Kaye Walter, Chancellor, Ivy Tech Community College-Central Indiana

KEYNOTE SPEAKER

David Thornburg, Ph.D., is an award-winning futurist, author, and consultant whose clients range across the public and private sector in the United States and Brazil. His razor-sharp focus on the fast-paced world of modern computing and communication media, project-based learning, 21st century skills, and open-source software has placed him in constant demand as a keynote speaker and workshop leader for schools, foundations, and governments.

As the founder and director of global operations for the Thornburg Center, Thornburg conducts research and provides staff development in several areas. He helps clients to think intelligently about the future and is active in exploring ways that telecommunications and multimedia will change the face of learning at home and in the classroom.

Thornburg's educational philosophy is based on the idea that students learn best when they are constructors of their own knowledge. He also believes that students who are taught in ways that honor their learning styles and dominant intelligences retain the native engagement with learning with which they entered school. A central theme of his work is that we must prepare students for their future, not for our past.

In addition to his work at the state and local level, Thornburg is also involved at the federal level in helping to shape telecommunications and education policy for the benefit of all learners. He has shared his perspectives with policy makers in several countries.

Thornburg has written numerous books. His most recent book, *STEM Education: From Sputnik to the 22nd Century* (2010), explores the current problems we face, and then examines proven strategies that can be applied in the classroom to not only provide needed knowledge and skills, but also to engage students in the joy of working in these fields. His last book, *When the Best is Free*, explores the world of free open-source software in education, with special emphasis on tools for use by students. Reviewers have declared this to be the definitive book on the topic. His other books include: *Campfires in Cyberspace*; *Brainstorms and Lightning Bolts: Thinking Skills for the 21st Century*; *Putting the Web to Work in Education*; *Education in the Communication Age*; and *Education, Technology and Paradigms of Change for the 21st Century*.

DAVID THORNBURG

7:00 AM - 7:00 PM   **Registration**
Grand Foyer East, Third Level
JW Marriott Indianapolis

▶▶ 8:00 AM - 9:00 AM

SPECIAL SESSION

🔲 Energy, Environment, and Sustainability

National Labs: Partnerships With Community Colleges That Impact STEM Education and Career Pathways
Grand Ballroom 1-2, Third Floor
This session highlights how to partner with National Labs to support the redesign of technical pathways in STEM education as well as how to leverage the Learn and Earn model and the Department of Energy Community College Institute.
Evangelina Shreeve, Manager, STEM Education and Work-Based Learning, Pacific Northwest National Laboratory, WA; Kenneth White, Manager, Educational Programs, Brookhaven National Laboratory, NY; Anne Seifert, STEM Coordinator, Education Programs; Richard Holman, Manager, Energy Workforce Initiatives, Idaho National Laboratory, ID; Craig T. Layman, Section Manager, Science Education Programs, Oak Ridge Institute for Science and Education, TN; Andrew F. Skipor, Director, Educational Programs, Argonne National Laboratory, IL; Pat Riddle, Program Coordinator and Professor, Mechanical Engineering Technology, Pellissippi Community College, TN

CONCURRENT SESSIONS

🔲 Health and Science

Creating Information Literate Students: Understanding the Science in Lay Literature
White River Ballroom I, First Floor
An Ivy Tech Community College faculty and librarian collaboration created a scientific literacy project to teach students how to evaluate mass media information. Faculty members participating in this session can learn how to implement similar projects in their areas.
Albert Rubenstein, Professor, Biology; Jessica Placke, Director, Library; Erica McFarland, Assistant Director, Library, Ivy Tech Community College, IN

🔲 Mathematics, Engineering, and Architecture

Network Science: Use Snoop Dogg to Teach the Scientific Method
White River Ballroom G, First Floor
Network science is a growing field of study that embraces ideas from computer science, sociology, and mathematics. This presentation has two objectives—introduce participants to network science and provide a motivating lesson for high school students using a dataset of hip-hop collaborations.
Thomas Hayden, Doctoral Student, Electrical Engineering and Computer Science, Northwestern University, IL

🔲 Manufacturing, Industry, Agriculture, and Aerospace

The Advanced Manufacturing Industry's Role in Driving Educational Pathway Models
White River Ballroom H, First Floor
Participants discuss Learn and Earn strategies that use competency-based educational pathways aligned to nationally portable, industry-recognized credentials as well as policy and investment issues for colleges, industry, and states.
Emily DeRocco, President; Jennifer McNelly, Senior Vice President, The Manufacturing Institute, DC; Audrey Theis, President, Key Links, Inc., OR

🔲 E-Learning Resources

EMC Academic Alliance: Storage Course and Tools
Room 107, First Floor
Learn how this free technology-based storage course and tools like simulators and open-source software can be used at your college to enhance student career prospects in the world of IT.
Kim Yohannan, Academic Alliance Manager, Education Services, EMC Corporation, MA

🔲 Recruiting, Retaining, and Transitioning Students Into STEM Programs

Creating Effective Partnerships for Building the K-20 STEM Pipeline
Room 105, First Floor
Creating effective partnerships between K-12 and community colleges is critical to filling the pipeline for a diverse STEM workforce. Participants discuss how partnerships between Project Lead the Way, a local school district, and a community college effectively recruit, retain, and transition students into STEM fields.
Terri Schulz, National Director, Market Development and Relationships, Project Lead the Way, Inc., NY; Steve Wendel, Director, National Center for Manufacturing Education, Sinclair Community College, OH; Carletta Sullivan, Community Liaison, Computer Technology Education, McKenzie Center for Innovation and Technology, IN

Edible Car Contests Give Students a Taste of STEM
Room 101, First Floor
Illinois Valley Community College, with National Science Foundation support, uses edible car contests to promote STEM. Session participants build edible cars while learning to offer and use these engaging contests.
Dorene Perez, Program Coordinator, Career and Technical Programs; Jim Gibson, Program Coordinator, Career and Technical Education; Susan Caley Opsal, Professor, Anatomy and Physiology; Rose Marie Lynch, Instructor, Humanities, Fine Arts, and Social Sciences, Illinois Valley Community College, IL

Expanding the Engineering Pathway for Underrepresented Minorities

Room 106, First Floor

Learn about integrating programs along the engineering pathway from middle school through workforce entry. Addressed are best practices in partnerships and data-driven strategies aimed toward expanding the STEM pipeline.

Raluca Cocianga, Director, Pre-Engineering Programs, National Action Council for Minorities in Engineering, NY

Engaging Employee Partners to Form Learn and Earn Partnerships (Part One)

Room 102, First Floor

In part one of a two-part session, Corporate Voices shares strategies that engage businesses in creating partnerships based on promising practices and policies demonstrated by employers that support talent development through postsecondary credential completion.

Peggy Walton, Senior Director, Workforce Readiness, Corporate Voices for Working Families, DC

TECHie Camp: Educating, Exciting, and Empowering Students With Technology!

Room 103, First Floor

TECHie Camp is a full-day, week-long technology experience designed specifically for elementary and middle school students. The goal of TECHie Camp is to engage students in activities that stimulate a deeper interest in technology as well as provide opportunities for them to express their imaginations.

Lisa Chambers, National Director, TECH CORPS, OH

Improving Career Choices Through Boot Camps for Women and Minorities

Room 104, First Floor

Students frequently drop out of courses misaligned to their skills or interests. Learn about targeted boot camps that help women and minorities choose their career path in an informed manner.

Ann Beheler, Principal Investigator, Convergence Technology Center, Collin College, TX; Larry Lee, Dean, Business, Professional and Technical Education, Del Mar College, TX

ROUNDTABLE DISCUSSIONS

All Roundtable Discussions take place in Grand Ballroom 3-4, Third Floor

Technology, Multimedia, and Telecommunication

Using Sprint to Support Mobile Learning and Generate New Revenue

Participants learn how two MiCTA members introduced successful Sprint student cell phone programs. This discussion demonstrates how campuses can use Sprint mobile devices to support learning and enhance revenue.

Tim von Hoff, Chief Operating Officer, MiCTA, MI; Brandon Smith, Buyer, President's Office, Ivy Tech Community College, IN

E-Learning Resources

Building a Social Support Network for All Faculty: The ProfNet

No more isolated faculty members! Discuss ideas for supporting and engaging adjunct and full-time faculty through an online community. Learn about ProfNet, a faculty-driven, grass-roots social media-based support network.

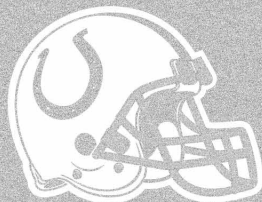*James Luke, Professor, Social Science, Lansing Community College, MI*

Recruiting, Retaining, and Transitioning Students Into STEM Programs

Knowledge Capture: Building Sustainable STEM Networks

Participants discuss building and sustaining partnerships, gaining buy-in, transitioning from building the network to building the programs, sustaining the network, and documenting the process to inform and sustain STEM networks.

Monica Hunter, Director, Research, PAST Foundation, OH

MONDAY

▶▶ 9:15 AM - 10:15 AM

TRACK KEYNOTE SESSION

▪ Manufacturing, Industry, Agriculture, and Aerospace

STEM Learn and Earn for All Students
Grand Ballroom 1-2, Third Floor
Students often need to earn income while they learn. The challenge before educators is to ensure that everything students learn while they earn is credit-bearing, and that all postsecondary learning is aligned. Join a distinguished panel in exploring critical Learn and Earn issues.

Marzell Brown,
Program Manager, Engineering Development, Rockwell Automation, OH

Susan Lavrakas,
Director, Workforce, Aerospace Industries Association, VA

Janice Morrison, President, Teaching Institute for Excellence in STEM, OH

Rick Parker, Principal Investigator and Director, AgrowKnowledge, IA

Emily DeRocco, President, The Manufacturing Institute, DC

Ashley W. Collins, Coordinator, Education, AgCareers.com, NC

CONCURRENT SESSIONS

▪ Health and Science

Hello: There Is a Person Inside This Computer!
White River Ballroom I, First Floor
How can we teach our students to keep high-touch in a high-tech world? Health care educators, administrators, and anyone who has ever been or will be a patient will benefit from this session.
Gaynelle Schmieder, Instructor, Academic Affairs, Pennsylvania Highlands Community College, PA

How to Manage a Grant and Stay in Compliance
White River Ballroom H, First Floor
Critical information is presented to ensure that principal investigators and other college participants and grant partners meet the goals of their grant, but more importantly, remain in compliance with the funder.
Lyvier Conss, Director, Community College National Center for Community Engagement, Mesa Community College, AZ

▪ Mathematics, Engineering, and Architecture

Innovative, Relevant, Dynamic STEM Education Using the Electric Guitar
White River Ballroom G, First Floor
This presentation demonstrates how using guitars in the classroom to teach STEM concepts will rock your world. Through an NSF grant, Butler County Community College pioneered this innovative approach to STEM Education. Come look and listen to the music of innovative STEM implementation at its finest.
Mike Aikens, Professor, Engineering Technology, Butler County Community College, PA

Teaching Science, Mathematics, and Engineering Concepts Using LEGO Underwater Robots
Room 103, First Floor
Learn about an NSF-funded program, disseminated through community college partners, to engage middle and high school students in a series of design challenges using fully submersible LEGO robots. **The WaterBots are also demonstrated in the exhibition hall in booth 219 during open exhibit hours.**
Jason Sayres, Specialist, Center for Innovation in Engineering and Science Education, Stevens Institute of Technology, NJ; Paul Lawrence, Assistant Professor, Automation and Control Technology, Sinclair Community College, OH; Antigone Sharris, Coordinator, Engineering Technology, Triton College, IL

◼ E-Learning Resources

How a Virtual Learning Environment Can Help Learners
Room 106, First Floor
Participants leave this discussion with an extensive list of web resources, most of which are free, that instructors and developers can use in on-campus or online classrooms.
Jeff Borden, Senior Director, Teaching and Learning, Pearson eCollege, CO

Opening Developmental Mathematics: New Resources for New Approaches
Room 107, First Floor
NROC Learn about a project underway to build media-rich, adaptable, and open educational resources to support new approaches to math remediation. Join us for a discussion of new possibilities for improving math literacy.
Terri Rowenhorst, Director, Membership, National Repository of Online Courses, CA

Driving Successful Outcomes Through Technology and Learner Engagement
Room 108, First Floor
The presenter details the ways in which Epsilen supports student engagement by coupling traditional LMS functions with collaboration tools that empower students and educators to participate in learning communities.
Brad Baumgartner, Vice President, Global Sales, Epsilen, IN

◼ Recruiting, Retaining, and Transitioning Students Into STEM Programs

Pathways to Results: A Data-Driven Approach to Programs of Study
Room 101, First Floor
This interactive session presents Pathways to Results, an inquiry-based and equity-guided method involving community colleges and partners in implementing and improving STEM programs of study.
Debra Bragg, Professor, Educational Policy, Organization, and Leadership; Catherine Kirby, Assistant Director, Community College Research and Leadership, University of Illinois, IL

Engaging Employee Partners to Form Learn and Earn Partnerships (Part Two)
Room 102, First Floor
LEARN EARN In part two of a two-part session, a representative from Corporate Voices shares additional strategies that engage businesses in creating Learn and Earn partnerships based on promising practices and policies demonstrated by employers that support talent development through postsecondary credential completion.
Peggy Walton, Senior Director, Workforce Readiness, Corporate Voices for Working Families, DC

What If Retention Is a Function of Time?
Room 104, First Floor
WebStudy But I don't have enough time! Sound familiar? Gaining competency is time-dependent. Learn to fulfill 21st century student needs in retention once you look at time in a different context.
Gisele Larose, President, WebStudy, Inc., PA; Carol Redfield, Associate Professor, Computer Science, St. Mary's University, TX

ROUNDTABLE DISCUSSIONS

All Roundtable Discussions take place in Grand Ballroom 3-4, Third Floor

◼ Mathematics, Engineering, and Architecture

Challenges and Solutions for STEM Programs Online or Onsite
How can technology address challenges in STEM programs and improve student comprehension, retention, and success? Participants discuss the challenges and explore technology options for displaying notation, visualizing concepts, exploring problems, and providing assessment opportunities.
Louise Krmpotic, Director, Business Development, Maplesoft, ON

◼ Technology, Multimedia, and Telecommunication

Recruitment, Retention, and Graduation of African American Students in Technology
Join us for a candid roundtable discussion about how to increase retention and success rates for African American students in technology and other STEM fields. Success strategies and interventions are highlighted as well as the barriers that can contribute to the failure of the educational experience.
Penny Foster-Shiver, Professor, Computer Technologies, Anne Arundel Community College, MD

◼ E-Learning Resources

Information Literacy: A Discipline-Based Approach to Using Online Databases
Efficiently accessing, extracting, and evaluating structured data combines general information literacy skills and discipline-based knowledge. Participants discuss strategies for engaging students in a series of activities that build transferable skills for working with databases.
Sam Donovan, Research Associate Professor, Biology, University of Pittsburgh, PA

◼ Recruiting, Retaining, and Transitioning Students Into STEM Programs

STEM Dropouts: Causes and Prevention
Participants discuss research on the reasons students abandon plans to major in STEM subjects and are challenged to identify what policies and practices would counteract these influences.
Laurence Shatkin, Senior Product Developer, Editorial, JIST Publishing, MN

▸▸ 10:15 AM - 12:00 PM

COFFEE BREAK IN THE EXHIBITION HALL
Grand Ballroom 5-6, Third Floor

MONDAY

▶▶ 11:00 AM - 12:00 PM

TRACK KEYNOTE SESSION

▪ Recruiting, Retaining, and Transitioning Students Into STEM Programs

NSF/ATE Centers: Preparing America's 21st Century Workforce
Grand Ballroom 1-2, Third Floor
With an emphasis on two-year colleges, the Advanced Technological Education program focuses on educating technicians for the high-technology fields that drive our nation's economy. The program involves partnerships between academic institutions and employers to improve the education of science and engineering technicians at the undergraduate and secondary school levels.

Celeste Carter, Program Director, Division of Undergraduate Education, National Science Foundation, VA

Deborah Boisvert, Director, Boston-Area Advanced Technological Education Connections, University of Massachusetts – Boston, MA

Deb Newberry, Director, Nanoscience Technology, Dakota County Technical College, MN

Marilyn Barger, Executive Director, Florida Advanced Technological Education Center, Hillsborough Community College, FL

Linnea Fletcher, Chair, Biotechnology, Austin Community College District, TX

Elaine Johnson, Executive Director, Bio-Link, City College of San Francisco, CA

Robert J. Spear, PI and Director, CyberWatch, Prince George's Community College, MD

CONCURRENT SESSIONS

▪ Health and Science

Redesigning a Program: Considerations for Success
White River Ballroom I, First Floor
Program redesign requires many areas to be taken into consideration to ensure learner success. Learn about the redesign experiences of the School of Health and Public Safety at SAIT Polytechnic.
Elizabeth Noble, Curriculum Development Coordinator, Health and Public Safety, SAIT Polytechnic, AB

Nanotechnology: The Development of an Associate's Degree
Room 102, First Floor
The presenters share their steps to plan, submit for approval, and implement a degree program in nanotechnology. Come learn about our efforts and share your ideas about how the program can benefit your organization.
Dave Brinkruff, Professor and Dean, Technology; Abdollah Aghdasi, Program Chair, Applied Science and Engineering Technology, Ivy Tech Community College, IN

Strengthening Health and Career Pathways
Room 101, First Floor
Participants discuss the development of a regional partnership in Arkansas, Oklahoma, Louisiana, and Texas to strengthen STEM career pathways that lead to careers in health, science, and advanced manufacturing.
Reo Pruiett, Program Officer, Texas High School Project, TX

From Concept to Delivery in 300 Seconds!
White River Ballroom G, First Floor
The VILOs project idea continues to be in high demand at Ivy Tech Community College. This presentation discusses the transition from VILOs to VALOs for the Respiratory Care and Respiratory Technology programs.
A. Andaz Ahmad, Director, Instructional Technology, Media Services, and Distance Education; Rob Rhodes, Lead Videographer, Instructional Technology, Ivy Tech Community College, IN

▪ Technology, Multimedia, and Telecommunication

Using Clickers to Improve Learning
Room 108, First Floor
Clickers are growing in popularity for good reason. How do clickers make instruction, assessment, and learning more

dynamic? The hands-on session provides opportunities to experience classroom situations using Qwizdom clickers.
Dan Alexander, Higher Education Accounts, Sales, Qwizdom, Inc., WA

◼ Technology Systems and Applications

Managing Curriculum and External Standards Across the Organization: New Technology
White River Ballroom H, First Floor
Educators are burdened with the task of documenting external standards in curriculum. Yet, how are the standards reflected in everyday teaching and learning? See a tool that balances organizational needs, external requirements, and customization in curriculum development.
Robin Nickel, Associate Director, Client Relations, Worldwide Instructional Design System, WI

◼ E-Learning Resources

100 Percent Accessible Flash-Based YouTube Video Player
Room 106, First Floor
See a demonstration of how this video player works, the interface St. Petersburg College designed to create captions, and how you can use this award-winning, completely accessible player.
Vicki Westergard, Executive Director, Web and Instructional Technology Services, St. Petersburg College, FL

Choose Your Own Adventure
Room 107, First Floor
Participants discuss a template, based on an old children's book strategy, to create individualized learning paths for students based on outcomes, presentation, and assessment through conditional release.
Jeff Borden, Senior Director, Teaching and Learning, Pearson eCollege, CO

Helping Students On and Off Campus With 24/7 Online Tutoring
Room 104, First Floor
How do you support students online? Representatives from two programs discuss the motivations, implementation, and results of Smarthinking Online Tutoring. Also included is independent research showing the positive impact on student success and retention.
Carolyn Linkous, Implementaion Specialist, Smarthinking, Inc., TN; Steve Rheinschmidt, Director, Iowa Community College Online Consortium, IA; Jim Hiett, Assistant Vice President, Academic Affairs,Volunteer State Community College, TN

Designing and Implementing a Collaboratory for STEM Education
Room 103, First Floor
Participants discuss how to create a collaborative learning environment for STEM instruction and new collaborative techniques using Tablet PCs with traditional, hybrid, and online students.
Michael LaFreniere, Assistant Professor, Hazardous Materials, Ohio University, OH; Rodney Handy, Professor, Mechanical Engineering Technology, Purdue University, IN

Online Music Appreciation: Bringing Awareness Through Interactivity
Room 105, First Floor
This session addresses approaches for developing, teaching, and supervising multiple sections of an interactive online music course and other courses in the humanities. Audio and visual examples of musical performances are shared, along with creative strategies for incorporating discussion forums, exams, essays, and games.
John Parcell, Associate Professor, Music, Sinclair Community College, OH

POSTER SESSIONS

All Poster Sessions take place in the Grand Foyer East, Third Floor

◼ Energy, Environment, and Sustainability

Biomanufacturing Training to Support the Emerging Bio-Economy
Hands-on activities, textbook support, virtual laboratories, websites, and conferences for a biomanufacturing curriculum created for high school through community college students and their alignment with industry needs are displayed.
Mary Jane Kurtz, Consultant, Biotechnology; Ron Marino, Director, Biotechnology, Minuteman Regional High School, MA; Bill Woodruff, Director, Biotechnology, Alamance Community College, NC; James Hewlett, Professor, Science and Technology, Finger Lakes Community College, NY; Sengyong Lee, Program Director, Biotechnology, Ivy Tech Community College, IN

◼ Technology, Multimedia, and Telecommunication

Clickers in the Classroom
Clickers are a great way to actively engage and assess student learning for all levels. The activities are endless and students just love using them!
Kelly Ferdinand, Teacher, French, Oakwood High School, IL

◼ E-Learning Resources

Developmental Mathematics for 21st Century Learners
NR⌀C Mathematics remains a daunting challenge to **NATIONAL REPOSITORY of ONLINE COURSES** college success. How might new media expand upon effective practices for reaching students? Take a tour of new resources being created for this purpose!
Dani Pedrotti, Manager, Marketing, National Repository of Online Courses, CA

E-Learning and a Collaborative Teaching Approach for the Humanities
This display showcases how alternative teaching techniques can close the gap between technology and the humanities. To close the gap, we propose a collaborative online teaching approach. This display will particularly interest faculty members interested in nontraditional teaching methods.
Marian Tudares, Assistant Professor, Liberal Arts and Sciences, Ivy Tech Community College, IN

Search for STEM Educational Computer Games
Learn how to find educational electronic games to support just about any class you or other faculty members teach. A laptop will be available so participants can search the database.
Carol Redfield, Associate Professor, Computer Science, St. Mary's University, TX

◼ Recruiting, Retaining, and Transitioning Students Into STEM Programs

TECH CORPS: Connecting Technology, Learning, and the Community
TECH CORPS is a nonprofit organization that develops engaging technology programs and deploys tech-savvy volunteers to assist K-12 schools and youth-serving organizations across the country to improve education.
Lisa Chambers, National Director, TECH CORPS, OH

⏩❙ 12:00 PM - 1:00 PM

LUNCH CONVERSATIONS
Grand Ballroom 3-4, Third Floor

⏩❙ 1:15 PM – 2:15 PM

REFRESHMENT BREAK IN THE EXHIBITION HALL
Grand Ballroom 5-6, Third Floor

⏩❙ 2:15 PM - 3:15 PM

TRACK KEYNOTE SESSION

◾ Mathematics, Engineering, and Architecture

Setting the Course for the Future: Promising Practices in Mathematics
Grand Ballroom 1-2, Third Floor
Young and older adults struggle to master basic concepts and to find interest in the challenges STEM education offers. Many of them find their lack of understanding and achievement as a constraint to credentials and degrees in STEM fields. The presenters create mathematics infrastructures that challenges yet support students understanding with real-world work.

Diego Navarro, Director, Academy for Excellence, Cabrillo College, CA

Nathan Klingbeil, Professor and Associate Dean, Engineering and Computer Science, Wright State University, OH

Tracy Gray, Managing Director, STEM Education and Innovation, American Institutes for Research, DC

F. Joseph Merlino, President, The 21st Century Partnership for STEM Education, PA

Geri Anderson, Associate Vice President and Provost, Strategic Planning, Colorado Community College System, CO

CONCURRENT SESSIONS

◾ Technology, Multimedia, and Telecommunication

Future of Work, Education, and Society-Technological Transformations
Room 108, First Floor
Participants discuss how rapid advancements in society and work fueled by technology are creating new pressure on employers and educators to change, current trends in technology and education, and how colleges and universities are addressing these trends.
Tracey Wilen-Daugenti, Vice President, Research and Strategic Innovations, University of Phoenix, AZ

◾ Technology Systems and Applications

Securing Retraining Grants Through Industry Collaboration
White River Ballroom G, First Floor
Two billion dollars in grant funding is available to create, expand, and restructure job training programs. Partner with National Instruments to create innovative and unique proposals for STEM programs critical for the 21st century workforce.
Carl Nybro, Business Manager, Academic; Shas Nautiyal, Business Manager, Academic, National Instruments, TX

Next Generation Learning Challenge Open-Source Software
White River Ballroom I, First Floor
With support from EDUCAUSE and the Bill and Melinda Gates Foundation, Sinclair Community College is moving its award-winning Student Success Plan software to open source. Learn how your college can make use of this proven success software to enhance your student support services.
Michael Burns, Director, Systems Development and Maintenance; Russ Little, Manager, Web Systems, Sinclair Community College, OH

◼ E-Learning Resources

Teaching Online Best Practices
Room 107, First Floor
For those tasked with teaching their courses online, principles and practices of online best practices are offered with first-hand practical applications and discussion about the Community of Inquiry.
Craig Gilman, Manager, Community College Outreach, American Public University System, WV

Digital Community College Survey: Winning Secrets Revealed!
White River Ballroom H, First Floor
The Center for Digital Education's Digital Community Colleges Survey celebrates exemplary use of technology. This session highlights survey findings in areas like distance learning, security, infrastructure, and more. Participants discuss technology success stories from survey winners.
John Halpin, Vice President, Strategy and Programs, Center for Digital Education, CA

Using Technology to Build a Sense of Community
Room 105, First Floor
Participants gain an understanding of how they can benefit from communities and groups. Come learn how to use Web 2.0 tools to build a sense of community and discuss ways to provide value to staff, faculty, students, and alumni.
Cathy Garland, Vice President, Sales and Marketing, Edvance360, VA

Use Technology to Validate Student to Faculty Interaction
Room 106, First Floor
WebStudy How are you measuring contact hours to fulfill credit hour requirements? Learn how technology can verify what you already do well . . . faculty-student interaction and student-student interaction.
Carol Redfield, Associate Professor, Computer Science, St. Mary's University, TX; Gisele Larose, President, WebStudy, Inc., PA

◼ Recruiting, Retaining, and Transitioning Students Into STEM Programs

One Plus One Equals Much More Than Two
Room 101, First Floor
Complex issues cannot be solved with a single approach. Explore the connection of formal and informal educational programs to recruit, retain, and support women and girls in STEM programs.
Karen Peterson, Chief Executive Officer, EdLab Group, WA; Claudia Morrell, Chief Operating Officer, National Alliance for Partnerships in Equity, PA

Aligning Academic Engineering Technology Programs With External Standards: Closing Loops
Room 102, First Floor
In 2007, the Florida Advanced Technological Education Center began implementing its Engineering Technology Degree program, which has a technical core aligned to an external industry standard and closes the loop between statewide frameworks, external standards, and classroom learning outcomes.
Marilyn Barger, Executive Director, Florida Advanced Technological Education Center, Hillsborough Community College, FL

How Robots Are Leading Our STEM Future
Room 103, First Floor
Learn how robotics and FIRST, a nonprofit organization dedicated to inspiring interest in science and technology, are engaging children at all ages to learn more about higher education and career fields in STEM industries.
Steve Florence, Teacher, Engineering and Technology, West Lafayette Junior/Senior High School, IN; David Brantley, Teacher, Third Grade, Cumberland Elementary School, IN

ROUNDTABLE DISCUSSIONS

All Roundtable Discussions take place in Grand Ballroom 3-4, Third Floor

◼ Health and Science

Explode Into Action: An Online Geology Course
Come discuss Explode Into Action, exciting online geology tools and resources that help teach online science and include content, videos, simulations, and student interaction, all available without a particular textbook.
Alishia Nelson, Manager, Academic Partnerships, Dallas TeleLearning, TX

◼ Technology Systems and Applications

Strengthening Geoinformatics in Geoscience Education: The Use of ENVI and GIS
Participants discuss integrating remote sensing and GIS software to develop multidisciplinary teaching modules for science labs and workforce programs. The model can also be applied to other STEM fields.
Sergio Sarmiento, Professor, Geology; Buck Buchanan, Professor, Geography; Michel Konvicka, Professor, Geosciences, Lone Star College System, TX

◼ E-Learning Resources

Designing Open Educational Resources for Developmental Math
NROC Learn about a new online developmental math series funded by the Bill and Melinda Gates Foundation, to be freely distributed through the National Repository of Online Courses. Share your expertise in helping shape this open educational resource.
John Watson, Consultant, Evergreen Education Group, National Repository of Online Courses, CA

Is an Online Biology Class a Lab Science Course?
Participants learn how an at-home lab kit can be used to introduce students to laboratory topics in online nonmajors biology courses and discuss how this instructional tool increases the exposure of non-science students to one of the basic sciences.
Anthony Gaudin, Professor, Science, Ivy Tech Community College, IN

▶▶| 3:30 PM - 4:30 PM

TRACK KEYNOTE SESSION

Energy, Environment, and Sustainability

Innovative Programs to Build Tomorrow's Energy Workforce
Grand Ballroom 1-2, Third Floor
The high demand for a skilled energy workforce is being addressed by national labs, the Department of Energy, National Science Foundation ATE centers, and industry. This session addresses ways to develop career awareness and pathways to supply tomorrow's energy workforce.

Michelle Fox, Chief Strategist, Workforce Development and Education, United States Department of Energy, DC

Kathleen Alfano, Primary Investigator, California Regional Consortium for Engineering Advances, College of the Canyons, CA

Michael Brown, Founder and CEO, SkillsNET, TX

Evangelina Shreeve, Manager, STEM Education and Work-Based Learning, Pacific Northwest National Laboratory, WA

Ann Randazzo, Executive Director, Center for Energy and Workforce Development, DC

CONCURRENT SESSIONS

Mathematics, Engineering, and Architecture

Excite Them With Mechatronics: A Practical Application of STEM
White River Ballroom I, First Floor
Come discuss why Mechatronics need not be overly challenging or expensive, but a logical culmination of a STEM program. Start slow, add what you can, and students will get excited and succeed.
Frank Lanzer, Professor, Engineering; Tim Callinan, Assistant Professor, Engineering, Anne Arundel Community College, MD

Using Service Learning to Help Build a Better Tomorrow
Room 102, First Floor
Participants discuss examples of service-learning projects in the United States and abroad that can help build a better tomorrow for their communities.
Lyvier Conss, Executive Director, Community College National Center for Community Engagement, Mesa Community College, AZ

Manufacturing, Industry, Agriculture, and Aerospace

NBC²'s Biomanufacturing Curriculum Supports Development and Expansion of Local Bioeconomies
White River Ballroom H, First Floor
The use of NBC²'s Global Biomanufacturing Curriculum for the development of the biotechnology and biomanufacturing education and training and workforce infrastructure, including career pathways in different locales, is demonstrated and discussed.
Sonia Wallman, Executive Director, The National Biomanufacturing Center and Collaborative, Montgomery County Community College, PA; James Hewlett, Professor, Science and Technology, Finger Lakes Community College, NY; Mary Jane Kurtz, Consultant, Biotechnology, Minuteman Regional High School, MA; Yakov Cherner, Consultant, Biotech and Biomanufacturing, NBC², NH

Technology, Multimedia, and Telecommunication

Business Engagement Leads to Workforce Program Success
Room 108, First Floor

College technology programs often struggle to stay abreast of the latest trends in industry. Participants discuss the benefits associated with business ownership of the program, including preparing students to meet workforce demands.

Ann Beheler, Principal Investigator, Convergence Technology Center; Helen Sullivan, Director, Convergence Technology Center, Collin College, TX

Technology Systems and Applications

If You MAP Academic Success, They Will Follow
White River Ballroom G, First Floor

My Academic Plan is a software application designed to keep students focused on degree and certificate completion. This session demonstrates how the tool interjects a prescriptive element into advising and course selection.

Russ Little, Manager, Web Systems, Sinclair Community College, OH

E-Learning Resources

Tools for Scaling Your Distance Education Program
Room 106, First Floor

Leaders learn about two tools used by 300+ colleges. One tool can improve retention by measuring levels of student readiness and the other tool is a survey tool for end-of-course evaluations.

Tara Boozer, Account Manager, SmarterServices, AL

360 Degrees Student Services: Engaging Online Students From Prospect to Degree
Room 105, First Floor

During this session, participants explore a holistic approach to engaging online students, including identifying and prioritizing student need, creating streamlined e-services, and developing communication strategies for online students with limited staff and resources.

Christina Amato, Coordinator, Student Retention; Elizabeth Burns, Program Coordinator, Distance Learning Programs and Support, Sinclair Community College, OH

CollegeAnywhere: Delivering Online Media
Room 107, First Floor

CollegeAnywhere combines media content from outstanding producers, including Governors State University and Annenberg Learner, with tools that allow faculty members and instructional designers to bookmark media to create teachable moments and add their own media and content for online and hybrid courses.

Danella Soeka, Manager, Marketing and Media Distribution, Governors State University, IL

Recruiting, Retaining, and Transitioning Students Into STEM Programs

Virtual Classrooms for STEM Education
Room 101, First Floor

Attract and retain students through project-based, hands-on STEM labs. Learn how the combination of graphical programming, modular hardware, modern computing, and the internet can transform your classroom into a multidisciplinary lab and prepare students for a future in higher education and industry.

Carl Nybro, Business Manager, Academic; Shas Nautiyal, Business Manager, Academics, National Instruments, TX

Increasing Higher Education STEM Completion Through Untapped Transfer Degrees
Room 104, First Floor

Come discuss the national need to increase college access and completion and learn strategies for recruiting and retaining traditional and transitional students into emerging STEM careers through untapped transfer degrees.

Carol Adukaitis, Manager, Academic and Student Affairs, Pennsylvania State System of Higher Education, PA

Start Early: Middle School STEM Fair as a Recruitment Tool
Room 103, First Floor

Participants learn how Triton College leveraged its popular Science Day for middle school students to design an expanded STEM fair to reach more local school students.

Jonathan Paver, Dean, Professional Development; Ric Segovia, Assistant Dean, Arts and Sciences; Antoinette Baldin, Dean, Business and Technology; Jo Beth Halpin, Professor, Health Careers and Public Service Programs, Triton College, IL

ROUNDTABLE DISCUSSIONS

All Roundtable Discussions take place in Grand Ballroom 3-4, Third Floor

E-Learning Resources

Using Tablet PCs to Support Notetaking Services for STEM Courses

Participate in hands-on demonstrations and discussions about the C-Print tablet software application and explore the benefits and challenges of notetaking and transcribing support services often used by students with learning or sensory disabilities.

Lisa Elliot, Senior Research Scientist, Center on Access Technology, Research; Pamela Francis, Coordinator, Development, Center on Access Technology, National Technical Institute for the Deaf, NY

The Sky's the Limit: Instructional Design for Immersive STEM Courses

Online immersive learning environments go beyond what has been achieved before and open up a realm of possibilities previously unimaginable to educators. Join us for a discussion about how to design them.

Michael Watkins, Director, Instructional Design and Technology; David Clarke IV, Vice President, Learning Solutions, Toolwire, CA

Recruiting, Retaining, and Transitioning Students Into STEM Programs

Bold Fusion: The Scientific Method Marries Critical Thought

Participants discover how to recruit students into STEM fields by applying six skills of scientific thinking easily and successfully across the curriculum, resulting in clear, formalized critical thought.

Katherine Watson, Professor, Distance Learning, Coastline Community College, CA

▶▌ 4:45 PM - 5:45 PM

SPECIAL SESSION

■ **E-Learning Resources**

Academics That Make Sense Produces Positive Results
Grand Ballroom 1-2, Third Floor
By connecting strong academics with real-world experiences in a wide range of fields, learning is not only exciting and challenging, but it can also help students gain an advantage in high school, college, and careers.
Janice Morrison, President, Teaching Institute for Excellence in STEM, OH; Gary Hoachlander, President, ConnectEdu California, CA; Ray M. Haynes, Director, STEM Integration, Da Vinci Schools, CA

INNOVATION **STREAM**   **LEARN** EARN

CONCURRENT SESSIONS

■ **Energy, Environment, and Sustainability**

Thriving Curriculum Through Business Sustainability
White River Ballroom H, First Floor
Featuring Bellevue College's Sustainable Business Practices program, this session explores the business need for sustainability and innovation in communication strategies and workforce training, then outlines a successful curriculum design that maximizes student options while managing college resources.
Marika Reinke, Faculty and Program Chair, Sustainable Business Practices, Bellevue College, WA

■ **Mathematics, Engineering, and Architecture**

Motivating Students: Integrating Beginning and Intermediate Algebra
White River Ballroom I, First Floor
The frequent delay students often take produces low performance in students. The presenter demonstrates how integrating two consecutive mathematics courses increases student motivation and commitment. This is a demonstration of students' work in and out of class by using a portfolio and methods of integrative instruction in mathematics, including service learning, outcomes assessment, and environmental instruction.
Jaime Bestard, Associate Professor, Mathematics, Miami Dade College - Hialeah Campus, FL

■ **Technology, Multimedia, and Telecommunication**

Using Scrum in the Classroom to Facilitate Collaborative Learning
Room 108, First Floor
Scrum is a well-known software development methodology used in the IT industry to empower teams to be self directed and goal oriented. This approach, when used in the classroom, motivates self-directed learning. This session will benefit anyone who manages small teams, including teachers and administrators.
Dave Dalsveen, Instructor, Information Technology Programming, Chippewa Valley Technical College, WI

VILO Mustard Seeds Grow Student Skills
Room 107, First Floor
Learn about the Video-Interactive-Learning-Object (VILO) project at Ivy Tech Community College and how the project has grown from a solution for one small problem to a library of learning resources. This session is designed for participants interested in planning, implementing, and incorporating VILO tools across career pathways in health care.
Patricia Ley, Assistant Professor and Chair, Medical Assisting; Rose Boneff, Faculty and Clinical Coordinator, Respiratory Therapy; Tova Wiegand-Green, Dean, Health Sciences, Ivy Tech Community College, IN

3D Imaging for Your Students on a Shoestring Budget
Room 105, First Floor
Instructors at any level who want to expose their students to 3D image and moviemaking with little or no funding will find this session useful. Learn how to take 3D still photos using a web camera and free software and make cheap 3D movies. Participants also make 3D glasses.
Eileen Dewey, Director, Computer Gaming and Simulation Development, Rose State College, OK

Industry-Driven Educational Pathway: AS to BAS in Software Development
Room 106, First Floor
Participants discuss how the curriculum has been developed and how the program is being delivered in an online format. Specifically for graduates with an AS in computer programming, students transition to the University of Central Florida with automatic acceptance into the BAS degree program.
Colin Archibald, Professor, Computer Programming, Valencia Community College, FL; Dick Grant, Professor, Computer Science and Information Technology; Craig Tidwell, Professor and Program Manager, Network Technologies, Seminole State College of Florida, FL

■ **Technology Systems and Applications**

A Virtual Coach System Advances STEM Student Success
White River Ballroom G, First Floor
Discover a futuristic, real-time, high-impact virtual retention system that manages at-risk factors to support STEM student success through online proactive alerts, a customized math portal, tutoring services, and much more.
Maria Ileana Garcia, Director, Title V, Miami Dade College - Hialeah Campus, FL

Recruiting, Retaining, and Transitioning Students Into STEM Programs

Increasing Retention of Engineering Students Using a Cohort Model
Room 102, First Floor
This session addresses issues that contribute to high attrition rates for freshman and sophomore engineering students at community colleges. Experiences with a cohort-based NSF scholarship program are shared.
Robert Twardock, Instructor, Engineering, Mathematics, and Physical Science, College of Lake County, IL

Putting the Pedal to the Metal With Interactive Content
Room 101, First Floor
SoftChalk is a user-friendly tool that allows non-technical faculty to easily create interactive content that facilitates better student understanding and retention. Join us to see how easy it can be!
Paige Brooks-Jeffiers, Coordinator, E-Learning Technology, Kentucky Community and Technical College System, KY

Advancing Partnerships for Hydrographic Survey Pilot Projects
Room 104, First Floor
Advanced technical training in hydrographic surveys and marine research represents an integral part of the first Freshwater Studies Associates degree in the United States. Early student participation is critical to future success.
Hans Vansumeren, Director, Great Lakes Water Studies Institute, Northwestern Michigan College, MI

Android App Inventor as a Recruiting and Retention Tool
Room 103, First Floor
This session presents the results of a year-long pilot involving non-majors collaborating with faculty members on projects using App Inventor for Android. Participants receive material for creating their own courses.
Tim Krause, Assistant Professor, Computing and New Media Technologies, University of Wisconsin - Stevens Point, WI

ROUNDTABLE DISCUSSIONS

All Roundtable Discussions take place in Grand Ballroom 3-4, Third Floor

Energy, Environment, and Sustainability

Bridging the Gap: Students and Professionals Design Netzero Energy Communities
The presenters demonstrate the design charrette technique used to bring interdisciplinary students and professionals together to design a net zero energy community. Participants take part in this joint ownership solution that takes place between students and design professionals to promote a collegial setting for learning.
Michele Filipiak, Lead Faculty and Program Coordinator, Architecture Technology; George Berghorn, Dean, Technical Careers; Sean Huberty, Faculty, Environmental Design and Building Technologies, Lansing Community College, MI

E-Learning Resources

Including the Middle: Beyond Plus and Minus for Critical Success
Participants discover four simple ways to achieve the multifaceted mindset that underlies effective critical thinking in a plus versus minus age. Educators and administrators who wish to find, define, disentangle, and fix the fallacious arguments hampering academic success will benefit from this session.
Katherine Watson, Professor, Distance Learning, Coastline Community College, CA

Recruiting, Retaining, and Transitioning Students Into STEM Programs

Using Project-Based Learning to Increase Student Interest and Success
Explore problem-based learning (PBL) as an instructional method in STEM courses. Discuss how PBL engages learners in addressing community issues, exploring careers, and interacting with mentors. Brainstorm how to implement PBL on your campus.
Catherine Brown, Professor, Mathematics Education, Indiana University, IN; Robert Abrams, Project Manager, STEM Education and Regional Manufacturing Network, Economic Opportunities Through Education, IN

▶▌ 5:45 PM - 7:00 PM

REFRESHMENT BREAK IN THE EXHIBITION HALL
Grand Ballroom 5-6, Third Floor
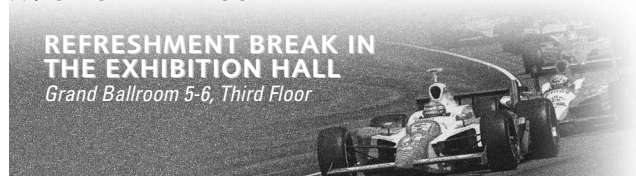
FUTURE
STEM*tech* CONFERENCES

2012
STEM*tech* CONFERENCE
October 28-31

Westin Crown Center and Sheraton Crown Center
Kansas City, Missouri

2013
STEM*tech* CONFERENCE
October 27-30

Hyatt Regency Atlanta
Atlanta, Georgia

MONDAY

7:00 AM - 5:00 PM Registration
Grand Foyer East, Third Level
JW Marriott Indianapolis

▶▶❙ 8:00 AM - 9:00 AM

TRACK KEYNOTE SESSION

▪ **Health and Science**

Competency-Based Pathways in Health Career Programs: Opportunities and Challenges
Grand Ballroom 1-2, Third Floor
Implementation of a competency-based core curriculum in health programs can provide portable completion points along a career pathway, promoting flexibility in career choice and quicker response to a dynamic labor market. Come learn about the value and opportunity of this approach and begin the dialogue toward a national core curriculum model.

Carolyn O'Daniel, Dean, Allied Health, Jefferson Community and Technical College–KCTCS, KY

Sondra Flemming, Vice President, Health and Economic Development, El Centro College, TX

Marianne Krismer, Dean, Health and Public Safety, Cincinnati State Technical and Community College, OH

Darla Olson, Director, Employment, TriHealth, Inc., OH

CONCURRENT SESSIONS

◼ Energy, Environment, and Sustainability

Infusing Sustainability Outcomes and Assessment Into Curriculum
White River Ballroom H, First Floor
Explore a tool that aligns green outcomes across the college, links them to programs and courses, and allows the organic design of syllabi, rubrics, and learning plans. Outcome assessment planning is also showcased, along with workflow, approval, and archiving.
Robin Nickel, Associate Director, Client Relations, Worldwide Instructional Design System, WI

◼ Mathematics, Engineering, and Architecture

Cognitive Tutor: Helping Students Succeed in Math
White River Ballroom I, First Floor
The goal of this session is to provide educators and leaders with an opportunity to discuss how the Cognitive Tutor software aligns and adjusts to their individual needs and changes the way we teach and learn.
Roger Blanco, Manager, School Partnerships, Carnegie Learning, PA

◼ Technology, Multimedia, and Telecommunication

Addressing the Demand for IT Problem Solvers
Room 108, First Floor
In response to employers' request for employees with problem-solving skills, educators at several colleges have designed a new course called IT Problem Solving that has a 90 percent retention rate.
Jaime L'Heureux, Assistant Professor, Computer Information Technology; Paula Velluto, Professor, Computer Information Technology, Bunker Hill Community College, MA

◼ Technology Systems and Applications

Funding Opportunities at the National Science Foundation
Room 102, First Floor
This presentation introduces funding opportunities for undergraduate STEM education at the National Science Foundation. By the end of the presentation, participants know where to find the programs that best fit their needs.
Zhanjing (John) Yu, Program Director, Division Undergraduate Education, National Science Foundation, DC

◼ E-Learning Resources

Using Rich Media to Drive Learning Results
Room 106, First Floor
Rich media becomes essential to engage students and drive learning results. Meet a group of innovators who shape pedagogy around video learning and discuss various innovative methods available to enrich teaching and learning.
Devin Beck, Account Executive, Kaltura, NY

What's in Your Technology iPad?
Room 105, First Floor
Participants analyze the e-learning resources supplied through book publishers that are provided to ensure student outcome assessment success by expanding traditional models of teaching through multimedia and resource-based technology. Educators gain an understanding about the importance of innovation in personally meaningful ways for students.
Trina Lynch-Jackson, Associate Professor, Business, Ivy Tech Community College, IN

YouTube and Wikipedia: Education Game Changers
Room 107, First Floor
YouTube and Wikipedia have quickly become universal go-to learning locations. Learn why these tools are reliable, how you can use them, and how they are changing our world and education.
D.I. von Briesen, Instructor, Information Technology, Central Piedmont Community College, NC

◼ Recruiting, Retaining, and Transitioning Students Into STEM Programs

Teaching Simple Machines and Force and Motion Using LEGOs
White River Ballroom G, First Floor
Even the least science-oriented teacher will feel confident learning how to teach simple machines, force and motion, and a little energy using that wonderful, manipulative LEGO while addressing content standards in math, science, and technology and promoting scientific inquiry and problem solving.
Ivery Toussant Jr., Educational Consultant, Education, LEGO Education, KS

GEARing UP to Choose Ohio First for Ohio's Future
Room 101, First Floor
Participants learn about the Ohio model taking STEM from secondary education (GEAR UP), to postsecondary (Choose Ohio First), to the workplace. Participants are encouraged to map out STEM assets and identify resources to connect their STEM work.
Briana Hervet, Director, Choose Ohio First, Ohio Board of Regents, OH

Student Success With the Society of STEM Scholars
Room 104, First Floor
Increased student participation and enthusiasm are linked to the Society of STEM Scholars, a student-led academic organization. The framework, which will be of particular interest to STEM faculty members, is shared.
Tara Ebersole, Associate Professor, Biology; Laura LeMire, Coordinator, Engineering, The Community College of Baltimore County, MD

Preparing Students for Summer Internships in STEM Disciplines
Room 103, First Floor
A representative from the National Institutes of Health (NIH), the nation's leading biomedical research institution, discusses strategies for preparing community college students to pursue summer internships in a STEM discipline. The NIH Community College Summer Enrichment Program is highlighted.
Erika Barr, Co-Director, Community College Summer Enrichment Program, National Institutes of Health, MD

▶▶ 9:15 AM - 10:15 AM

TRACK KEYNOTE SESSION

■ E-Learning Resources

From the Frontlines of Next Generation Learning at America's Community Colleges
Grand Ballroom 1-2, Third Floor
Step into your future with grantees participating in the Next Generation Learning Challenges initiative. Learn about their efforts to foster technology-enabled next-generation learning that can be scaled up effectively and cost efficiently.

Mike Davis, Associate Vice Chancellor, STEM, City Colleges of Chicago, IL

Russ Little, Manager, Web Systems, Sinclair Community College, OH

Andrew Calkins, Deputy Director, Next Generation Learning Challenges, EDUCAUSE, CO

Stella Perez, Executive Vice President and Chief Operating Officer, League for Innovation in the Community College, AZ

Geri Anderson, Associate Vice President and Provost, Strategic Planning, Colorado Community College System, CO

CONCURRENT SESSIONS

■ Health and Science

Using Magnetic Resonance to Connect Newtonian Mechanics and Quantum Behavior
Room 106, First Floor
While MRI has revolutionized medical imaging, the presenter demonstrates how magnetic resonance provides an opportunity to show the convergence of classical and quantum physics in a relevant, understandable manner.
Keith Madden, Professor, Physics, Ivy Tech Community College, IN

■ Energy, Environment, and Sustainability

Evidence of Student Success in Environmental and Sustainability Projects
White River Ballroom H, First Floor
Students engaged in STEM disciplines present evidence of success in curriculum-based, community service learning projects in the areas of environmental science, applied technology (GIS), and sustainability.
Brandi Peters, President, Student Government; Dianne Phillips, Coordinator, Mathematics and Science; Jennifer Watkins, Student, Science and Mathematics; Ralph Weber, Student, Science and Mathematics, NorthWest Arkansas Community College, AR

The Theory and Practice of Service Learning in STEM Disciplines
Room 102, First Floor
Participants discuss the background and application of the pedagogy of service learning involving STEM initiatives such as solar energy for economic development, watershed stewardship, and undergraduate research for degree completion.
Lyvier Conss, Executive Director, Community College National Center for Community Engagement, Mesa Community College, AZ

Building an Interdisciplinary Sustainability Degree: Use What You Have
Room 108, First Floor
Lane Community College's Sustainability Coordinator Degree is an interdisciplinary program built on existing courses. Learn how to implement a similar program at your institution for little or no additional cost.
Margaret Robertson, Faculty, Advanced Technology, Lane Community College, OR

Mathematics, Engineering, and Architecture

A Path for Math
White River Ballroom I, First Floor
WebStudy Participants examine the continuum for student success in mathematics from developmental math to algebra to calculus and discuss the role technology can play.
Gisele Larose, President, WebStudy, Inc., PA; Carol Redfield, Associate Professor, Computer Science, St. Mary's University, TX

Manufacturing, Industry, Agriculture, and Aerospace

Science and Technology Through the Lens of Agriculture
White River Ballroom G, First Floor
The Chicago High School for Agricultural Sciences is an example of a student-centered approach. This presentation focuses on how the school developed and implemented curricula that connect science and technology through the lens of agriculture science.
William Hook, Principal, Chicago High School for Agricultural Sciences, IL

E-Learning Resources

Personalizing Red Ink: Hybrid Audio Feedback Model for Student Writing
Room 107, First Floor
Are your online class sizes increasing? Are you struggling with providing detailed feedback to students in online writing courses? Do online students think you are critical and cold-hearted? This session will benefit faculty members or any educator answering such questions and looking for more efficient yet personalized communications and increased student satisfaction.
Brian Kerr, Instructional Designer, Academic and Student Affairs, Memorial University, NF

Recruiting, Retaining, and Transitioning Students Into STEM Programs

Science Foundation Arizona's Development of Career Pathways for Rural Colleges
Room 104, First Floor
LEARN EARN Participants discuss how Science Foundation Arizona works with four community colleges to develop a STEM pathways system designed to provide students with clear routes to industry-driven, postsecondary degrees and credentials.
Caroline Vaningen-Dunn, Manager, STEM Initiative, Science Foundation Arizona, AZ

Developing College Advancement Opportunities for High School Students
Room 105, First Floor
Texas State Technical College - Marshall has developed resources that allow high school students to study college-level technical course material and take assessment examinations that allow students to attain college credit and marketable skills certifications for their work.
April Graham, Associate Vice President, Learning Success; Irene Cravey, Vice President, Student Learning, Texas State Technical College – Marshall, TX

STEM Me In: Creative Ways to Get Students Involved
Room 103, First Floor
Participants in education and advanced manufacturing fields learn about best practices used by the Consortium for Alabama Regional Center for Automotive Manufacturing (CARCAM) in conjunction with the Career Coach Initiative to discover creative techniques to get students involved in STEM careers.
Beverly Hilderbrand, Director, Consortium for Alabama Regional Center for Automotive Manufacturing; Marian Haynie, Director, Career Services, Gadsden State Community College, AL

Technology Systems and Applications

Increasing Institutional Research Capacity: A Low-Cost Solution
Room 101, First Floor
The presenters describe and demonstrate a low-cost solution to rapidly increase the data capacity of institutional research offices using commonly available IT programs and tools.
Kathy Drumm, Executive Vice President; Terri Manning, Director, Center for Applied Research; Bobbie Frye, Director, Institutional Research, Central Piedmont Community College, NC

10:15 AM - 11:15 AM

REFRESHMENT BREAK IN THE EXHIBITION HALL
Grand Ballroom 5-6, Third Floor

10:15 AM - 12:00 PM

EXHIBITION HALL OPEN
Grand Ballroom 5-6, Third Floor

▶❙ 11:00 AM - 12:00 PM

TRACK KEYNOTE SESSION

■ **Technology, Multimedia, and Telecommunication**

The Role of STEM in Education, Workforce, and Economic Development Innovation
Grand Ballroom 1-2, Third Floor
What is STEM and why is it important? Six percent of jobs in the United States are STEM related, and one half of all STEM jobs are related to networking and information technology. This session highlights multiple perspectives on STEM, model programs, emerging jobs, and emerging technologies.

Jim Brazell, Technology Forecaster and Strategist and 2011 STEM*tech* Conference Closing Keynote Speaker (see page 46)

CONCURRENT SESSIONS

■ **Health and Science**

Reignite Your Anatomy Instruction With Engaging, Interactive, Hands-On Teaching
Room 108, First Floor
This session emphasizes the skeletal system, directional terms, muscle and bone morphology, and other body systems that can be taught using online labs or in anatomy and health-related courses. This is an amazing discovery of interactive teaching and learning with decades of verifiable results.
Teri Fleming, Instructor, Anatomy and Health Sciences, Hands and Minds, Inc., CO

■ **Mathematics, Engineering, and Architecture**

Enhancing Teacher Knowledge in Pre-Engineering Software Applications
White River Ballroom H, First Floor
Community College of Baltimore County's model to provide professional development training for Project Lead the Way teachers is being replicated in other states to increase high school teachers' competence using technology, software, or pre-engineering concepts.
Laura LeMire, Coordinator, Engineering, The Community College of Baltimore County, MD

■ **E-Learning Resources**

Real Life, Real Time: Engage Students Through Immersive Experiential Learning
Room 106, First Floor
Engage and retain more students through immersive online experiential learning environments. Explore how learning by doing benefits students and how colleges and universities are employing these technologies across a spectrum of subjects.
David Clarke IV, Vice President, Learning Solutions, Toolwire, CA

Online Higher Education: Positioning Community Colleges
White River Ballroom I, First Floor
Community colleges offer the most affordable online degrees and certificate programs in the country. Yet, many students do not know they are available. Learn how community colleges are creatively getting the word out and helping students find these programs through OnlineCommunityColleges.org.
Valerie Cavazos, Director, Marketing, Dallas TeleLearning, Dallas County Community College District, TX

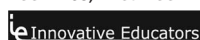**Going Mobile: Reengineering Online Science Labs for Mobile Delivery**
Room 107, First Floor
Repurposing Flash desktop simulations for mobile delivery is demonstrated using Skeletal PAL, an anatomy and physiology online lab simulation that participants will be able to download to their devices.
Rene Vogt-Lowell, Adjunct Faculty, Computer Information Systems; Shawn Gormley, Web Architect, Web Systems, Sinclair Community College, OH

Providing Services 24/7: Restructuring How We Support Today's Students
Room 105, First Floor
ie Innovative Educators With limited resources and high demands, institutions struggle to provide services to students in a cost-effective manner. This session explores online tools that institutions can use to provide 24/7 student support.
Valerie Kisiel, Co-Owner, Marketing, Innovative Educators, CO

How Does Social Media Improve Learning Outcomes?
White River Ballroom G, First Floor
Learn how ConnectYard enables faculty, staff, and administrators to easily communicate with students across a variety of popular social and mobile media, including Facebook, Twitter, and text messaging.
Sophie Alstrom, Client Engagement Specialist, Marketing, ConnectYard, Inc.

Technology, Multimedia, and Telecommunication

Professional Certifications Versus Skills: The Perceived Value of IT Certifications
Room 102, First Floor
The value of holding certifications information technology is unknown. Do certifications adequately reflect the proficiencies of their bearers? Come discuss why the certifying institutions' reputation is at risk if the individuals they certify cannot perform.
Joan Heise, Associate Professor and Chair, Computer Information Systems and Technology, Ivy Tech Community College, IN

Recruiting, Retaining, and Transitioning Students Into STEM Programs

Smooth Hand-Off: A Guide for STEM Transfer Students
Room 101, First Floor
STEM transfer students in Iowa now benefit from a powerful guide that outlines the skills, habits, and foundations needed for success, composed by and for community college and university faculty.
Jeffrey Weld, Director, Iowa Mathematics and Science Education Partnership, University of Northern Iowa, IA

Using IT Problem Solving to Engage Students
Room 103, First Floor
IT problem solving uses industry-relevant problems to engage students and develop their 21st century skills and computational thinking. Participants discuss course components and model processes for increasing and verifying student capabilities.
Deborah Boisvert, Director, Boston-Area Advanced Technological Education Connections, University of Massachusetts - Boston, MA; Paula Velluto, Professor, Computer Information Technology, Bunker Hill Community College, MA

Talent Expansion in STEM: A Two-Year to Four-Year Collaborative
Room 104, First Floor
TEST: UP is a two-year to four-year collaborative that focuses on STEM counseling, STEM peer advising, supplemental instruction, STEM transfer demographics, and transition concerns specific to STEM students.
Cathy Fernandez-Weston, Coordinator, STEM Transfer Student Services, California State University - Fullerton, CA; Tammy Camacho, Counselor, Santa Ana College, CA

POSTER SESSIONS

All Poster Sessions take place in the Grand Foyer East, Third Floor

Manufacturing, Industry, Agriculture, and Aerospace

Biomanufacturing Training to Support the Emerging Bio-Economy
New food, fuels, and drugs for the future using biomanufacturing require a highly trained workforce. This poster session displays hands-on activities, the textbook, virtual labs, and more.
Sonia Wallman, Executive Director, The National Biomanufacturing Center and Collaborative, Montgomery County Community College, PA

E-Learning Resources

Cyberlearning at Community Colleges: Faculty Scholarship and E-Science
The C[3] Project focuses on professional development workshops and online collaborative activities for community college biology faculty. Our goals include helping faculty members leverage digital library resources, networked computing and communications technologies, and e-science data and tools to engage in cyberlearning strategies.
Sam Donovan, Research Associate Professor, Biology, University of Pittsburgh, PA

Considerations for Second Life Adoption
Institutions of higher education have made significant investments in virtual worlds, in particularly in Second Life. This poster session showcases the presenter's dissertation research findings and suggests best practices for adopting Second Life.
Mark Choman, Associate Professor, Computer Information Services, Luzerne County Community College, PA

Recruiting, Retaining, and Transitioning Students Into STEM Programs

Developing Leaders in STEM Fields
The poster session highlights an outreach program to introduce underrepresented first-generation, college-bound community college students to STEM careers, provides a synopsis of the 2011 spring workshops, and shares initial research results.
Michael Gibbs, Vice President, Advancement, Capitol College, MD

AS Degree Requirements Are a Stumbling Block for STEM Success
To increase the number of students successfully transitioning into four-year STEM degree programs, associate of science degree requirements must be aligned with bachelor's degree programs to facilitate a seamless transfer.
Anne Distler, Assistant Professor, Chemistry; Terri Pope, Professor, Health Careers and Science, Cuyahoga Community College, OH

Recruiting Women Into STEM Education
Participants discuss some of the key approaches for recruiting and retaining women in STEM education. Join Weld-Ed in their quest to build a solid foundation for women involved in STEM education.
Ramona Anand, Project Manager, Weld-Ed - National Center for Welding Education and Training, Lorain County Community College, OH

▶▶ 12:00 PM - 1:00 PM

LUNCH CONVERSATIONS
Grand Ballroom 3-4, Third Floor
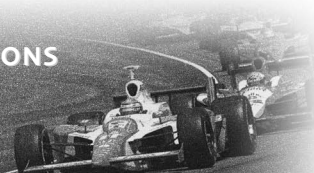
▶▶ 12:30 PM - 1:30 PM

TRACK KEYNOTE SESSION

▪ **Technology Systems and Applications**

Education Your Way!
Grand Ballroom 1-2, Third Floor
Join this provocative discussion that explores innovative technology platforms that permit students to acquire skills at a time, place, and pace of their convenience while also achieving a mastery of knowledge that prepares them for the 21st century workforce.

Denise Reading, President, Global Corporate College, OH

Chris Bustamante, President, Rio Salado College, AZ

Mark David Milliron, Deputy Director, Postsecondary Success, Bill and Melinda Gates Foundation, WA

Satish Menon, Vice President, Product Strategy and Development, Apollo Group, AZ

Jennifer McNelly, Senior Vice President, Manufacturing Institute, DC

CONCURRENT SESSIONS

▪ **Energy, Environment, and Sustainability**

Changing the Game: Teaching Environmental Sustainability at a Community College
White River Ballroom G, First Floor
Teaching sustainability requires teaching ecology, design, and economics. But the game changers for students are ethics, social justice, and spirituality. This session explores the Sustainable Building and Sites program at Wayne County Community College District.
Frank Dunbar, Campus Chief Academic Officer, Instruction, Wayne County Community College District, MI

Building the EcoBox: A Carbon Neutral Living Sustainability Lab
White River Ballroom H, First Floor
Learn how college employees and volunteers built a green lab from a used shipping container. This living workshop demonstrates photovoltaics, batteries, thermal concepts, rainwater harvesting, and more.
D.I. von Briesen, Instructor, Information Technology, Central Piedmont Community College, NC

▪ **Mathematics, Engineering, and Architecture**

Motivating Engineering Students to Succeed Using Innovative Concepts From Industry
White River Ballroom I, First Floor
Explore the use of actual design documents in the classroom. Learn how actual design issues can stimulate students' creativity. Learn how critical thinking and judgment can be developed. Learn the benefits of partnering with industry. Learn how to independently verify hand computations.
James MacCariella, Professor, Civil Engineering Technology and Engineering Science, Mercer County Community College, NJ

▪ **Technology, Multimedia, and Telecommunication**

Don't Turn Off Facebook! Student Laptops in Composition Classrooms
Room 108, First Floor
The presenters piloted freshman composition sections that required students to bring their laptops to class. Participants brainstorm about their own projects while learning how the presenters started their project.
Nadine Davis, Professor, English; Michael Somers, Assistant Professor, English, Delta College, MI

Mind Mapping: Visual Learning and Thinking Within the STEM Curriculum
Room 102, First Floor

MindMaps help facilitate students' analytical thinking, comprehension, creativity, and writing skills. MindView allows students and teachers to rapidly visualize, organize, and implement ideas and export them to HTML, Word, and PowerPoint.

Dave Hamilton, Educational Advisor and Trainer, Sales and Training, MatchWare, Inc., FL

E-Learning Resources

Faculty Engagement With Instructional Technology Planning
Room 105, First Floor

Participants learn how to align the instructional technology needs of faculty with their educational technology support resources through collaborative planning and communication. This session will particularly benefit faculty who are innovators with instructional technology and administrators of educational technology support areas.

Vincent Miller, Director, Educational Technology Center, Johnson County Community College, KS

Streaming Video for Mobile Devices
Room 107, First Floor

Integrating video into online courses can enhance the learning experience. But as mobile devices and online video usage continues to grow, what are the implications for delivering instructional media? Participants consider an effort to repurpose a repository of streamed academic video clips for use on mobile devices.

Wanda Harden, Account Manager, Sales and Marketing, INTELECOM Intelligent Telecommunications, CA

Addressing the Need for More and Better IT Labs Virtually
Room 106, First Floor

LEARN EARN Explore addressing the need for more access to hands-on laboratories via virtual laboratories that provide unlimited patience and maximum practice without the need to provide physical access to laboratory equipment.

Erich Spengler, Director, Center for System Security and Information Assurance; John Sands, Professor, Business and Technology, Moraine Valley Community College, IL

Recruiting, Retaining, and Transitioning Students Into STEM Programs

Building Collaboration With Web 2.0 Tools
Room 101, First Floor

Participants explore how they can benefit from communities and groups; learn to use Web 2.0 tools to build a sense of community and build collaboration; and discuss ways to provide value to staff, faculty, students, and alumni.

Cathy Garland, Vice President, Sales and Marketing, Edvance360, VA

STARS: Increasing Student Participation Through Technology, Research, and Service
Room 104, First Floor

During this session, participants learn about the National STARS model, which increases the participation of students in STEM disciplines, including traditionally underrepresented students. STARS implements best practices through multifaceted interventions with an integrated focus on recruiting, retention, advancement, institutionalization, and dissemination.

Felesia Stukes, Instructor, Information Technology, Central Piedmont Community College, NC

A Pathway to the Maryland STEM Workforce Program
Room 103, First Floor

LEARN EARN A Maryland STEM Coalition designed a STEM Learn and Earn workforce development blueprint that incorporates deep learning and student engagement to meet employers' needs for scalable and sustainable growth in biotechnology, cybersecurity, and engineering.

Michael Wood, President; Adam Trice, Director, Foundation Relations, Capitol College, MD; Tara Ebersole, Associate Professor, Biology, The Community College of Baltimore County, MD

▶▌ 1:30 PM - 2:30 PM

REFRESHMENT BREAK IN THE EXHIBITION HALL
"Last Chance to Visit the Exhibition Hall"
Grand Ballroom 5-6, Third Floor

▶▌ 2:30 PM - 3:30 PM

SPECIAL SESSION

Recruiting, Retaining, and Transitioning Students Into STEM Programs

The Workforce Investment System's Role in Preparing and Educating a STEM Workforce
Grand Ballroom 1-2, Third Floor

The long-term key to U.S. competitiveness in a global economy is the adequate supply of STEM workers, and the public workforce investment system is uniquely positioned to be an important partner in these efforts. Come learn how workforce boards have increased the pipeline of STEM workers, trained dislocated workers to obtain the skills and competencies for STEM employment opportunities, and developed partnerships and provided strategic investments to facilitate economic growth.

Ron Painter, CEO, National Association of Workforce Boards, DC; Brooke Huntington, President and CEO, EmployIndy, IN; Bill Raymond, Executive Director, Ottawa County Michigan Works!, MI; Scott Higinbotham, Director, Human Resources, Stanley Security Solutions, IN

▶▶ 2:30 PM - 3:30 PM *(continued)*

CONCURRENT SESSIONS

Health and Science

Online Tutoring for Nursing and Allied Health Students
Room 108, First Floor
Learn how to improve student achievement and retention in your nursing or allied health programs with online tutoring from Smarthinking—live, online tutoring by expert nursing educators that helps students succeed.
Denise Woodson, Academic Coordinator, Education, Smarthinking, Inc., DC ; Mattie Mobley Jones, Director, Nursing Programs, Florida Gateway College, FL

Manufacturing, Industry, Agriculture, and Aerospace

A STEM Agenda: Connecting STEM and Workforce Education
White River Ballroom H, First Floor
Successfully connecting youth with high-skill, high-wage industrial career pathways requires a strong grounding in STEM. Participants learn how Washington State is pioneering new approaches to STEM and workforce education.
Joseph Hauth, Director, Industrial Excellence Center; Holly Moore, Executive Dean, Georgetown Campus, South Seattle Community College, WA

Technology, Multimedia, and Telecommunication

New Microsoft Technology Associate (MTA) Certifications for IT Students!
White River Ballroom I, First Floor
Discover nine new industry assessments that validate student foundation skills in software development, security, database, or network administration. Integration strategies are discussed and participants receive a voucher to take a free MTA exam!
Debora Collins, Consultant, Training, Certiport, UT

Technology Systems and Applications

The Dashboard: Empowering Faculty to Improve Student Success With Data
White River Ballroom G, First Floor
See a live demonstration of Lansing Community College's online Achieving the Dream data dashboard. Learn how our faculty members find trends in student success data to improve program quality.
James Luke, Professor, Social Science, Lansing Community College, MI

E-Learning Resources

Open Your Book to Page E: Using E-Textbooks
Room 107, First Floor
This session presents the findings of two Sinclair Community College research projects that explored the learning advantages and disadvantages of using e-textbooks. Faculty members, instructional technologists, and instructional designers will benefit from this session.
Furaha Henry-Jones, Assistant Professor, English; Kay Koeninger, Associate Professor, Art, Sinclair Community College, OH

Free Tips, Tricks, and Technology Tools for Teachers
Room 105, First Floor
In this annual round-up, you'll see amazing tools, cool ideas, and nifty shortcuts. Old tools, new tools, and cool tools, we guarantee you'll find something useful or new, and back it up with chocolate.
D.I. von Briesen, Instructor, Information Technology, Central Piedmont Community College, NC

Recruiting, Retaining, and Transitioning Students Into STEM Programs

Best Practices in Preparing and Transitioning STEM Students
Room 101, First Floor
Anne Arundel Community College has developed a collaborative system in STEM education that includes business and industry, four-year colleges, and K-12 schools. Participants learn about best practices in transitional strategies, instructional partnerships, and program pathway development.
Kathleen Beauman, Director, Business Education Partnerships; Richard Cerkovnik, Director, STEM, Anne Arundel Community College, MD

Obtaining an AS Degree in STEM Before Completing High School
Room 102, First Floor
Participants learn how high school students graduate with AS degrees in Engineering, Biology, and Computer Science while in high school. Recruitment, retention, and completion best practices are discussed.
Lucia Castaneda, Coordinator, Dual Enrollment Academies; Jessica Garcia, Academy Specialist, High School Programs and Services, South Texas College, TX

The iGeners Are Coming: RU Ready?
Room 104, First Floor
Come explore various generations of learners and how to teach metacognitive strategies to improve STEM student success in an age of disengagement.
Jodi Long, Chair, Sciences for Health Programs; Linda Nichols, Professional Specialist, Perkins Grants, Santa Fe College, FL

Science and Engineering Festivals: Bringing STEM to Life Across America
Room 103, First Floor
Inspiring today's youth to enthusiastically explore STEM is a societal challenge, but science and engineering festivals are making a difference. Through engaging hands-on activities, Michigan Tech Mind Trekkers is igniting a passion for intellectual inquiry into the WOW! of STEM
Cody Kangas, Assistant Director, Center for Pre-College Outreach; Steve Patchin, Director, Center for Pre-College Outreach; Jamie Lindquist, Coordinator, Center for Pre-College Outreach, Michigan Technological University, MI

▶▌ 3:45 PM - 4:45 PM

SPECIAL SESSION

▪ **Manufacturing, Industry, Agriculture, and Aerospace**

From Imagine to Make: STEM Learning Through Fab Labs
Grand Ballroom 1-2, Third Floor
Meet the world of the MIT Fab Lab, a 21st century prototyping lab where STEM literacy is developed as students create personalized projects. Come learn how Fab Labs can be designed to meet the needs of your community. **See page 10 for how conference participants can experience a Fab Lab first hand.**
Sherry Lassiter, Program Manager, Bits and Atoms, MIT Media Lab, MA; Caroline McEnnis, Consultant, Teaching Institute for Excellence in STEM, OH; Kelly Zelesnik, Dean, Engineering Technologies, Lorain County Community College, OH; Scott Simenson, Director, Fab Lab, Century College, MN; Jim Janisse, Manager, Fab Lab Development, Fox Valley Technical College, WI

CONCURRENT SESSIONS

▪ **Health and Science**

Nanotechnology: Lions, Tigers, and Wheat?
Room 108, First Floor
This session considers the infusion of nanoscience into agriculture, animal husbandry, and food and paper processing markets, and includes examples and applications and ties to traditional programs.
Deb Newberry, Director, Nanoscience Technology, Dakota County Technical College, MN

Life Science Course With a Laboratory Component Delivered as a Hybrid
White River Ballroom H, First Floor
Discussed is a hybrid format designed for life science courses and labs using online instructional components. Concepts are presented through representations of interactive learning that can lead to higher retention and learning.
Carol Kirkner, Dean and Professor, Health Sciences, Ivy Tech Community College, IN

▪ **Mathematics, Engineering, and Architecture**

The Math Performance Success Program: 10+ Years of Success
White River Ballroom I, First Floor
Mathematics remains a daunting challenge for many community college students. The Math Performance Success Program at De Anza College embraces a collaborative approach to helping students complete their math requirements from pre-algebra through university-level statistics. Learn how we are helping students achieve their goals in math.
Herminio Hernando, Counselor and Instructor, Counseling; Jerry Rosenberg, Dean, Physical Sciences, Mathematics, and Engineering, De Anza College, CA

The Effect of Math Competency on Pre-Service Teachers' Nature of Science Views
Room 101, First Floor
The presenters explore the change in pre-service teachers Nature of Sciend (NOS) views before and after an intervention of explicit and reflective NOS instruction. The views were compared according to the participants' match competency.
A. Andaz Ahmad, Director, Instructional Technology, Media Services, and Distance Education, Ivy Tech Community College, IN; Colak Huseyin, Assistant Professor, Science Education Inquiry and Curriculum Studies, Northeastern Illinois University, IL

Create Video Tutorials for Students and Colleagues
Room 107, First Floor
ScreenCorder can capture screen recordings from any piece of software and turn them into tutorials videos (i.e., .wmv, .swf, or .avi) and display them on a server, CD-ROM, or the web.
Dave Hamilton, Educational Advisor and Trainer, Sales and Training, MatchWare, Inc., FL

▪ **Technology, Multimedia, and Telecommunication**

Getting Started With Microsoft Office 2010 VBA
Room 104, First Floor
This session describes the Office 2010 Visual Basic for Applications (VBA) programming environment. Knowing VBA lets you perform tasks that cannot be done with the Ribbon. Participants explore a handful of useful, predesigned VBA examples for Word, Excel, Access, and PowerPoint.
Mark Choman, Associate Professor, Computer Information Services, Luzerne County Community College, PA

▪ **Technology Systems and Applications**

Technology 2.0: Selling Change in Higher Education
White River Ballroom G, First Floor
Switch gears on technology change. Fear and panic can easily transition to excitement and ownership. Cross-campus collaboration and communication proved significant when migrating to a new portal for students, faculty, and staff.
Paige Francis, Associate Vice President, Information Technology, NorthWest Arkansas Community College, AR

▪ **E-Learning Resources**

Turning Knowledge Into Action: Contextual Learning and Natural Assessment
Room 106, First Floor
New technologies are enabling virtual internships in which learners interact with characters and are naturally assessed. Contextual in nature, natural assessments also provide valuable signposting and remediation functionality.
Michael Watkins, Director, Instructional Design and Technology, Toolwire, CA

Going Mobile: Pocket Articulations Lab
Room 105, First Floor
Repurposing Flash desktop simulations for mobile delivery is demonstrated using Skeletal PAL, an anatomy and physiology online lab simulation that participants will be able to download to their devices.
Rene Vogt-Lowell, Adjunct Faculty, Computer Information Systems; Marigrace Ryan, Professor, Biology, Sinclair Community College, OH

⏩ 3:45 PM - 4:45 PM *(continued)*

◾ **Recruiting, Retaining, and Transitioning Students Into STEM Programs**

Using High-Quality Rubrics to Evaluate STEM Projects
Room 102, First Floor
Learn to design high-quality, research-based scoring rubrics that significantly increase the quality of the STEM projects your students complete in any type of classroom setting.
Toni Eubank, Director, Middle Grades School Improvement, Southern Regional Education Board, GA

Avoiding Crashes on the Information Highway: Basic Technology Skills Assessment
Room 103, First Floor
CIS faculty members present issues that led to the development of a budget-friendly technology assessment and the challenges encountered during implementation. Participants receive a CD-ROM of sample assessment questions.
Andra Goldberg, Faculty, Computer Information Systems; Matthew Butcher, Faculty, Computer Information Systems, Mohave Community College, AZ

⏩ 5:00 PM - 6:00 PM

CONCURRENT SESSIONS

◾ **Health and Science**

Creating a STEM Pipeline: A College and Community Event
Room 108, First Floor
Participants discuss hosting a science and mathematics exposition that serves as a service-learning opportunity as well as a community outreach and STEM pipeline for K-12 students.
Parris Powers, Associate Professor, Chemistry, Volunteer State Community College, TN

◾ **Energy, Environment, and Sustainability**

Building SySTEMic Partnerships in Our Rural Community
Room 106, First Floor
Come participate in a dynamic discussion about the ways that nine rural school districts and businesses have been designed to educate and sustain a partnership for K-12 educators and their students creating living laboratories.
Thomas Steward, Director, Instructional Services, Western Wisconsin STEM Consortium, WI

◾ **Technology, Multimedia, and Telecommunication**

Learn How You Can Add SharePoint to Your Curriculum
Room 107, First Floor
Teach your students how to collaborate using SharePoint skills for any subject area. Gain tips for working with your IT department to set up a class and see demonstrations.
Mary Corcoran, Faculty, Institute for Business and Information Technology; Suzanne Marks, Faculty, Business Technology Systems, Bellevue College, WA

◾ **Technology Systems and Applications**

Managing IT During Peak Demands
White River Ballroom G, First Floor
This session provides a broad overview of the collaborative efforts between IT, administration and finance, and academics to prepare and manage technology during peak periods and will benefit anyone interested in how a collaborative effort results in successful peak periods.
Gerard Hourigan, Vice President and Chief Information Officer, Information Technology Services, Cuyahoga Community College, OH; Peter Ross, Vice President, College Partnerships, Cuyahoga Community College-Western Campus, OH

Taking the College to the Cloud: Online Student Profile Platform
White River Ballroom I, First Floor
Is it time for your college to embrace the cloud with more than just email? Learn how we built the Online Student Profile platform to support students, shared it with other colleges, and provided a platform for cloud hosting and developing new services.
Ken Ingle, Executive Director, Emerging Technology, Information Technology Services; David Kim, Chief Information Officer, Central Piedmont Community College, NC

◾ **E-Learning Resources**

The Many Faces of Formative Assessment
White River Ballroom H, First Floor
Formative assessment has taken center stage in education reform at all grade levels. Participants discuss how different formative assessment techniques have been used to improve student achievement.
David Majerich, Research Associate, Institute for Schools and Society; Judith Stull, Senior Researcher, Institute for Schools and Society; Andria Smythe, Research Assistant, Institute for Schools and Society; Tiffany Gilles, Researcher, Chemistry; Susan Jansen Varnum, Professor, Chemistry; Joseph Ducette, Chair, Educational Psychology, Temple University, PA

Using Mind Mapping Software for Planning and Presenting
Room 105, First Floor
Mind mapping programs are well suited to classroom and conference room use. Participants discuss many potential uses for mind mapping during a presentation given using mind mapping software.
Douglas Minter, Chief Information Officer, Heartland Community College, IL

◾ **Recruiting, Retaining, and Transitioning Students Into STEM Programs**

Cheap, Easy, and Effective Online Tools: Recruiting, Retaining, and Transitioning Students
Room 102, First Floor
What to do, where to go, and how to easily navigate online resources designed to improve faculty members' ability to recruit, retain, and transition students into STEM programs.
Patressa Gardner, Project Manager, Business and Industry, Florence-Darlington Technical College, SC

Building a Successful Summer STEM Camp for Middle School Girls
Room 101, First Floor
Lorain County Community College has established an engaging summer STEM camp for middle school girls. Camp participants learn how hands-on science, LEGO robotics, welding, and computer forensics are combined with exposure to a foreign language to provide an exciting STEM opportunity to introduce skills for our global environment.
John Crooks, Associate Provost, University Partnership; Luz Santiago, Staff Associate, Distance Learning; Mike Substelny, Faculty, Distance Learning, Lorain County Community College, OH; Kathleen Crooks, Graduate Student, College of Education, University of Akron, OH

Leveraging National Laboratory Resources in Support of STEM Education Improvement
Room 104, First Floor

America's national laboratories are rich in resources and can serve as catalysts to enhance education. Through a coordinated and collaborative approach, Idaho's needs have been identified, and action is being taken that will lead to comprehensive STEM education improvement. Learn how Idaho's strategies can be implemented in your state.

Anne Seifert, STEM Coordinator, Education Programs; Richard Holman, Workforce Development Lead, Education Programs, Idaho National Laboratory, ID

Lessons Learned From NSF ITEST Programs for K-12 Students
Room 103, First Floor

This session brings together the Principal Investigators of Innovative Technology Experiences for Students and Teachers (ITEST) projects to discuss lessons learned about recruiting students into and retaining them in STEM programs.

Randal August, Academic Director, Professional Studies, Northeastern University, MA; Doug Oppliger, Program Director, Engineering Fundamentals., High School Enterprise Program - Michigan Tech, MI; Jason Black, Associate Professor, Computer and Information Sciences, Florida A&M University, FL

STEM*tech* ONLINE
OCTOBER 12, 2011

Do you have staff or colleagues who are unable to attend the 2011 STEM*tech* conference in person? Then encourage them to participate in STEM*tech* Online, our fully interactive virtual conference that will provide numerous opportunities for collaboration, education, and networking! The League for Innovation has assembled the very best STEM and technology thought leaders who will share information about the growing importance of STEM and the strategic use of technology to better serve students, campuses, and communities. All you need to join STEM*tech* Online, the most exciting new professional development opportunity to come along in years, is a computer with internet access.

Given its many exciting features, STEM*tech* Online is obviously not just another web seminar. Hosted by Learning Times, the recognized leader in online educational community building and synchronous communications, STEM*tech* Online will provide several exciting opportunities for collaboration, education, and networking, including presentation materials, speaker bios and images, a searchable directory of participants and resources, live chat, and discussion boards.

Visit www.league.org/stemtech/online for additional information about the most exciting professional development opportunity for educators to come along in some time!

WEDNESDAY, OCTOBER 5, 2011

▶▶ 8:00 AM - 9:00 AM

CONCURRENT SESSIONS

■ **Mathematics, Engineering, and Architecture**

Student-Centered Number Theory Honors Seminar With C++ Programming
Room 105, First Floor
Come discuss an honors seminar as an alternative to a lecture-based course. Students take ownership of the material, present number theory topics, collaborate with programmers, explore and exchange ideas, and merge mathematical beauty with contemporary cryptology.
Aharon Dagan, Professor, Mathematics; Debbie Reid, Professor, Information Technology Education; Won-il Kim, Student, Mathematics, Santa Fe College, FL

■ **Technology, Multimedia, and Telecommunication**

Girls Try-IT: NSF Project Research Results, Curriculum, and Student Artifacts
Room 107, First Floor
Research results are discussed that demonstrate gains in confidence and learning for participants in the NSF-ITEST Tri-IT Regional Information Technology Grant Project that provides after-school technology experiences to high school girls. Curriculum and student artifacts are demonstrated. Two state colleges and one HBCU are partners in the project.
Linda Austin, Program Manager, Women's Center, Florida State College at Jacksonville, FL

■ **Technology Systems and Applications**

IT Leadership and the Art of War
Room 106, First Floor
This session benefits anyone interested in IT leadership and who has a desire to learn a new perspective based upon Sun Tzu's *The Art of War*.
John Honchell, Manager, Technology Services, Inver Hills Community College, MN

E-Learning Resources

Español por Internet: You Can Teach Spanish Online
Room 101, First Floor
Students at our college can now take an entire year of Spanish online. The presenter demonstrates activities and assessments, the e-tools available to students, and how you can reproduce this success at your college.
Derek Petrey, Associate Professor, Spanish, Sinclair Community College, OH

■ **Recruiting, Retaining, and Transitioning Students Into STEM Programs**

The Nuts and Bolts of Building a STEM Learning Community
Room 102, First Floor
Learn how to build a STEM learning community by combining personal skills seminars with field trips and mentoring. Assessment data for this three-year-old program are shared.
Bernadette Sandruck, Chair, Mathematics; Loretta Tokoly, Coordinator, STEM Learning Community, Howard Community College, MD

Teaching STEM to Novices: Maximize Your Effectiveness and Minimize Your Losses
Room 104, First Floor
Students new to STEM subjects often find the introductory courses intimidating and frustrating. Learn how the mind and perception of novices differ from those of their expert teachers and what novices are desperately looking for to help them succeed. Handouts include research-based suggestions for instruction, labs, and problems.
Douglas Kranch, Professor, Computer Information Systems, North Central State College, OH

Fostering STEM Retention and Completion Through Key Instructional Strategies
Room 103, First Floor
Are you frustrated with rising drop/failure/withdrawal rates? Learn how to easily capture students in the critical first three weeks. Increase retention and completion rates with simple, sustainable, and affordable instructional strategies that result in improved student performance.
Rhonda Felheim, Assistant Professor, Sciences for Health Programs; Jodi Long, Chair, Sciences for Health Programs, Santa Fe College, FL

▶▶ 9:15 AM - 10:15 AM

CONCURRENT SESSIONS

■ **Health and Science**

Online Support for Professional Competency Development of Clinical Nursing Instructors
Room 104, First Floor
Impacting students and teachers, Humber College Institute of Technology and Advanced Learning supports professional development of part-time clinical nursing instructors in an online environment. Explore the STACS101 course from inception to implementation!
Sharon Aka, Professor and Consultant, Professional Development; Wendy Murphy, Information Technology Specialist, Health Sciences, Humber College Institute of Technology and Advanced Learning, ON

The Nursing Boot Camp: Preparing Students for Success
Room 103, First Floor
Beginning nursing school can be an intimidating process. How can nursing faculty address the unique needs of students in online programs? What topics and resources promote student success? Join us for an interactive discussion and explore possibilities for online nursing programs.
Michael Rager, Associate Professor and Program Coordinator, Nursing, Madisonville Community College, KY

▪ Energy, Environment, and Sustainability

Drinking Water: Convincing Kids It Matters
Room 105, First Floor
Students conduct an investigation into their drinking water, determine whether disinfection of surface water is helpful or harmful, and gain an understanding of where their drinking water comes from and how it is treated. Students measure chlorine levels and decipher primary water documents.
Margaret Busker, Teacher, Science, Buchtel High School - Akron Public Schools, OH

▪ Technology Systems and Applications

Moving to the Cloud: The Journey Begins
Room 106, First Floor
Learn about Carl Sandburg College's journey of moving its applications to the public cloud. Starting with moving its student e-mail application to the Google cloud two years ago, the college is in the process of moving most of its applications to the cloud by 2014.
Samuel Sudhakar, Vice President and CIO, Information Technology Services, Carl Sandburg College, IL

▪ E-Learning Resources

Using Clicker Formative Assessment to Improve Student Achievement
Room 107, First Floor
Clickers, by virtue of their simplicity, are increasingly being used in many instructional settings and disciplines. Come discover how clicker formative assessment can benefit instructors and students.
David Majerich, Research Associate, Institute for Schools and Society; Judith Stull, Senior Researcher, Institute for Schools and Society; Andria Smythe, Research Assistant, Institute for Schools and Society; Tiffany Gilles, Researcher, Chemistry; Susan Jansen Varnum, Professor, Chemistry; Joseph Ducette, Chair, Educational Psychology, Temple University, PA

▪ Recruiting, Retaining, and Transitioning Students Into STEM Programs

Are You AWARE? A Robot Camp for Girls
Room 101, First Floor
The Advancing Women in Automation, Robotics, and Engineering (AWARE) summer camp targets young women to teach them about automation, robotics, and engineering. The presenter demonstrates several activities and participants try their hand at them as well.
Van Madray, Dean, Construction and Industrial Technology, Pitt Community College, NC

Creating STEM Student Competitions
Room 102, First Floor
STEM competitions are a great recruiting and retention tool for STEM fields of studies. Learn how the Skyway Conference created a cocurricular competition and how it helps students be academically successful.
Talia Koronkiewicz, Coordinator, Student Life and Campus Activities, McHenry County College, IL; Dan Ward, Professor and Director, Honors Program, Waubonsee Community College, IL

WEDNESDAY

45

CLOSING GENERAL SESSION

10:30 AM - 12:00 PM • WHITE RIVER BALLROOM A-F, FIRST FLOOR

CHAIR AND INTRODUCTION

Kathleen Lee, Vice Chancellor, Academic Affairs,
Ivy Tech Community College–Central Indiana

2012 STEM*tech* CONFERENCE INVITATION

Terry Calaway, President, Johnson County
Community College

KEYNOTE SPEAKER

Jim Brazell is a technology forecaster, strategist, and public speaker focusing on innovation and transformation. Jim is a member of the Thornburg Center for Professional Development and the Society for Design and Process Science STEM team. Jim is known as a boundary spanner who connects topics related to STEM pedagogy and workforce, education, and economic development strategy.

Between 2007 and 2010, Jim delivered over 100 speeches to audiences ranging from the 2009 inaugural NSF High Impact Technology Exchange Conference (Educating America's Technical Workforce) to the International Conference on Technology Policy and Innovation on energy policy in Norway in 2008 and solutions to the financial crisis in Portugal in 2009. Since 2005, Jim has served as a volunteer to the Defense Learning Strategies Consortium, NSF Automotive Manufacturing Technical Education Collaborative, Texas STEM Action Committee, Information Technology and Security Academy, San Antonio-Austin Nano-Bio-Tech Summit, and the San Antonio Cyber Security Action Team.

Jim has authored several emerging technology forecasts and briefs for the Texas State Technical College Program for Emerging Technologies. These forecasts analyze the role of emerging technologies and deliver forward-looking recommendations for community colleges, career and technical education, and workforce education. Jim's mentor and collaborator is Dr. (Col.) Francis X. "Duke" Kane who was recognized in March of 2010 for his role in Project Forecast and the engineering concept for the Global Positioning System.

Jim is a 1995 Summa Cum Laude graduate of Bradley University with a Bachelor of Science in Sociology. He is a 1995 George Gilder Fellow in High Technology, Entrepreneurship, and Public Policy. At Bradley University, Jim was the co-principal investigator of Interlabs, the sociology of cyberspace course and the social informatics minor. Jim resides in San Antonio, Texas, with his wife, Lisa Cervantes, and daughter, Ava Brazell.
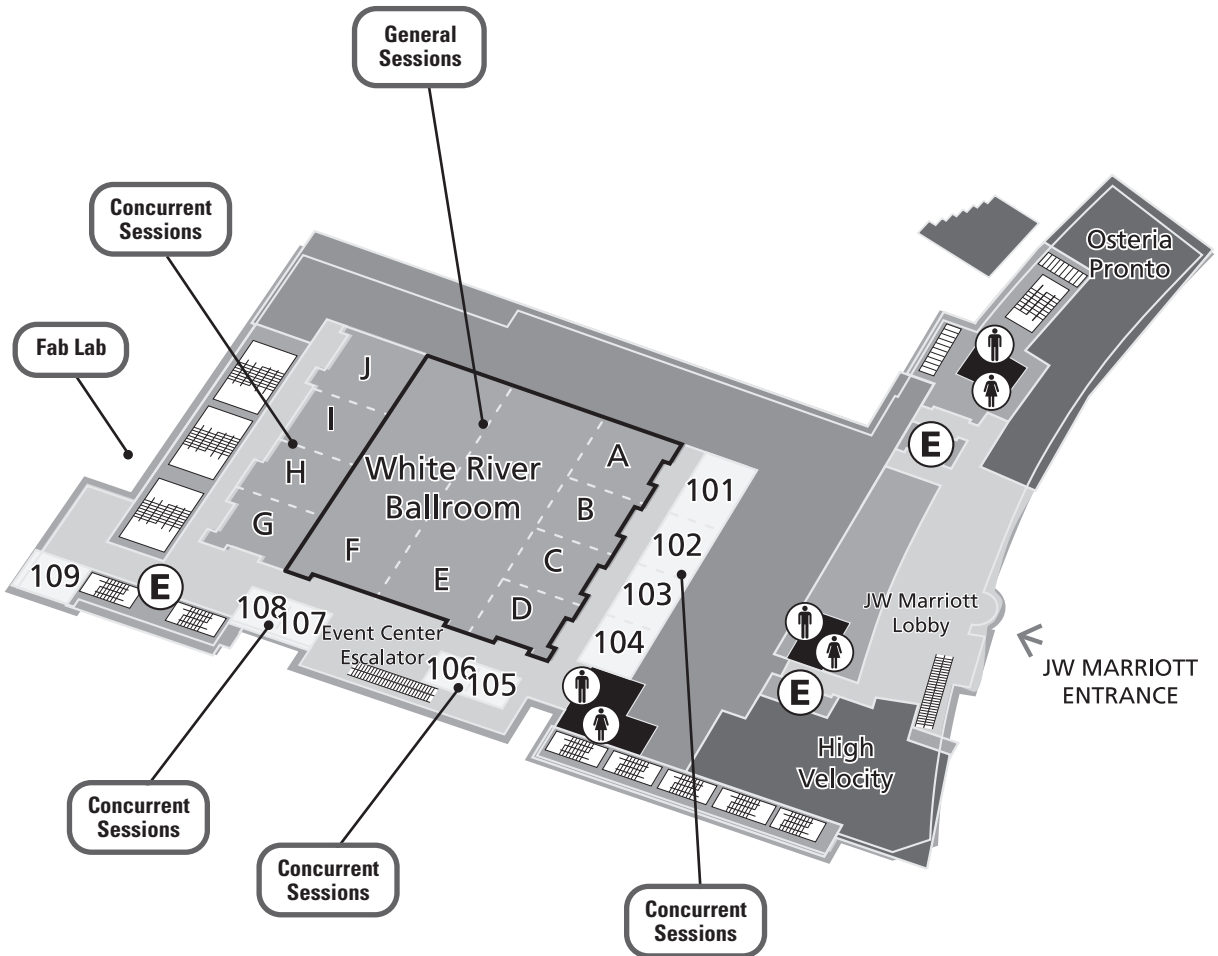
JIM BRAZELL

The League for Innovation in the Community College is an international association dedicated to catalyzing the community college movement. CEOs from the most influential, resourceful, and dynamic community colleges and districts in the world comprise the League's board of directors and provide strategic direction for its ongoing activities. These community colleges and their leaders are joined by more than 900 institutions that hold membership in the League's Alliance.

The League—with this core of powerful and innovative community colleges and more than 150 corporate partners—serves nationally and internationally as a catalyst, project incubator, and experimental laboratory for community colleges around the world. We host conferences and institutes, develop web resources, conduct research, produce publications, provide services, and lead projects and initiatives with our member colleges, corporate partners, and other agencies in our continuing efforts to make a positive difference for students and communities. These current programs, along with the League's 43-year history of service to community colleges, explain why in 2001, Theodore Marchese, the veteran executive editor of *Change*, observed, "The League is the single most vital organization in higher education today."

LEVEL 1

General Sessions

Concurrent Sessions

Fab Lab

Osteria Pronto

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G

White River Ballroom

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B

C

F

E

D

101

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106

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109

Event Center Escalator

E

E

E

JW Marriott Lobby

JW MARRIOTT ENTRANCE

High Velocity

Concurrent Sessions

Concurrent Sessions

Concurrent Sessions

LEVEL 2

Health Club

E

Pool

E

Ice

209

208

E

205

204

203

202

201

207

206

Griffin Hall

FedEx Center

E

JW Escalator

Event Center Escalator

Skybridge

Wireless Hot Spot

LEVEL 3

Exhibition Hall

Track Keynote
Sessions and
Special Sessions

Technical/AV
and Speaker
Support

300
301   302
303
304
307   305
308   306

309
310

JW Grand Ballroom

10
9
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313   6   3
5   4   312 311

E   E

JW
Escalator

24/7 Email
Stations

Roundtable Discussions
and Lunch Conversations

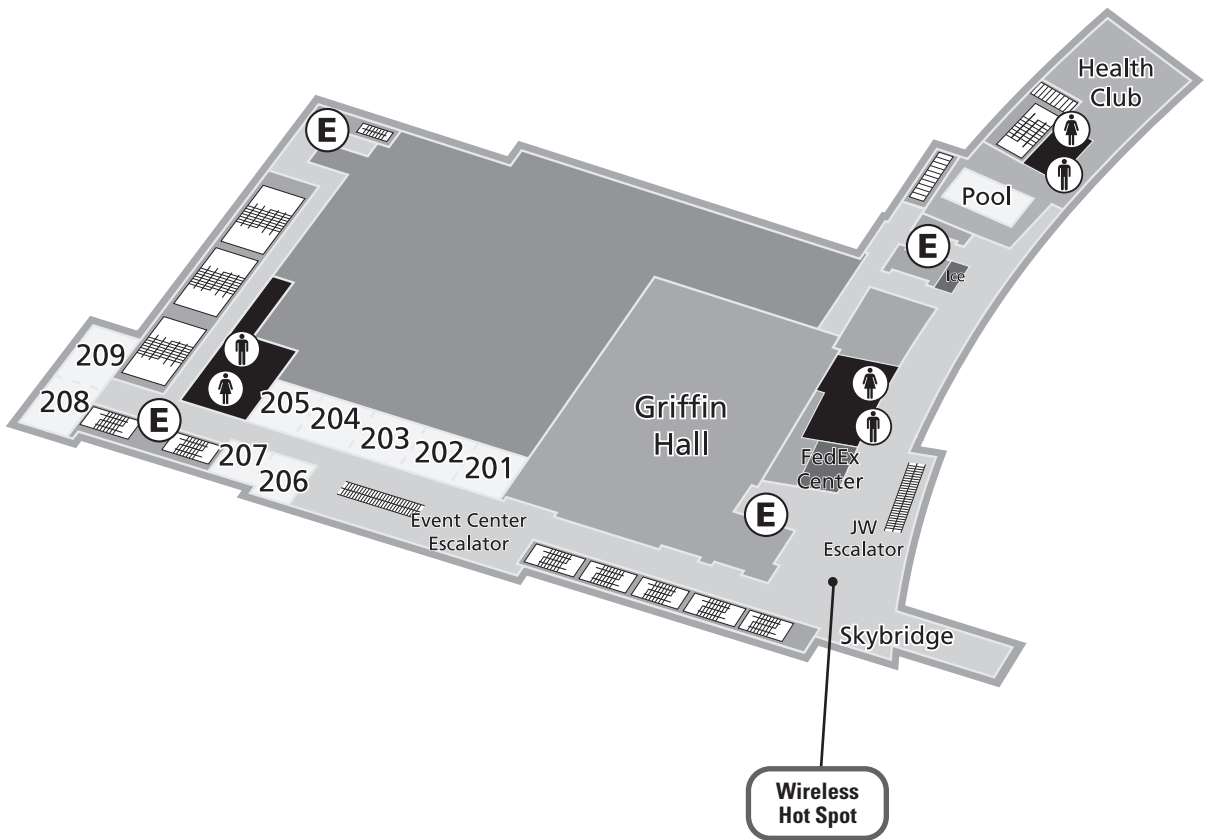Registration, Hospitality,
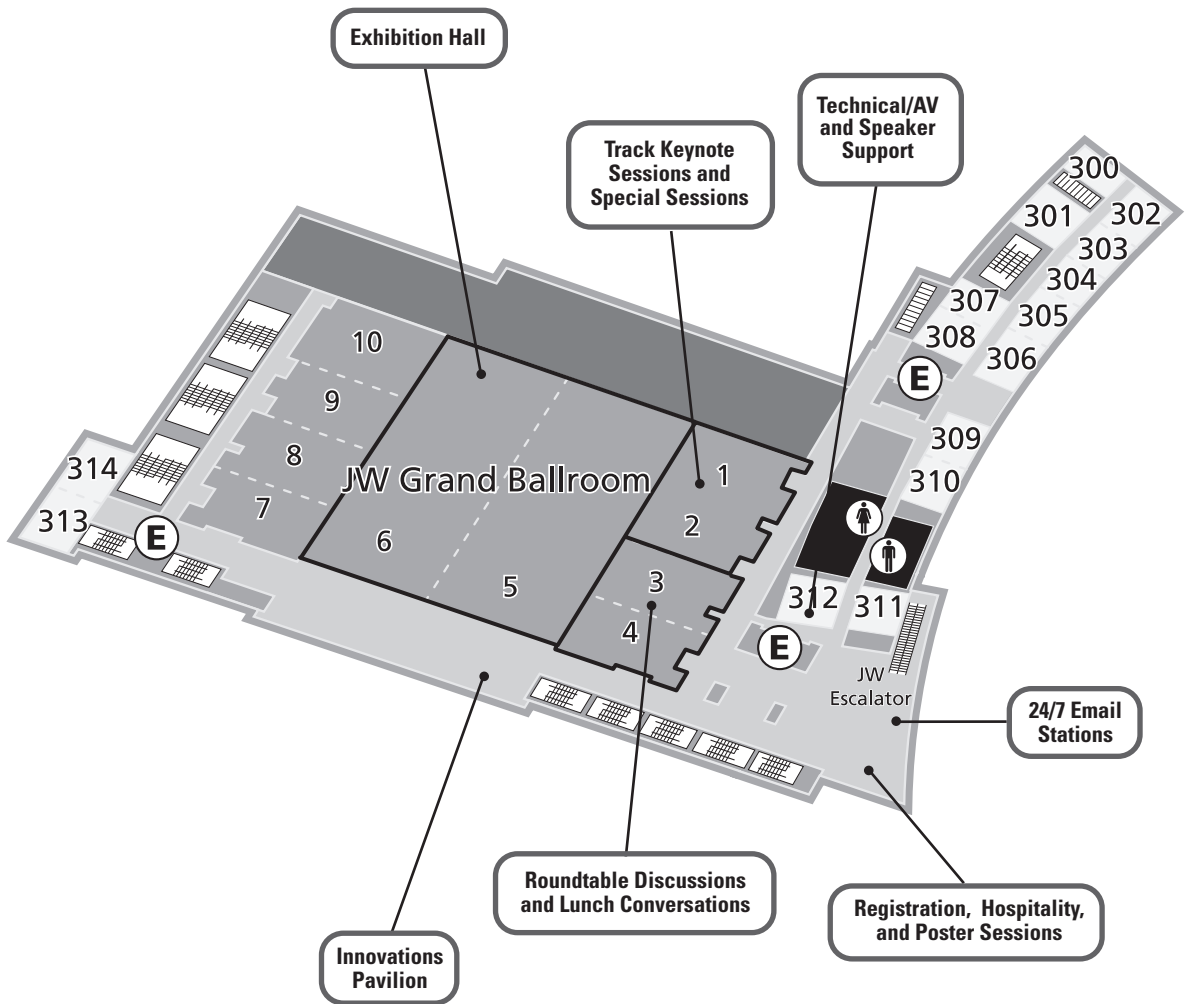and Poster Sessions

Innovations
Pavilion

ELI 2011

2011 EXECUTIVE LEADERSHIP INSTITUTE

December 4-9, 2011

Arizona Biltmore
Phoenix, Arizona

Sponsored by the League for Innovation in the
Community College in cooperation with
The University of Texas at Austin and the American
Association of Community Colleges

www.league.org/eli

Innovations
Conference in
Philadelphia, PA 2012
MARCH 4–7

INNOVATIONS 2012

March 4-7, 2012

Philadelphia Marriott Downtown
Philadelphia, Pennsylvania

Sponsored by the League for Innovation
in the Community College
Hosted by Community College of Philadelphia,
Bucks County Community College, and
Montgomery County Community College

www.league.org/i2012

Learning College Summit

LEARNING COLLEGE SUMMIT 2012

June 10-13, 2012

Arizona Biltmore
Phoenix, Arizona

Sponsored by the League for Innovation
in the Community College
Hosted by Maricopa County Community
College District

www.league.org/ls2012

STEMtech

2012 STEMtech CONFERENCE

October 28-31, 2012

Westin Crown Center and
the Sheraton Crown Center
Kansas City, Missouri

Sponsored by the League for Innovation
in the Community College
Hosted by Johnson County Community College
and Metropolitan Community College

www.league.org/2012stemtech

GET JAZZED!

Save The Date

WE'RE GOIN' TO KAN-SAS CIT-Y!

...the home of a vibrant arts scene, world-class attractions, eclectic grand-scale shopping, distinctive dining, family fun adventures, and spectacular entertainment!

League.org
FOR INNOVATION
IN THE COMMUNITY COLLEGE

2012 STEM*tech*
CONFERENCE
October 28–31, 2012
Hosted by Johnson County Community College and Metropolitan Community College

Educators, industry leaders, and others will gather to discuss increasing student access into and success in science, technology, engineering, and mathematics (STEM) majors and careers and to explore the strategic use of information technology to better serve students, campuses, and communities.

FIND OUT MORE

**at the 2011 STEM*tech*
Conference Closing
General Session
Wednesday, October 5
10:30 a.m.
Grand Ballroom 5-6
Third Floor**

Tracks for the 2012 STEM*tech* conference include
- Health and Science
- Energy, Environment, Natural Resources, and Sustainability
- Mathematics, Engineering, and Architecture
- Manufacturing, Industry, Agriculture, and Aerospace
- Technology, Multimedia, and Telecommunication
- Recruiting, Retaining, and Transitioning Students Into STEM Programs
- The Integration of STEM and the Liberal Arts (*New for 2012*)
- Technology Systems and Applications
- E-Learning Resources

Proposals to present at the 2012 STEM*tech* conference are now being accepted at www.league.org/2012stemtech/cfp.

KAN-SAS CIT-Y... HERE WE COME!

GET JAZZED!

2012 STEMtech CONFERENCE
October 28-31, 2012

WESTIN CROWN CENTER AND THE SHERATON CROWN CENTER, KANSAS CITY, MISSOURI

WE'RE GO-IN' TO KAN-SAS CIT-Y!

www.league.org/2012stemtech
Hosted by Johnson County Community College and Metropolitan Community College

www.league.org

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