SUMMIT FOR TRANSFORMATIVE LEARNING

JUNE 5-7, 2016

CONFERENCE GUIDE

MICDS

Mary Institute and Saint Louis Country Day School

Contents

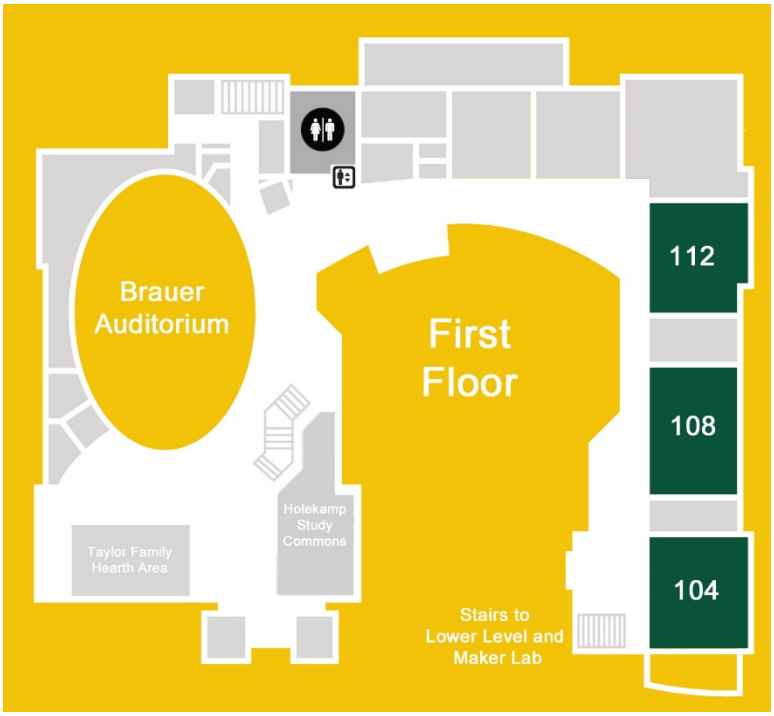
Map of MICDS Campus and the STEM Building

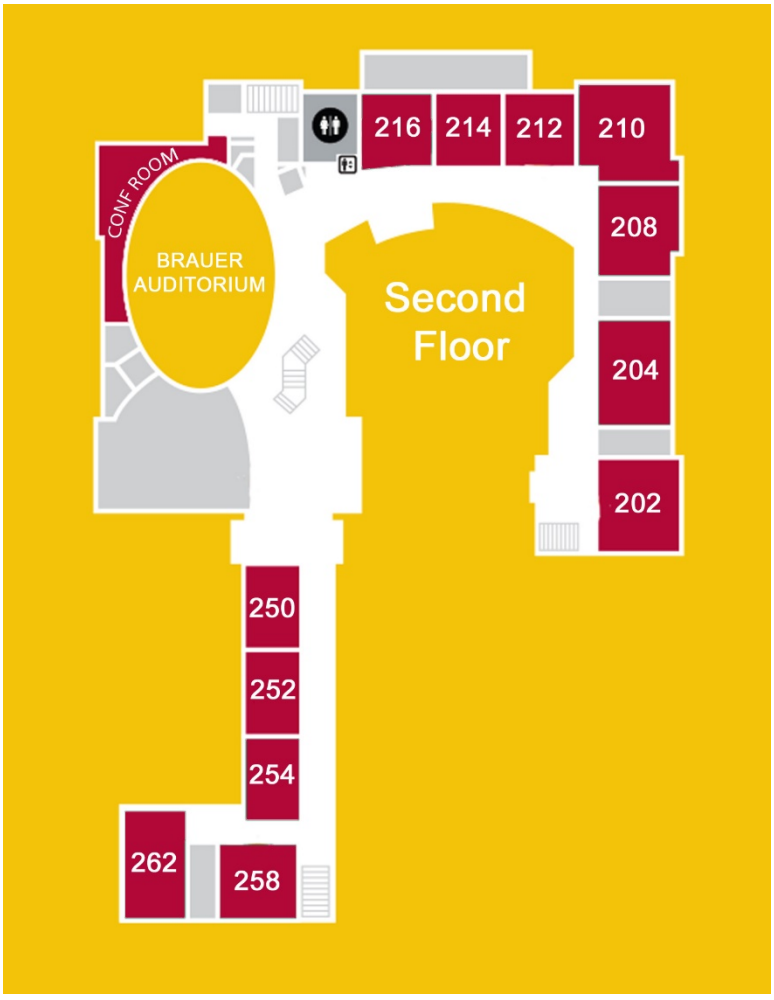
Campus Map and Conference Location

Note: MICDS is a large campus with six entrances. Use Entrance 6 (E6) on Warson Road. Parking is available in the lot next to the STEM building.

McDonnell Hall and Brauer Hall: Basement

McDonnell Hall and Brauer Hall: First and Second Floors





Sunday, June 5

Pre-Conference General Schedule

8:30 - 9:00 Morning Check-in
9:00 AM - 12:00 PM Half Day Workshop
12:00 - 1:00 Lunch for Full Day Participants
12:30 - 1:00 Afternoon Check-in
1:00 PM - 4:00 PM Half Day Workshops

AM Workshop: 9:00 AM - 12:00 PM

The "Gambetta Method" and "The Oregon Way" Part 1

In this two-part workshop, Vern and Jim will share their collective experience coaching and developing youth, college and professional athletes. Jim will present the philosophy used at the University of Oregon to develop strength, power, and acceleration. He will showcase drills and techniques he uses on a daily basis which are grounded in science and have proven successful for all of the Oregon athletic teams. Participants will also have an opportunity to observe, participate, question, and explore the application of the Gambetta Method – Systematic Sport Development Model of training, teaching and injury rehabilitation. This workshop will be motivating and allow you to look into your own training design and develop proper practices with tools and techniques from Vern and Jim.

Presenters: Vern Gambetta, Gambetta Sports, Jim Radcliffe, University of Oregon - Eugene
Strand: Excellence in Teaching, Coaching, and Athletic Development
Audience: K-12 Coaches
Location: 202

PM Workshops: 1:00 PM - 4:00 PM

The "Gambetta Method" and "The Oregon Way" Part 2

In this two-part workshop, Vern and Jim will share their collective experience coaching and developing youth, college and professional athletes. Jim will present the philosophy used at the University of Oregon to develop strength, power, and acceleration. He will showcase drills and techniques he uses on a daily basis which are grounded in science and have proven successful for all of the Oregon athletic teams. Participants will also have an opportunity to observe, participate, question, and explore the application of the Gambetta Method – Systematic Sport Development Model of training, teaching and injury rehabilitation. This workshop will be motivating and allow you to look into your own training design and develop proper practices with tools and techniques from Vern and Jim.

Presenters: Vern Gambetta, Gambetta Sports, Jim Radcliffe, University of Oregon - Eugene
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Audience: K-12 Coaches
Location: 202

In the Classroom at the Confluence of Mind, Brain and Education Science

“Mind, Brain, and Education Science” weaves together the expertise of neuroscience, cognitive psychology and education research, providing insights into effective interventions and instruction. After looking at the underlying physical changes in the brain that accompany learning, we will look at what these sciences say about the importance of emotion in learning, the impact of stress, sleep, diet, study strategies, metacognition, executive function interventions, and examine the roles of both student and teacher attitude on learning and achievement. We will confront the challenges of sorting the actual “brain science” from the marketing of brain myths and from the questionable application of scientific studies. We will take some time to look at how the findings of MBE science research has been integrated practically into the 9th grade English program at MICDS. How does this research confirm us in our best practices, challenge us, and offer us means to become even more effective teachers and learners?

Presenter: Chris Rappleye, MICDS
Strand: Brains on Learning
Audience: 5-12 Teachers, Learning Specialists
Location: 212

Design Thinking
Learn how to help students and groups of colleagues tackle big problems with a process that can handle a variety of situations. Design Thinking, used both in the humanities and in STEM fields, allows individuals to attack creativity and innovation with purpose. This session will familiarize participants with the Design Thinking process, offer examples from a variety of classrooms and provide materials for attendees to continue their study on their own.
Presenter: Lynn Mittler, MICDS
Strand: Best Practices in Pedagogy and Assessment
Audience: K-12 Teachers, Curriculum Specialists, Learning Specialists
Location: 214

Implementing Game Theory in the Multi-Modal Classroom
This is a workshop about student choice. Game Theory provides a structure and scaffolding for what kinds of choices can be migrated from the teacher to the students as we work to create cultures of thinking in our classrooms. Within that structure, there are a variety of opportunities for a variety of media (full-length film, shorts, clips, video games) to play a role. The goal of this workshop, then, is provide a system that allows teachers to confidently make the choices that encourage the students to make strong choices of their own.
Presenter: Tex Tourais, MICDS
Strand: Contemporary Literacy
Audience: 5-12 Teachers, Curriculum Specialists
Location: 216

Making Learning Sticky in the K-8 Classroom
What are the most effective study strategies for long term retention? How can various assessment practices actually increase learning? What are some of the best instructional strategies to foster student engagement? In this interactive workshop, participants will learn the answers to these questions along with much, much more. We will explore a variety of free and exciting tools and resources that students and teachers can use for retrieval practice and for formative, diagnostic and summative assessment of learning. Attend this workshop to optimize instructional time to have the greatest impact on your students.
Presenter: Connie White, Woodward Academy
Strand: Best Practices in Pedagogy and Assessment
Audience: K-8 Teachers
Location: 250

Google Apps for Education
During this workshop, participants will learn to use Google Classroom, Drive, Maps Engine, and a variety of Google Apps for Education through hands-on activities. We will practice using Classroom to distribute individual copies of a template and rubrics, use Maps Engine to label, annotate, and share personalized maps, and use Docs and Drawings to edit, cite, and manipulate images and information. The workshop will also provide guidance on how to create self-grading quizzes, how to use Forms to collect a variety of information types, as well as exploring an array of other tools such as Add-ons and Chrome extensions and apps. Participants in this workshop should bring a laptop computer.
Presenter: David Doherty, MICDS
Strand: Contemporary Literacy
Audience: All
Location: 252

Using Tech to Promote Inquiry-Based Learning in STEM
Effective inquiry-based curriculum must provide students the opportunity to model and to explore possible solutions while offering a high level of challenge for every student. Technology allows us to promote inquiry-based learning in STEM classes by facilitating student exploration, providing immediate feedback, and allowing students to visualize complicated models or processes. In this session, you will experience several activities from math and science that demonstrate an inquiry-based approach supported through technology. Technology will include a Python editor, Desmos, GeoGebra, Algodoo, and others. Activities will be shared.
Presenter: Amy Scheer, MICDS
Strand: Amplifying STEM
Audience: 6-12 Teachers, Curriculum Specialists
Location: 254

Maker for the JK-8 Classroom
Look around a lower grade classroom. You will see a flurry of activity, students building, constructing, and experimenting with materials. This dynamic changes in middle and high school, as these once confident students begin with questions such as, "Why are we doing this?", "Am I doing this right?", and "Is this on the test?" which changes to the statement, "I am not good at this." A new movement which is emerging, the Maker Movement, now challenges students to become the learner they once were, willing to try and confident in their ability to learn. It is: School Projects + Technology = Maker 2.0. During this workshop, you will have an opportunity to make, design, program, and build while exploring the elements which comprise a maker space. Additionally, we will provide models on how you can begin to implement a makerspace into a variety of curricula, from the humanities to STEM using low cost tools and scaling from that point. Our goal is to unleash your inner kindergartner.
Presenter: Vinnie Vrotny, The Kincaid School
Strand: It's Elementary
Audience: K-8 Teachers, Administrators
Location: Maker Lab

Sunday Conference Kickoff

4:00 - 5:00 PM Check-in and Social Hour (STEM Building)
5:00 - 7:00 PM Opening Dinner and Keynote

Sunday Keynote: Tim Rylands

5:00 – 6:00 PM
Brauer Auditorium

Tim Rylands, a primary school teacher for over 25 years, has always maintained that in order to gain experience you need to do it. In order to do it, you need to want to do it! With over 25 years of classroom experience, in the UK, and beyond, including four years in West Africa, Tim is now much in demand for training days, conferences and seminars around the world, presenting the results of his work in an inspiring, practical and often humorous way. He has received notable recognition for using computer games, and Web 2 technologies to inspire children's creative confidence in many areas of the curriculum – writing, speaking and listening, music, thinking skills, collaboration, interaction and much more. Tim has received a vast amount of press coverage for his innovative use of ICT, and has been featured on the BBC, 'Teachers TV', CNN, in *The Times, The Guardian, The Independent*, and many others. In 2005 he won the 2005 Becta ICT in Practice Award.

Sunday Dinner

6:00 – 7:00 PM
Dinning Hall

At the conclusion of the Opening Keynote, a complimentary dinner will be served in the Upper School Dining Hall.

Monday, June 6

Monday General Schedule

One Hour Sessions	Extended Workshops
7:15 - 8:00 Continental Breakfast	**7:15 - 8:00 Continental Breakfast**
8:00 - 9:00 Opening Keynote	8:00 - 9:00 Opening Keynote
9:15 - 10:15 Session 1	9:15 - 12:00 Workshop 1
10:30 - 11:30 Session 2	
11:30 - 12:30 Lunch	**12:00 - 1:00 Lunch**
12:30 - 1:30 Session 3	1:00 - 4:00 Workshop 2
1:45 - 2:45 Session 4	
3:00 - 4:00 Session 5	
4:10 - 4:40 Closing Keynote	4:10 - 4:40 Closing Keynote
4:45 - 6:00 Social Hour	4:45 - 6:00 Social Hour

Monday Opening Keynote: Ron Ritchhart

8:00 – 9:00 AM
Brauer Auditorium

Ron Ritchhart is a Senior Research Associate at Harvard's Project Zero where his work focuses on such issues as teaching for understanding, the development of intellectual character, creative teaching, making students' thinking, and most recently the development of school and classroom culture. Ron's research and writings have informed the work of schools, school systems, and museums throughout the world. His book, *Making Thinking Visible,* has popularized the use of thinking routines to facilitate learning and engagement. Ron's latest book, *Creating Cultures of Thinking*, takes readers inside a diverse range of learning environments to show how teachers create classrooms where thinking is valued, visible and actively promoted as part of the day-to-day experience of all group members.

AM Sessions: 9:15 – 10:15

iPad 101: Getting Started in a 1:1 Elementary Classroom
This session will focus on getting yourself and your students started using the iPad in the classroom. Join me to discover classroom management apps, learning/teaching apps, websites, and projects that will motivate and excite your students! If you are new to 1:1 tech with the iPad in an elementary classroom, and are wondering where to start, then this session will be packed with ideas for you! (Basic iPad knowledge recommended).
Presenter: Angela Kava, Kalamazoo Country Day School
Strand: It's Elementary
Audience: JK-5 Teachers
Location: 208

The Use of Mobile Technology to Enhance Language Learning
Are you interested in connecting the digital dots to enhance L2 learning? The session includes demonstrations of sample activities, innovative practices to tap into tech tools such as mobile apps, and web-based learning in and beyond the foreign language classroom. It aims to show pedagogical aspects of specific applications to maximize students' proficiency in the interpretative, interpersonal and presentational modes. Examples of corrective feedback will also be discussed. Participants will have hands-on opportunities collaborating to experience personalized digital content for learner-instructor and learner-learner interactions.
Presenter: Lily Childs, MICDS
Strand: Contemporary Literacy
Audience: 3-12 Teachers, Curriculum Specialists
Location: 210

Reaching Boys through Romantic Wanderings: Effective Lessons in Transitive Learning
In "Reaching Boys, Teaching Boys: Strategies That Work –and Why," the published results of their "Teaching Boys Project," Michael Reichert and Richard Hawley articulate three key insights recommended for connecting with male students: 1) boys are relational learners; 2) boys elicit the kinds of teaching they need; and 3) lessons for boys need to have transitivity. This session will introduce relational teaching methodologies as they specifically meet the needs of an all-boys school such as Missouri Military Academy. Bill Bushnell and Mike Harding will provide background on Reichert and Hawley's "Teaching Boys Project" with recent examples of relational teaching and transitivity. They will then recount a best practice in relational teaching in which they teamed up with MMA's Art director on a project-based learning lesson in American Romanticism.
Presenters: William Bushnell and Mike Harding, Missouri Military Academy
Strand: Best Practices in Pedagogy and Assessment
Audience: 6-12 Teachers
Location: 212

Getting STEAMy in the STL
We will get our hands dirty, maybe even literally, as we look at how I seamlessly integrate Genius Hour, STEM and Makerspace into the curriculum. You will also create a lesson that integrates these concepts into your curriculum.
Presenter: Jill Badalamenti, Reed School
Strand: Amplifying STEM
Audience: JK- 8 Teachers, Curriculum Specialists, Learning Specialists, Librarians
Location: 214

Using Crosscutting Concepts to Help Students Build Habits of Mind for Sense Making and Critical Thinking
In this workshop, participants will explore the seven Crosscutting Concepts, which are one of the strands of three-dimensional learning that comprise the Next Generation Science Standards. These themes, including Patterns, Cause and Effect, and Systems and Models, can be used as habits of mind by students of all ages in order to build critical thinking skills that they can carry with them from your classroom to their post-secondary education and careers. Using the Crosscutting Concepts will help students make sense of difficult concepts and make connections between concepts and across content. By the end of this workshop, participants will be able to: describe the Crosscutting Concepts and identify them across content areas; recognize the progressions of the Crosscutting Concepts across K-12 classrooms; use the resources and strategies presented to effectively and meaningfully incorporate the Crosscutting Concepts in the classroom. This workshop will feature opportunities for discussion, student-facing handouts, and strategies for implementation in your classroom.
Presenter: Jeanne Norris, Washington University
Strand: Brains on Learning
Audience: JK-12 Teachers
Location: 252

We Need to Talk: Effective Communication & Strategies for Challenging Conversations with Parents (and Others)
In this session, the presenters will provide practical advice on how to communicate and address challenging situations or conversations with parents as well as others (e.g., colleagues, students). The session will include strategies and structures for communicating via email, over the phone, and/or in person to foster ongoing productive conversation with meaningful outcomes.
Presenters: Vicki Thurman, Kara Friedman, David Hotaling, and Ashley O'Toole, MICDS
Strand: Best Practices in Pedagogy and Assessment
Audience: All
Location: Leadership Conference Room

AM Sessions: 10:30 – 11:30

Thinking Collaboratively
Want students to stay engaged and be accountable for their work? Incorporating Kagan's Cooperative Learning Protocols can help with just that. In this interactive session, we will be trying out a variety of protocols that you can use right away in your classroom. As a Cooperative Learning novice, I am eager to share my experiences with you as well as learn about all of your experiences and ideas.
Presenter: Sara Levine, MICDS
Strand: It's Elementary
Audience: 3-5 Teachers
Location: 208

Engagement Now: Help Students Authentically Engage with Texts
All it takes is a slight shift in seating or the ping of a notification for students to turn away from texts they were assigned to read at home. Distractions for the student mind are nothing new, however, in contemporary society they are multitudinous and commonplace. This workshop aims not to eliminate distractions, but to show instructors how to use these "distractions" as a means for fostering engagement in reading beyond the walls of the classroom. Participants will be presented with dynamic ways to use the formats of Twitter, chat rooms, instant messaging, Snapchat, memes, Facebook, social networks, etc. as means of helping students form literary communities and demonstrate their knowledge of a given text in ways that are more conducive to the world they inhabit. This session will also feature meaningful conversation about the impact of technology on the minds of readers.
Presenter: Jake Williamson, Chadwick
Strand: Contemporary Literacy
Audience: 6-12 Teachers
Location: 210

Spark!: Igniting a Passion for Learning in High School
Spark! is Parkway School District's dynamic, experiential, immersion-based student learning model that provides opportunities for students to experience professions in the real-world prior to graduation. In its second year, this program has quickly grown to serve 80 students. See how Parkway actively engages with business partners, community service and educational providers to design and develop mutually beneficial learning experiences based on the interests of students and stakeholders. This session will focus on the planning, implementation, and impact that the program has on our district as we seek to expand the choices and opportunities that we offer to the students we serve.
Presenter: Dr. Jennifer Stanfill, Parkway School District
Strand: Best Practices in Pedagogy and Assessment
Audience: 9-12 Teachers, Curriculum Specialists, Administrators
Location: 212

Planning a STEM Career Day
This session will focus on the key elements necessary to plan and implement a successful STEM Career Day. This event is focused on igniting interest in all STEM fields with hands on, real world activities and presentations. All stages of the planning process will be outlined in this presentation, from the early stages of securing presenters and a keynote speaker to scheduling rotations and providing refreshments to guests. Examples of small group presentations that were well received, along with photographs, will be shared. Detailed schedules and brochures will be available. Suggestions of how STEM Career Day can be expanded upon will also be discussed. Attendees will walk away with a detailed plan of the steps needed to organize a successful STEM Career Day in their school.
Presenter: Kim Eife and Jennifer Nobles, Academy of Notre Dame de Namur
Strand: Amplifying STEM
Audience: 6-12 Teachers
Location: 214

Mindfulness in the Elementary Classroom
Mindfulness is the intentional practice of focusing one's attention on what is occurring in the present moment. This practice and awareness helps children to get their brains ready to learn. It helps children to understand how their brain works and how they can help it to learn more. In this session participants will be presented with data and research to support the implementation of mindfulness in the classroom. Noted outcomes as well favorite mindfulness exercises and resources will be discussed. There will be many ideas to begin a mindfulness practice in your classroom and many resources recommended to help with this process.
Presenter: Lindsay Klasing, Chesterfield Day School
Strand: Brains on Learning
Audience: JK-5 Teachers
Location: 252

#ADMITTED: From HS to College- A Revolutionary Guide to Overcoming the Odds
For some first generation, low income or under-resourced students, the simple act of daring to dream and setting a goal to go to college is revolutionary. All too often, student's families do not have access to resources they need to make sure their children are properly prepared for high school and the college application process. Sometimes even if they are prepared, they may not have the money, time at their disposal to make sure their child can succeed in the way he or she could if the odds were in their favor. In this session, Kielah Harbert, first generation college student and co-author of *#ADMITTED*, will share all of the important steps a student needs to take, myths they can overcome, habits they need to develop, and relationships they need to foster, to move from high school to college.
Presenter: Kielah Harbert, first generation college student, Washington University
Strand: Best Practices in Pedagogy and Assessment
Audience: All
Location: Leadership Conference Room

AM Workshops: 9:15 AM – 12:00 PM

Deeper Learning through PBL in the K-6 Classroom
When project-based learning works well, teachers and students become equally invested in the learning experience. High-quality, engaging projects don't happen by accident. Good projects require thoughtful planning, with attention to key elements that foster deeper learning. This session introduces strategies to help you get off to a good start with PBL in the elementary grades, so that you can help students maximize the learning opportunities. Appropriate for PBL newcomers and project veterans, as well as instructional leaders, this interactive, collaborative workshop will have participants learning by doing.
Presenter: Suzie Boss, Writer and Educational Consultant
Strand: It's Elementary
Audience: K-6 Teachers, Curriculum Specialists, Learning Specialists
Location: 104

Intervention Planning and Progress Monitoring for Learning Support
Learn a practical approach to designing intervention plans and measuring progress. Often, learning support resources are spent helping students complete assignments, with little time left for delivering evidence-based interventions to support skill development. The intervention planning process taught in this session will serve as the foundation for transforming learning support into focused intervention time that supports the building of critical skills that reach across the curriculum and across time.
Presenter: Lee Ann Jung, Author and Professor, University of Kentucky
Strand: Best Practices in Pedagogy and Assessment
Audience: All
Location: 108

Helping Students Improve Executive Functions: Part 1
This presentation will describe executive functions and discuss how executive functions deficits and delays in development impact learning and production both in the classroom and at home. Ways to recognize executive functions difficulties and ways to help children with executive functions difficulties improve behavior and increase academic production will be discussed.
Presenter: George McCloskey, Author and Professor, Philadelphia College of Osteopathic Medicine
Strand: Brains on Learning
Audience: All
Location: 112

Discourse in the Culture of Thinking Classroom

How do conversation, language, and discussion in a Culture of Thinking classroom differ from that of a traditional classroom? How do we understand effective discourse patterns, versus ineffective ones, so that we as teachers can better foster powerful learning communities? This mini course will focus on current research conducted by the Cultures of Thinking research team at Project Zero in the area of discourse. Drawing on current work in field, Ron Ritchhart will share practices that can help teachers at all year levels and across subject areas create a culture of thinking that empowers students and fosters deep understanding. We will look at how we as teachers can use routines that are designed to facilitate thinking while structuring the discourse of the classroom.

Presenter: Ron Ritchhart, Project Zero, Harvard Graduate School of Education
Strand: Best Practices in Pedagogy and Assessment
Audience: All
Location: 202

Teaching Professional Computational Modeling Skills with Jupyter

We have officially exited the information age and are navigating the analytics age. As a result, students and teachers must gain proficiency with professional tools beyond spreadsheets. Jupyter Notebook (formerly iPython Notebook) is a web application (front-end) to create and share documents that contain live code, visualizations, and marked-up text and equations. Teachers can write tutorials, and students can write professional, interactive reports. Accessible to students and scalable to professionals, Jupyter Notebook is ideal for teaching computational modeling, data visualization, collaborative computing, and reporting. In this workshop, participants will receive a set of Jupyter notebooks and will write their first notebooks for their classes.

Presenter: Aaron Titus, Professor, High Point University
Strand: Amplifying STEM
Audience: 9-12 Teachers, Curriculum Specialists
Location: 216

Developing Rich Assessment Tasks

Students will be called to apply learning in authentic ways; the 21st century 4C skills - critical thinking, collaboration, communication and creativity - demand concomitant assessments that call for more than making a selection from given answers in a selected-response format. Richer, more authentic tasks are needed. Explore a set of proven design tools for developing quality performance tasks. Such tasks provide more than simply another method for measuring learning - they embody the most important goals while engaging students in meaningful learning.

Presenter: Jay McTighe, Author & Educational Consultant
Strand: Best Practices in Pedagogy and Assessment
Audience: 2-12 Teachers, Curriculum Specialists, Learning Specialists
Location: 258

Team Building: A New Approach

Pretty much everything we do in life is a cooperative endeavor. For an athletic team, that means creating a culture and philosophy that gets young people excited, and this is done by developing and nurturing relationships. We are naive if we assume that an autocratic approach will create a lasting legacy. That is coaching through compliance. This workshop is all about coaching with compassion. Learn how you can develop a philosophy that questions common practices and traditional beliefs, emphasizes the mental, not physical approach, prioritizes relationships over rules, focuses on the process rather than the outcome, and can be put into action daily.

Presenters: Clay Erro, Former Coach and Educator, and Vern Gambetta, Director, Gambetta Sports
Strand: Excellence in Teaching, Coaching, and Athletic Development
Audience: K-12 Coaches
Location: 262

PM Sessions: 12:30 – 1:30

The Power of Digital Portfolios for Faculty and Students

In this session participants will learn how the administration at Chesterfield Day School is using Seesaw, an app and website, to generate portfolios for students and teachers. These portfolios are used to create conversations around instruction, methodologies, approach, successes and struggles. Participants will explore how to begin using digital portfolios, tools that are out there, how to roll it out to families and how to use portfolios with faculty and staff.

Presenter: Jeff Horwitz, Chesterfield Day School
Strand: It's Elementary
Audience: JK-8 Teachers, Administrators
Location: 208

Six-Word Story, Six Unique Shots: Enhancing Writing Through Multimedia

Explore an activity that brings the writing process to life with digital storytelling. A simple six-word story, created as a video with six unique camera shots, allows students the ability to tell a powerful visual story. This presentation will guide educators through a unique project that addresses the fundamentals of media literacy, filmmaking, and the digital storytelling process.

Presenter: Don Goble, Ladue Horton Watkins High School
Strand: Contemporary Literacy
Audience: All
Location: 210

Diversifying the English Canon

For generations, we have learned from and taught in an education system, both public and private, that has focused narrowly on a single lens—white European-American. Our English classrooms have fallen prey to what Chimamanda Ngozi Adichie has aptly phrased as "the danger of a single story." We have welcomed multiple stories that represent our European background and heritage at the cost of all others. It's a complicated curricular dance to come up with new texts, and it's even harder with an agenda to "diversify." This session will help you look at the need for diverse perspectives in our text selection not simply as an agenda but as an imperative to empowering a well-educated global citizen of any background. We will address how we choose the texts that end up in our classrooms, and why it is so easy for all of us to overlook writers who have made an incredible impact in the world of literature. There will be a student-designed component to help us understand what the most pressing needs are in our classrooms. We will propose new alternatives and even provide a model of an entire core curriculum that de-centers the canonical European perspective.

Presenter: Brigitte Leschhorn, MICDS
Strand: Best Practices in Pedagogy and Assessment
Audience: 9-12 Teachers, Curriculum Specialists, Librarians
Location: 212

Probability and Probability Modeling: Exploring Monte Carlo Methods for Understanding

This session will focus on using handheld calculators to model complex problems. Working with some built in apps and generating lists of random numbers, the calculator can be used to bring simulation to life in the classroom. Simulation is a great tool for examining a process that could be costly or time consuming to carry out in real time. Monte Carlo methods provide a way for students to run real simulations and work out answers to complicated questions. The notion of randomness and link to probability will be explored as the foundation not only in the case of statistics but also as an understanding of the variation that occurs throughout problem solving fields.

Presenter: Edsel Baker, Missouri Military Academy
Strand: Amplifying STEM
Audience: 6-12 Teachers
Location: 214

Authentic Accountability Using Simple Tech Tools
This presentation will help teachers leverage technology to promote authentic accountability integrated into the classroom. I will introduce and demonstrate three ways to easily and quickly increase accountability in the classroom: audio recording, Padlet, and Google Docs/Classroom. The tools covered will allow teachers to help students self-monitor, publish work to a closed audience, and increase collaboration among students as well as between students and teachers.
Presenter: Dr. Riina Hirsch, Ritenour High School
Strand: Best Practices in Pedagogy and Assessment
Audience: 6-8 Teachers, 9-12 Teachers, Learning Specialists
Location: 252

PM Sessions: 1:45 – 2:45

Time and Space Continuum for K-5 Students
How do young students think about time and space? What kinds of investigations can help students develop these very complex ideas? The Next Generation Science Standards are moving from what students need to memorize to how students learn to learn. This workshop will demonstrate several investigations for K-5 students in thinking about time and space in the Earth and Space sciences.
Presenter: Skyler Wiseman, Washington University
Strand: It's Elementary
Audience: JK-5 Teachers, Curriculum Specialists, Librarians
Location: 208

Literacy in Action: Create to Learn
Student created media is a fabulous way to leverage all of the literacies, including media literacy, through reporting, interviewing, and broadcasting. In this session, participants will learn how the creation of student media leads to reflection, authentic assessment, student portfolio development, and ultimately, help our students become critical media consumers and creators.
Presenter: Don Goble, Ladue Horton Watkins High School
Strand: Contemporary Literacy
Audience: All
Location: 210

Reading for Meaning - Fluently
Learn how to develop fluency, support vocabulary, and promote comprehension by combining the powerful, research-based strategies of teacher modeling, repeated reading, and progress monitoring. Support the Common Core State Standards Foundational Skills and accelerate the reading achievement of Title I, special education, ELL, and mainstream students using these research-proven strategies. This session describes the strategies of Read Naturally, but the strategies can be used with any classroom reading materials for early intervention to adults who need to improve their reading proficiency.
Presenter: Carol Ann Kane, Read Naturally, Inc.
Strand: Best Practices in Pedagogy and Assessment
Audience: All
Location: 212

Podcasting 101: Using Podcasting in the Classroom
Teachers who attend this session will leave with easy ways to introduce audio production into their classrooms to engage students. As your own instructional tool or in creating production, podcasting will be a great way to spice up your classroom. For those who are looking for ways to include a real-world audience appeal while giving students purpose and motivation, let me introduce you to the world of podcasting. Podcasts can be published and archived so students learn from each other by both creating and hearing original audio. You will leave with the tools and resources needed for creating podcasts, lesson ideas for multiple subject areas and where to find examples. Don't miss adding a new tool to your teaching arsenal.
Presenter: Jane Bannester, Ritenour High School
Strand: Amplifying STEM
Audience: 3-12 Teachers
Location: 214

Humanities and Assessment
Humanities educates the mind, broadens the heart, and refines the sensibilities of a generation that will be called upon to act as citizens of the world by emphasizing the variety and depth of "the human experience." This seminar promotes a 9-12 interdisciplinary curriculum that focuses on how teaching pedagogies help students investigate societies and understand a central text. Additional storylines include the interim and summative assessments associated with a 9-12 writing program that became a linchpin for spurring on standards-based grading practices, common grading of essays and vertically aligning writing standards, and the use of data to inform re-teaching instructional decision making.
Presenter: Kurt Christiansen and J.D. Uebler, Culver Academies
Strand: Best Practices in Pedagogy and Assessment
Audience: 9-12 Teachers, Curriculum Specialists, Administrators
Location: 252

PM Sessions: 3:00 – 4:00

MakerSpace: Hands On Learning
In this session participants will learn how we built a MakerSpace at Chesterfield Day School, how we structure the curriculum, and what tools we use to accomplish our curricular goals.
Presenter: Jeff Horwitz, Chesterfield Day School
Strand: It's Elementary
Audience: JK-8 Teachers
Location: 208

"iAm" iMovie Trailers
iMovie Trailers can be a fabulous way to teach media literacy, while allowing students the opportunity to express valuable content comprehension in the classroom. This presentation will guide educators through a unique project that addresses the fundamentals of an iMovie Trailer project for iPad, as well as engage in a reflective practice. Tell the world "iAm" and learn how to replicate this idea in your classroom.
Presenter: Don Goble, Ladue Horton Watkins High School
Strand: Contemporary Literacy
Audience: All
Location: 210

Foundational Skills: Standards Tell Us What, Research Tells Us How
We know that all students must develop the foundational skills necessary to become proficient readers. The Common Core State Standards define what foundational skills students should be able to do by the end of each grade (K-5), but the standards do not tell teachers how they should teach. Teachers are thus free to provide students with whatever tools and knowledge their professional judgment and experience identify as most helpful for meeting the goals set out in the standards. You can meet the goals by emphasizing skills that impact reading development and predict reading success. Learn how to implement highly effective, research-based strategies to accelerate the progress of your developing and struggling readers—using Read Naturally curriculum (or apply to your own curriculum).
Presenter: Carol Ann Kane, Read Naturally, Inc.
Strand: Best Practices in Pedagogy and Assessment
Audience: JK-8 Teachers, Curriculum Specialists, Learning Specialists
Location: 212

Math Imitates Art
Or does art imitate math? Are there really ”two cultures”? In fact, there is an important dialog between these two seemingly separate disciplines. The visual arts speak to mathematics, and the fine arts can be approached in a mathematical way. From “walking like an Egyptian” to Renaissance methods of perspective to MC Escher’s Circle Limits to 20th century cubism, visual artists have always wrestled with the problem of representing space, the central object of geometry’s study. The rule of one-point perspective is “parallel lines intersect at infinity”. What does this rule mean in geometry? The works of the pre-Impressionists and the Impressionists moved visual art from Realism to a new emphasis on color and light. The work of Picasso and Einstein contain many overlapping concepts. Humans have incorporated symmetry into their artwork for millennia; making the symmetry in our artwork worth studying, as well as its absence. Asymmetry can be as powerful an artistic device as symmetry. Simply put, there is an immense amount of interplay between art and mathematics, so bring both your left brain and your right brain to this presentation; you’ll need them both!
Presenter: Frank J. Corley, St. Louis University High School
Strand: Amplifying STEM
Audience: 6-12 Teachers
Location: 214

Testing Giving You The Blues? Get Creative with EDTech Formative Assessments
Educators around the world share a common focus on preparing our students for standardized testing. The data and results that come from testing can show powerful trends about student achievement, but especially in an age when technology is constantly changing, have you ever wondered if there were other ways your students can creatively show their learning, in a timely and efficient manner? The real test is finding ways to truly get your students excited about learning and showing what they know in non-traditional ways. Here are a few digital tools that help teachers do just that. Let's not test, let's Celebrate Learning!
Presenter: Patricia Brown, Ladue School District
Strand: Best Practices in Pedagogy and Assessment
Audience: JK-12 Teachers, Curriculum Specialists, Learning Specialists
Location: 252

PM Workshops: 1:00 – 4:00

Deeper Learning through PBL in the 7-12 Classroom
When project-based learning works well, teachers and students become equally invested in the learning experience. High-quality, engaging projects don’t happen by accident. Good projects require thoughtful planning, with attention to key elements that foster deeper learning. This session introduces strategies to help you get off to a good start with PBL in the upper grades, so that you can help students maximize the learning opportunities and connect to their interests. Appropriate for PBL newcomers and project veterans, as well as instructional leaders, this interactive, collaborative workshop will have participants learning by doing.
Presenter: Suzie Boss, Writer and Educational Consultant
Strand: Contemporary Literacy
Audience: 7-12 Teachers, Curriculum Specialists, Learning Specialists
Location: 104

Challenging our Traditions in Grading
This workshop will explore what research confirms about effective grading policies and practices. Keeping in mind the practical challenges teachers face, we will outline strategies for reporting student learning progress that provide meaningful communication between school and home. Finally we'll discuss procedures for implementing new reporting structures, including standards-based grading, as well as policies for ensuring fairness and honesty in grading exceptional learners. The audience will be invited to challenge practices, raise questions and bring up issues based on their own experiences.
Presenter: Lee Ann Jung, Author and Professor, University of Kentucky
Strand: It's Elementary
Audience: K-6 Teachers, Curriculum Specialists, Learning Specialists, Administrators
Location: 108

Helping Students Improve Executive Functions: Part 2
This presentation will continue the work begun in Part 1 and will describe executive functions and discuss how executive functions deficits and delays in development impact on learning and production both in the classroom and at home. Ways to recognize executive functions difficulties and ways to help children with executive functions difficulties improve behavior and increase academic production will be discussed.
Presenter: George McCloskey, Author and Professor, Philadelphia College of Osteopathic Medicine
Strand: Brains on Learning
Audience: All
Location: 112

Using Thinking Routines to Make Thinking Visible
The use of thinking routines and the idea of making students' learning and thinking visible originated at Project Zero, Harvard Graduate School of Education, and has captured the interest of schools and teachers worldwide. With such popularity, we sometimes get superficial use of the routines. For example, teachers may use thinking routines as simple activities. However, the real power of thinking routines comes from using them to establish patterns of thinking in the classroom, but how do teachers move beyond the use of routines as good activities to their establishment as patterns of thinking? What do classrooms look like when such patterns take hold? In this interactive master class, participants will have a chance to learn how teachers are working with thinking routines to transform their classrooms into cultures of thinking, and to use the routines themselves to see how they work as tools for all learners.
Presenter: Ron Ritchhart, Project Zero, Harvard Graduate School of Education
Strand: It's Elementary
Audience: All
Location: 202

Teaching STEM Through Video Game Development
Classic arcade games are a physics playground, with elements that are realistic and elements that are unphysical. By learning to create games like Missile Command and Asteroids, students also learn the underlying physics and the power of modeling. An ideal tool for both teaching and learning the computational modeling necessary for such games is GlowScript, a web-based environment for writing and running interactive 3D animations. With iterative (step-by-step) calculations of position and velocity, students recreate classic arcade games like Space Invaders and Lunar Lander. In this workshop, participants will receive a workbook of programming exercises (including physics content) to use in teaching students both physics and game development. It can be freely modified and used as a supplement to physics, math, programming (computer science), or game development courses.
Presenter: Aaron Titus, Professor, High Point University
Strand: Amplifying STEM
Audience: 6-12 Teachers, Curriculum Specialists
Location: 216

Gregg Stone: BYOA = Build Your Own App
Learn how Mobile App Development can lead to the development of essential skills in your students. A design approach to app creation is demonstrated in a hands-on workshop with reference to specific broad-based learning initiatives and standards.
In this session, teachers and administrators are introduced to a professional, online, app-building tool they can use to make their own mobile apps. They will learn that building apps does not have to be a tedious and daunting project. A unique "coding to learn" approach gives students a platform that allows them to easily build a content-rich, visually impressive, and professional mobile app. The program, called MAD-learn, enables students to quickly see the finished product, and use technology creation as a means of serving the community, solving problems, building entrepreneurialism, and sharing one's ideas with the world.
Presenter: Gregg Stone, MAD-learn
Strand: Contemporary Literacy
Audience: All
Location: 254

Anchoring: A Process for Establishing Performance Standards
Anchoring refers to the process of selecting examples of student work to reflect performance standards. These examples, known as anchors, provide tangible and specific illustrations of various levels of quality or degrees of proficiency based upon established criteria. The collaborative process of selecting anchors helps teachers to reach agreement on what it means to "meet the standard." Anchors also assist teachers and students to better understand "how good is good enough" and how to apply performance criteria more consistently. Workshop participants will learn and apply a structured process for anchoring student work.
Presenter: Jay McTighe, Author & Educational Consultant
Strand: Best Practices in Pedagogy and Assessment
Audience: 2-12 Teachers, Curriculum Specialists, Learning Specialists
Location: 258

Practical Applications in Principle Based Coaching and Strength Training in the Large Team Setting
In this dual-topic session, Mark will discuss what he feels the foundations of effective coaching are, and strategic ways to implement them into your locker room, weight room, or classroom. Coaching is teaching, and it is vital for the successful coach or teacher to have principles from which to build upon; Mark will give his insight as to what makes the great coaches exactly that...great. In addition, Mark will use the MICDS weight room to show you how to efficiently construct, cue, and execute a training session in the large team setting. This will truly be a valuable presentation for all coaches focused on developing their athletes.
Presenter: Mark Watts, Director of Education, EliteFTS
Strand: Excellence in Teaching, Coaching, and Athletic Development
Audience: K-12 Coaches
Location: 262

Novel Engineering
Participants will learn the Novel Engineering approach by doing a full Novel Engineering design project. Inspired by kids, grounded in research, and developed by Tufts University, Novel Engineering is an innovative approach to integrate engineering and literacy in elementary and middle school. Novel Engineering works for any grade level and any subject and can authentically integrate science, math, and English language arts standards into your existing curriculum. Students use classroom literature--stories, novels, and expository texts--as basis for engineering design challenges to identify engineering problems, impose constraints by using details from the text, design functional, realistic solutions for characters, and engage in the Engineering Design Process while reinforcing their literacy skills.
Presenter: Kim Weaver, Engineering Education Specialist, Washington University
Strand: It's Elementary
Audience: K-8 Teachers
Location: Maker Lab

Monday Closing Keynote: Vern Gambetta

4:10 – 4:40 PM
Brauer Auditorium

Vern Gambetta is currently the Director of Gambetta Sports Training Systems. He has been the conditioning coach for several teams in Major League Soccer as well as the conditioning consultant to the U.S. Men's World Cup Soccer team. Vern is the former Director of Conditioning for the Chicago White Sox and Director of Athletic Development for the New York Mets. Vern is recognized internationally as an expert in training and conditioning for sport having worked with world class athletes and teams in a wide variety of sports. He is a popular speaker and writer on conditioning topics, having lectured and conducted clinics in Canada, Japan, Australia and Europe. Vern's coaching experience spans 39 years at all levels of competition, and he has authored six books and over 100 articles related to coaching and sport performance in a variety of sports.

Tuesday, June 7

Tuesday General Schedule

One Hour Sessions	**Extended Workshops**
7:15 - 8:00 Continental Breakfast	**7:15 - 8:00 Continental Breakfast**
8:00 - 9:00 Opening Keynote	8:00 - 9:00 Opening Keynote
9:15 - 10:15 Session 1	9:15 - 12:00 Workshop 1
10:30 - 11:30 Session 2	
11:30 - 12:30 Lunch	**12:00 - 1:00 Lunch**
12:30 - 1:30 Session 3	1:00 - 4:00 Workshop 2
1:45 - 2:45 Session 4	
3:00 - 4:00 Session 5	
4:10 - 4:30 Conference Close	4:10 - 4:30 Conference Close

Tuesday Opening Keynote: Ken O'Connor

8:00 – 9:00 AM
Brauer Auditorium

Ken O'Connor, a.k.a. The Grade Doctor, has been a staff development presenter and facilitator on assessment, grading and reporting in 45 states, nine Canadian provinces, and 21 countries outside North America. He is widely considered to be one of a small group of leading experts on how to grade and report effectively. His 23 year teaching career included experience as a geography teacher and department head in Scarborough, Ontario, and teaching at four schools in Toronto and Melbourne, Australia (Grade 7-12). He also served as the Curriculum Coordinator responsible for Student Assessment and Evaluation and Geography for the Scarborough Board of Education and worked as a consultant on Secondary Assessment at the Ontario Ministry of Education. Ken is the author of three books: *A Repair Kit for Grading: 15 Fixes for Broken Grades*, *How to Grade for Learning*, and *Essentials for Principals: A School Leader's Guide to Grading*.

AM Sessions: 9:15 – 10:15

From Vision to Reality: Creating a Design Lab That Works

You already know that a maker space or design lab provides incredible learning opportunities for students. But the road to implementation is fraught with peril. In this seminar, we will share a "philosophy first" process that we used at Parker which led to buy-in by grade level teachers and the development of integrated projects across the school. This led to the development, implementation, and integration of a design center that is a part of the student day for all Lower School students this year. Join us as we share our journey and field questions on how your school might integrate a design lab more holistically into the student day.
Presenter: Laurynn Evans, Francis Parker School
Strand: It's Elementary
Audience: JK-5 Teachers, Administrators
Location: 208

Coding for Young Learners

At Pulaski Academy in Little Rock, Arkansas; children as young as three start learning to code in our STEAM lab. This learning continues through the fourth grade in our STEM lab. Early Childhood STEAM teacher, Juli Paddie, and Lower School STEM teacher, Christina Carroll, will walk you through everything you need to know before you start teaching your kids to code. They will cover a variety of resources from web based programs, coding apps, unplugged activities and robots designed for young children. Everyone will leave this workshop with a detailed list of our favorite resources to teach coding, as well as some offline activities, that your kids will love. Participants will also be able to get up close and personal with Bee-bots, Dot and Dash, and Code-a-pillar - a few of our favorite robots!
Presenters: Christina Carroll and Juli Paddie, Pulaski Academy
Strand: Amplifying STEM
Audience: JK-5 Teachers, Learning Specialists
Location: 210

Rigor v. Hard Assessments: Part 1

During this two part session, participants will be active with defining what assessments should look like, determining the types of assessments presented, and receive tips and hints on how to "rigor up" an assessment. We will conclude by doing just that with given assessments. This is one of the keys in the Wright City High School passing up over 50% of the state high schools in performance from 2011 to 2014.
Presenters: David Buck and Shawn Brown, Wright City High School
Strand: Best Practices in Pedagogy and Assessment
Audience: All
Location: 212

Creative Assessment with WebAssign

Many web-based homework systems have been created since WebAssign was developed in 1997, yet most do not have some of my favorite features in WebAssign. First, WebAssign is independent of a publisher but works with many publishers. As a result, you have access to your textbook's content, and you can create and share your own content. Second, WebAssign allows you to create unique types of questions including image maps, computational models (students' programs), and laboratory reports (with data and results). In this workshop, participants will test examples of creative question types and will "dream" of the types of questions they want for their courses that they didn't think were possible.
Presenter: Aaron Titus, High Point University
Strand: Amplifying STEM
Audience: 9-12 Teachers, Curriculum Specialists
Location: 214

Mindfulness in the Classroom
Through mindfulness, a particular way of paying attention, students and teachers can improve attention, focus, and emotional regulation. Using Mindfulness, students and teachers learn ways to respond rather than react. Research shows that this practice has positive effects on student learning outcomes while building community and reducing stress. Mindfulness techniques for one's personal practice and ways mindfulness can be used in the classroom will be shared.
Presenter: Christine Wallach, New City School
Strand: Brains on Learning
Audience: All
Location: 252

#ADMITTED: From HS to College- A Revolutionary Guide to Overcoming the Odds
For some first generation, low income or under-resourced students, the simple act of daring to dream and setting a goal to go to college is revolutionary. All too often, student's families do not have access to resources they need to make sure their children are properly prepared for high school and the college application process. Sometimes even if they are prepared, they may not have the money, time at their disposal to make sure their child can succeed in the way he or she could if the odds were in their favor. In this session, Kielah Harbert, first generation college student and co-author of *#ADMITTED*, will share all of the important steps a student needs to take, myths they can overcome, habits they need to develop, and relationships they need to foster, to move from high school to college.
Presenter: Kielah Harbert, first generation college student, Washington University
Strand: Best Practices in Pedagogy and Assessment
Audience: All
Location: Leadership Conference Room

AM Sessions: 10:30 – 11:30

Teaching STEAM and STEM through Children's Literature Pk-4
By using quality children's books to pique students' interest, we will combine the STEM disciplines with reading instruction in a fun and engaging way! Pulaski Academy's Early Childhood STEAM teacher, Juli Paddie, and Lower School STEM teacher, Christina Carroll, will make it easier than ever to teach fundamental STEM concepts using high-quality fiction and nonfiction children's books. Participants will receive information about each book, detailed instructions on doing these lessons with your students, handouts for students if needed, and a list of any materials and resources. We will have fun creating and using a variety of great hands on activities while exploring STEM/STEAM through the medium of children's literature!
Presenters: Christina Carroll and Juli Paddie, Pulaski Academy
Strand: It's Elementary
Audience: JK-5 Teachers, Curriculum Specialists
Location: 208

Reverse Engineering in STEM Education
It is imperative that we modify the way we teach science and offer students more opportunities to hone their STEM skills. This session will offer participants the use of hands-on labs as a tool for discovery rather that confirmation of concepts, theories and formulas. Reverse engineering is taking apart an object to see how it works in order to duplicate or enhance an object. Competing industries use it often, taking a “short-cut” to save time, funds and human effort. For example, the inclined plane is a simple machine that allows a comprehensive study of a variety of fundamental mechanics topics in introductory engineering. What if we ask our students to reverse engineer an inclined plane and ask them to discover the intricacies of an inclined plane? Given the power of self-discovery, the students should be able to transition more organically into deeper conversations on the subject matter. Sample lessons in pulley systems, pendulums, springs and electric circuits will be offered in the session.
Presenter: Duruhan Badraslioglu, Bullis School
Strand: Amplifying STEM
Audience: 3-12 Teachers, Curriculum Specialists
Location: 210

Rigor v. Hard Assessments: Part 2
During this two part session, participants will be active with defining what assessments should look like, determining the types of assessments presented, and receive tips and hints on how to "rigor up" an assessment. We will conclude by doing just that with given assessments. This is one of the keys in the Wright City High School passing up over 50% of the state high schools in performance from 2011 to 2014.
Presenters: David Buck and Shawn Brown, Wright City High School
Strand: Best Practices in Pedagogy and Assessment
Audience: All
Location: 212

Creating Professional-Looking Documents in LaTeX
STEM students should learn how to write papers and lab reports in LaTeX. Many scientific articles submitted to journals or arXiv.org are written in LaTeX. Furthermore, if you want to write mathematical markup in Jupyter Notebook (formerly iPython Notebook), Trinket, Wikipedia, WebAssign or a host of other sites, you will use LaTeX. By learning LaTeX, students also gain experience with markup, file management, pathnames, mathematical typesetting, and debugging. The results are far more professional (in appearance) than with Microsoft Word. In this one-hour workshop, participants will download a template for a paper, will modify the paper, and will typeset it using LaTeX.
Presenter: Aaron Titus, High Point University
Strand: Amplifying STEM
Audience: 9-12 Teachers, Curriculum Specialists
Location: 214

Supporting Students with Mental Health Diagnoses
Creating an environment where each student feels safe and supported in an engaging and appropriately challenging environment is not an easy task but is necessary in today's educational world. Each classroom includes students with a variety of diagnoses. The most common are depression, anxiety, oppositional defiant disorder, conduct disorder, and ADHD. This session will provide educators with initial response strategies when faced with challenging situations and strategies which foster a positive classroom culture while recognizing potential emotional triggers.
Presenters: Diane Richter and Victoria Fricke, St. Louis University
Strand: Brains on Learning
Audience: JK-6 Teachers, Learning Specialists, Curriculum Specialists, Administrators
Location: 252

Taking One to One to the Next Level - Top 10 Considerations
In this session Tom Wyman, Director of Technology at MICDS, will facilitate a discussion of themes that faculty and administrators must consider to take one to one programs to the next level.
Presenter: Tom Wyman, MICDS
Strand: Best Practices in Pedagogy and Assessment
Audience: 6-8 Teachers, Curriculum Specialists, Librarians, Administrators
Location: Leadership Conference Room

AM Workshops: 9:15 AM – 12:00 PM

Education 3.0: The Pedagogy, Andragogy & Heutagogy of Mobile Learning
In this workshop, we will explore moving from Education 1.0 through Education 2.0 toward Education 3.0. Jackie and Terry will take us from pedagogy to andragogy to heutagogy and from instructivism to constructivism to connectivism – all within the context of mobile learning. This presentation will be useful if you are already integrating mobile learning into your teaching and learning environments, or if you are planning to incorporate it soon. Topics addressed include the current state of learning with mobile devices, an overview and characteristics of Education 1.0, 2.0, and 3.0, pedagogical, andragogical, and heutagogical connections, examples of Mobile Learning 1.0, 2.0, and 3.0, using the SAMR model as a framework to integrate technology into the Education 2.0 and 3.0 curriculum, and personal assessment and future plans.
Presenters: Jackie Gerstein, Author and Online Graduate Instructor, Terry Heick, Director, TeachThought
Strand: Contemporary Literacy
Audience: 6-12 Teachers, Curriculum Specialists, Learning Specialists
Location: 104

Measuring Student Growth

In this session we will begin with a thoughtful discussion of what the term “growth" means and the implications of defining that for practice. Best practice demands that learners' progress be measured in systematic and defensible ways. This session will examine the advantages and considerations of a variety of assessment procedures and tools, both standardized and classroom-based, for use in a high--quality progress monitoring system.

Presenter: Tonya Moon, Author and Professor, University of Virginia
Strand: It's Elementary
Audience: K-6 Teachers, Learning Specialists, Administrators
Location: 108

The Core of Character: Developing Self-Regulation, Empathy, and Resilience

Children with self-regulation skill can calm themselves, focus, persevere, and delay gratification. Empathy gives children the foundation for social skills and emotional intelligence. Resilient children have the ability to struggle, believe in themselves even when things get tough, and solve the problems that come along in life. They also are healthier, happier, and achieve more in school. In this workshop you will understand the sequence of attachment, self-regulation, empathy, and social learning experiences which help students develop strength of character. You will consider the correlation between self-regulation, empathy, resilience, school success, and life success. You will learn and practice specific teaching strategies and skills to help students develop self-regulation, empathy and resilience.

Presenter: Bob Sornson, Author and Founder of the Early Learning Foundation
Strand: It's Elementary
Audience: K-6 Teachers
Location: 112

A Repair Kit for Grading: Fifteen Fixes for Broken Grades

Communicating about student achievement requires accurate, consistent, and meaningful grades. Student achievement isn’t only about “doing the work” or accumulating points. As many schools are focusing on the implementation of standards and competency-based learning, questions are arising regarding how to implement a standards-based grading system. This workshop will offer participants practical suggestions for implementing a grading system based strictly on student achievement. Grades are artifacts of learning, and students need to receive grades that reflect what they have actually learned. This workshop will prepare participants to understand basic perspectives on grading from current experts in the field, determine grades so that they are accurate representations of student learning, identify and control for sources of bias that can distort grades, work with colleagues to establish grading practices that support the learning process, and understand how to report student achievement using standards-based grades.

Presenter: Ken O'Connor, Author & Educational Consultant
Strand: Best Practices in Pedagogy and Assessment
Audience: 6-12 Teachers, Learning Specialists, Curriculum Specialists, Administrators
Location: 202

The Power of Formative Feedback

Effective feedback practices can improve mathematics learning, but what are those practices? Come learn some tools to introduce teachers to principles of formative feedback and help them begin to implement specific practices in their classrooms! We'll view video examples of the practices in action, and tie these ideas to the Common Core State Standards. Bring your laptop or tablet for an activity discussing examples of feedback with sample student work.

Presenter: Cheryl Tobey, Senior Mathematics Associate, Education Development Center
Strand: Amplifying STEM
Audience: All
Location: 216

Gregg Stone: BYOA = Build Your Own App
Learn how Mobile App Development can lead to the development of essential skills in your students. A design approach to app creation is demonstrated in a hands-on workshop with reference to specific broad-based learning initiatives and standards.
In this session, teachers and administrators are introduced to a professional, online, app-building tool they can use to make their own mobile apps. They will learn that building apps does not have to be a tedious and daunting project. A unique "coding to learn" approach gives students a platform that allows them to easily build a content-rich, visually impressive, and professional mobile app. The program, called MAD-learn, enables students to quickly see the finished product, and use technology creation as a means of serving the community, solving problems, building entrepreneurialism, and sharing one's ideas with the world.
Presenter: Gregg Stone, MAD-learn
Strand: Contemporary Literacy
Audience: All
Location: 254

Tools to Tell a Tale – Developing Story Telling and Writing Skills, With and Without Technology
Tim Rylands and Sarah Neild will guide us through a process that uses artifacts, images and free Web 2.0 tools to bring worlds of words alive, supported by story telling, drama activities, developing character, settings and dilemmas. Join us, as we travel across dangerous terrain, through swamp-infested landscapes, and to the top of crumbling towers, all through the power of inventive technologies. An intriguing, imaginative and exciting experience, for those joining the journey, leaving everyone with copious practical ideas, approaches and technical tools to take back and use in their own teaching, with children of all ages, and abilities.
Presenters: Tim Rylands, Educational Consultant, Sarah Neild, Educational Consultant
Strand: Contemporary Literacy
Audience: All
Location: 258

Nice is Not Enough: How to Establish a Task-Involved Motivational Climate in PE and Sport Settings
Information disseminated in this session is grounded in goal-orientation theory. This research to practice workshop provides physical education teachers and coaches with strategies so they can leave prepared to establish a learning community that is committed to improvement, personal best, and task mastery.
Presenter: Amanda Stanec, Founder, Move Live Learn
Strand: Excellence in Teaching, Coaching, and Athletic Development
Audience: K-12 Teachers, K-12 Coaches
Location: 262

Building K-8 Maker Culture
Makerspaces – informal networks and communities of people who tinker, invent, make stuff, and collaborate – are popping up all over the United States. One may be coming to a school near you! In physical, virtual, and hybrid spaces some of the very students who are disengaged in school are wildly active in collaboratively developing and sharing ideas and projects about hacking, programming, building, and prototyping. We'll look at some easy ways that you can engage students as creators, not just users. What does it mean to have a culture of "making" in your school? Learn some strategies to envision, design, and engage students in problem-solving, critical thinking, and revision -- by using their hands to program, build board games, control robots, make jewelry, hack fashion, and more.
Presenter: Kristin Fontichiaro, Author and Professor, University of Michigan
Strand: It's Elementary
Audience: K-8 Teachers, Curriculum Specialists
Location: Maker Lab

PM Sessions: 12:30 – 1:30

PBL in the Elementary Grades
Interested in trying PBL, but can't imagine it with younger grades? In this session, you will realize that PBL is possible for all ages and all grades! Come listen to how it is done in 2nd grade with 7-8 year olds, examples of projects, and the impact it's had on our kids!
Presenters: Kristen Kaiser and Robin Campbell
Strand: It's Elementary
Audience: JK-5 Teachers
Location: 208

Innovating with Infographics: The STEM Literacy through Infographics Project

Creating infographics, incorporating both traditional graphs and other visualizations, can help students increase skills for interpreting and representing data and ideas. Students who learn how to critically "read" and create infographics will be better prepared to deal with 21st century communications. They will have a more critical understanding of the connection between graphic design and visualization used in media and the underlying mathematical reasoning. Additionally, they will better understand sources of credible data, especially online sources. They will also gain valuable experience related to multiple practices in contemporary educational standards, and at the kind of data analysis and communication with graphical representations gaining increasing importance on assessments, such as the ACT. In this session, educators exploring the use of infographics in high school classrooms and out-of-school programs will share techniques and lessons learned. Participants will become familiar with the cutting edge research on the visual representation of understanding being carried out by the STEM Literacy through Infographics initiative. This project, funded by the National Science Foundation, is centered at the University of Colorado Boulder but involves classroom and researchers from across the United States.

Presenters: Rose Davidson, Cynthia Graville, Rob Lamb, and Alan Newman, St. Joseph's Academy
Strand: Contemporary Literacy
Audience: 6-12 Teachers
Location: 210

The Beginner's Guide to Making Better People: How a value-based learning culture can reinforce values, good decision-making, and personal success in an increasingly fragmented and distracted world.

Students from privileged backgrounds are in dire risk, as described, most recently, in the cover story of the December 15 issue of *The Atlantic*. They are under myriad pressures, receive insufficient supervision, and have the means to get into real trouble, whether that means turning these pressures inward on themselves or acting out through substance abuse or other risky behaviors. What is really at risk here are these kids' values—what is most important to them. This workshop will lead participants through the latest research, interspersed with turn-and-talk sessions that will allow teachers and administrators to identify the risks, assets, and values of their own school communities. They will be given a framework they can apply to their community to leverage existing human and cultural assets to promote engagement and make their students not only better academicians, but even, according to the values promoted by the school, better people.

Presenter: Dr. Brad Philipson, Fort Worth Country Day
Strand: Best Practices in Pedagogy and Assessment
Audience: JK-12 Teachers, Administrators
Location: Room 212

Don't Procrastinate, Play NOW!

Have you ever seen a child so deep into an activity that he ignores the world around him? Learning through play opens the mind to new possibilities that were never thought possible before. Bringing play into the classroom helps strengthen focus, independence, and problem solving, while also eliminating the fear of failure.

Presenter: Noah Hollenkamp, City Academy
Strand: Amplifying STEM
Audience: JK-8 Teachers, Curriculum Specialists, Learning Specialists
Location: 214

Reflective Assessment in Practice

Brain research has clearly demonstrated the positive impact that metacognition has on student achievement. This session will delve into specific classroom strategies and techniques that encourage metacognition in students, as well as providing formative assessment strategies that provide beneficial feedback for both students and teachers during units of study.

Presenter: Laurynn Evans, Francis Parker School
Strand: Brains on Learning
Audience: 3-12 Teachers, Curriculum Specialists, Learning Specialists
Location: 252

Coaching the Thinking of Your Athletes
Coaches often wonder why players cannot remember a particular game plan or set play. Frustration sets in for coaches when the ideas trained in practice are not carried out during games. As a result, coaches yell, punish, or over train their players in the hopes things will improve in the future. Studies have shown that upwards of 90% of an individual's thoughts are unconscious. That being the case, nine out of 10 thoughts players have during games and practices will be unconscious rather than conscious. This session will examine the importance of coaching the unconscious thinking of players. Strategies will be explained and practical ideas shared on how to guide conversations in order to remain objective. The obstacle many coaches encounter when talking with players and parents is to become subjective, thus operating in a "subjective status quo".
Presenters: Mike Quante and Bill Daues, ASET – Association for Soccer Education and Training
Strand: Excellence in Teaching, Coaching, and Athletic Development
Audience: All
Location: Leadership Conference Room

PM Sessions: 1:45 – 2:45

Bringing Twitter, Seesaw, and More into your Elementary School
This session will help you start using Twitter and Seesaw to connect parents to your classroom. Likewise, students engage in authentic real world learning and sharing that lets their work reach outside audiences. We will also share knowledge about similarities and differences for using Kahoot and Quizizz in meaningful ways with your students and teachers.
Presenters: John Hurston and Ryan Heming, Woodward Academy
Strand: It's Elementary
Audience: JK-5 Teachers, Curriculum Specialists, Learning Specialists, Librarians, Administrators
Location: 208

A Second LAP: Institutional Commitment to Authentic Student Learning
The Local Action Project at MICDS is a social entrepreneurship, problem-based learning unit for all 11th grade students combining our American Literature course with our Advisory/Enrichment programming. This year, students will examine the issues of Health, Homelessness, and Transportation in our regional area. This design thinking enterprise pushes students to identify an issue they finding compelling and to create an advocacy, policy, or service solution they can make actionable. Ultimately, students will incorporate these authentic projects into the community service component of their graduation requirements. Attend this session to learn how alumni now play a role in providing select groups entrepreneurial insights into making student projects actionable in the real world. Nuts and bolts considerations for scheduling, logistics, and troubleshooting in each phase of the project will be considered.
Presenter: Matthew Mahaffey, MICDS
Strand: Contemporary Literacy
Audience: 9-12 Teachers, Curriculum Specialists, Librarians, Administrators
Location: 210

Teachers and Students Win Through Self-Assessment
Do your students ever use self-assessments in your classroom? Have you ever considered if and how self-assessment impacts student learning and achievement? (Hint: You'll start using self-assessment more often after hearing the results!) Discover how these questions about self-assessment were answered when studied through action research. You will leave this session empowered to examine your teaching practices through action research, and you will be motivated to use self-assessments with your students tomorrow.
Presenter: Heather Tibbetts, Principia School
Strand: Best Practices in Pedagogy and Assessment
Audience: JK-12 Teachers
Location: 212

Authentic Research in Marine Biology
Diving into a marine science course might have you floundering, but navigating through these waters can be as simple as collaborating through a PBL. For the last nine years I have been teaching marine biology to juniors and seniors in high school. This session will explore two student centered approaches to learning used to explore the marine science curriculum. The first involves an authentic project that the students create and research using a variety of scientific principles. This experience is envisioned and executed by the student and completed over the course of the academic year. Throughout the process, students not only strengthen their knowledge of science methodology, but they also explore scientific studies and their applications all while considering the ethics of their own research. The second aspect of the course is a complete week long intensive case study of the Florida Keys ecosystem. Through this brief discussion participants will have the opportunity to think about and discuss ways to explore the curriculum through a submersive experience in science. Whether it is a week-long intensive ecological case study in the Florida Keys, or the authentic research that students are doing with support from universities, participants in marine science become masters of their own learning.
Presenter: James Fry, Malvern Preparatory School
Strand: Amplifying STEM
Audience: 9-12 Teachers, Curriculum Specialists
Location: 214

Helping Students Learn How to Learn
Across the United States, study skills are not a part of the standards students are expected to master each year. This is unfortunate as study skills can be applied to any learning situation, not just classroom learning. Researchers agree that study skills are necessary for success in school, but teachers, under pressure to meet curriculum standards and requirements, tend to focus on content rather than on teaching students skills to help them absorb that content. Teachers may assume parents are teaching their children study skills while parents may assume that study skills are taught as part of classroom instruction. As a result, many students fail to develop effective learning strategies, especially students with mild disabilities or learning or behavior problems. These students, who often have trouble self-monitoring and staying organized, can perhaps benefit the most from explicit study skills instruction.
Presenter: Dr. Sara H. Barnett, Saint Louis University
Strand: Brains on Learning
Audience: 3-12 Teachers, Learning Specialists
Location: 252

Use Your Influence
In this session we will highlight the significance of the influence that coaches have in the world of athletics. We will encourage participants to develop their athletes as players, people, students and teammates.
Presenters: Molly Grisham, Influence LLC and Jen Brooks, Ursuline Academy
Strand: Excellence in Teaching, Coaching, and Athletic Development
Audience: 6-12 Teachers, Coaches, Administrators
Location: Leadership Conference Room

PM Sessions: 3:00 – 4:00

Portrait of the Co-teaching Model in an Elementary Classroom
In this session, educators will gain a deeper understanding of how to successfully implement co-teaching in an elementary classroom. This process includes recruiting, building, and sustaining general educators and ELL teachers passionate about co-teaching, co-planning, building a positive working relationship, picking an appropriate teaching model, adopting lessons for ELLs, and establishing roles for each teacher. We will further share several examples of what a co-teaching classroom looks like including pictures and videos of mini-lessons, student work, and students showing their learning. The session will also give participants the opportunity to ask questions in a discussion format to help them pursue co-teaching in their own schools.
Presenters: Andrew Dawson and Lynn Hennessy, Mesnier Primary, Affton School District
Strand: It's Elementary
Audience: JK-5 Teachers
Location: 208

More than Googling: Teaching 21st Century Humanities Research Methods

How do you most effectively help high school students develop and build on their research skills? What do we mean when we talk about doing research in the humanities? To students, "researching" something may seem as easy as typing a few words into Google. To educators and librarians, this is often the last approach we want students to take. In the 21st century, teaching humanities research skills means taking a hybrid approach with both print and online resources. Ultimately, we need to teach students that print materials are still relevant (and how to use them effectively), while also helping them learn to navigate online databases, websites, and content as they manage the research process. This session will include two components. First, participants will learn about the Contemporary Global Issues research methods course required for sophomore students at MICDS and how faculty are teaming with school librarians to create a scaffolded skills approach to the research process. The main goal for this session, however, is to learn from one another: participants will share their own experiences and ideas for teaching effective research methods. The session will be most beneficial to high school history and English faculty, as well as librarians.

Presenter: Tanya Roth, MICDS
Strand: Contemporary Literacy
Audience: 9-12 Teachers, Librarians
Location: 210

Standards-Based Feedback and Assessment: A Report from the Trenches

One year ago, a dozen MICDS Upper School teachers accepted the charge to design and implement comprehensive standards-based feedback and assessment schemes in their classes. The "pilot group" included teachers from every discipline, who worked together to better align curriculum with standards, develop more effective feedback, and produce grades that better reflect academic achievement. In this session, three of those teachers will share their specific experiences in English, World Languages and Math. With ample time for questions, attendees will not only learn about the ins-and-outs of our work—both the triumphs and the defeats—but also receive a list of helpful resources along with models of various, discipline-specific standards-based grading schemes.

Presenter: Steven Crumb, David Terrell, and Amy Scheer, MICDS
Strand: Best Practices in Pedagogy and Assessment
Audience: 9-12 Teachers, Curriculum Specialists, Administrators
Location: 212

Do's and Don'ts for Educating the STEM Student: Come Listen to the Experts!

Do you ever wish you knew exactly what STEM students needed before going to college? Wouldn't that make it easier to educate them? Well, there is a way to find out. Come listen to this panel of STEM college students! We expect them to emphasize the fact that more science classes were desired. Did you know that more science mentorship opportunities were also sorely missed? They also wanted in-depth discussion of some topics and much less of others. They wanted to meet some community STEM leaders and not others. Their opinions regarding STEM curriculum sources, electronics in the classroom, environmental involvement, teaching methods, homework choices, social interactions, hands-on activities, extracurricular activities, research options, safety, ethics, and future directions are strong. They have insight into which teaching strategies work and which don't. Come ask the experts what they think! They are a wealth of knowledge.

Presenter: Dr. Agnes Meyo, Psychologist and Student Panel
Strand: Amplifying STEM
Audience: All
Location: 214

The Brain in the Classroom

Every day science gets another step closer to unlocking the mystery of the brain's potential. Neuroeducation is the field of research that focuses on the brain and its role in education. In this session, we will introduce neuroeducation and how research in the area can improve your classroom. We will also discuss "Brain Myths" that are prevalent in the educational world and the current research that debunks them. This is for educators of all subject areas and all age ranges. No prior knowledge required.

Presenter: Judy Jones, Cor Jesu Academy
Strand: Brains on Learning
Audience: All
Location: 252

Sports Braining
Too often coaches use subjective and non-contextual terms such as confidence, sharp, and focus. These words cannot be trained, players find these words difficult to understand and assume responsibility for improving. Vague words, such as the ones listed above, provide players the opportunity to escape responsibility and this makes coaching more difficult. Confidence is simply the ability to think you can do something. At the heart of every issue is a players thinking. This session will examine how to speak with players in ways that enables them to realize they are responsible for their thoughts and thus, responsible for improving. Training ideas and examples will be discussed that can be implemented regardless of sport, age, or gender.
Presenters: Mike Quante and Bill Daues, ASET – Association for Soccer Education and Training
Strand: Excellence in Teaching, Coaching, and Athletic Development
Audience: All
Location: Leadership Conference Room

PM Workshops: 1:00 – 4:00

Shifting to the Classroom of the Future
The classroom of the future is an exciting idea full of romance and speculation, but the "future tense" of it all seems to absolve us of accountability to create it *right now.* Applied and sustainable innovation rarely occurs in giant leaps, but instead in steps and stumbles. In this workshop, through hands-on collaboration and work, teachers will work through the following questions, sharing their insights, ideas, and plans: what is a "future classroom", and how does it compare to the way I teach today, what changes can I make in the short-term to modernize my approach to teaching, what is the best approach for me long-term to continuously reflect on my craft as a 21st century teacher, and what are the barriers to this kind of thinking, and how can and should I respond?
Presenters: Jackie Gerstein, Author and Online Graduate Instructor, Terry Heick, Director, TeachThought
Strand: Contemporary Literacy
Audience: All
Location: 104

Grading in a Differentiated Environment
There's no question that grading evokes many emotions in teachers, administrators, parents, and students alike. For teachers, grading is one of the most difficult and troublesome aspects of teaching. Despite the challenge, grades can be valuable tools in identifying strengths and weaknesses in students' understanding as well as communicating important information to varied stakeholders. Check your emotions at the door and join us as we look into ways to improve grading procedures when working in a differentiated classroom.
Presenter: Tonya Moon: Author and Professor, University of Virginia
Strand: Best Practices in Pedagogy and Assessment
Audience: All
Location: 108

Using Competency Based Learning During the Early Childhood Years
Helping children experience early learning success and acquire essential skills by third grade is a crucial part of any school reform effort. Yet, many teachers and children are overwhelmed by the ineffective curriculum-driven education system and the "rush to cover" climate in schools. In the near future, schools will shift to using competency based learning, an approach which personalizes learning for essential early learning skills. By identifying essential learning outcomes in all the domains of early childhood, assessing student readiness for learning in these areas, teaching kids at their level of readiness, and carefully monitoring progress, we can help our student build the Core of academic and social-emotional competencies which predict learning success for life. This workshop will reference Dr. Sornson's book *Over-Tested and Under-Prepared: Using Competency Based Learning to Transform Our Schools.*
Presenter: Bob Sornson, Author and Founder of the Early Learning Foundation
Strand: It's Elementary
Audience: K-6 Teachers
Location: 112

How to Grade for Learning

This workshop is intended for those who want an introduction to the main issues in standards-based grading. It will consider what teachers should be grading, how to assess for grades, and how to combine grading components. Participants will gain a clear understanding of the standards for quality in grading, purposes of grading, and the issues and concerns for traditional grading practices.

Presenter: Ken O'Connor, Author & Educational Consultant
Strand: Best Practices in Pedagogy and Assessment
Audience: 6-8 Teachers, 9-12 Teachers, Learning Specialists, Curriculum Specialists, Administrators
Location: 202

Moving Learning Forward by Uncovering Student Thinking

Come learn about a variety of short, easy-to-administer diagnostic assessment probes and classroom techniques for formative assessment. Tasks are designed to uncover student misconceptions, engage and motivate students, activate thinking and promote metacognition, provide stimuli for mathematical discussion, and improve questioning and responses.

Presenter: Cheryl Tobey, Senior Mathematics Associate, Education Development Center
Strand: Amplifying STEM
Audience: All
Location: 216

Tools, Strategies and Resources for Students with Learning Differences

This workshop highlights technology ideas for all students but are especially helpful for students with learning differences and disorders that make learning difficult. In our regular classrooms we seem to be getting more and more students who suffer from differences and/or disorders such as Dyslexia, processing issues, anxiety, depression, emotional trauma, ADHD, etc. Many of our students have difficulty receiving and processing information in certain skill areas such as reading, writing, listening, speaking or math. In this session we will share our favorite technology tools and programs that can be helpful for students whose brains are wired differently. Our goal is to collaboratively share ideas and best practices to help children with learning differences achieve success in the classroom.

Presenter: Connie White, Director of Learning Design, Woodward Academy
Strand: Brains on Learning
Audience: All
Location: 254

ICT to Inspire!

Tim and Sarah will present many inspiring, accessible tools and ideas for raising the level of writing, speaking and listening, and creativity in children of all ages. They will lead an exploration of virtual worlds, Web 2.0 and visual literacy elements, and how they have had a huge impact on raising children's confidence and collaboration, across the creative curriculum. Using, and creating, relevant, engaging resources, to motivate, and enthuse, children of all ages and abilities. Come prepared to be inspired and to leave with many practical ideas to apply back in the classroom. After showing a huge, and accessible, range of ways to engage, and motivate students, Tim and Sarah will reinforce how these elements are not only essential for quality learning experiences to take place, but how they can also have a massive impact on standards, achievement…and enjoyment!

Presenters: Tim Rylands, Educational Consultant, Sarah Neild, Educational Consultant
Strand: Contemporary Literacy
Audience: All
Location: 258

Physical Literacy and the Classroom: All Teachers Should Teach the Whole Child

Physical literacy is the competence and confidence to be physically active in a wide variety of settings, to benefit yourself, others, and the community. The research is plentiful - physical activity positively influences learning, physical, mental, and social health. Therefore, the focus of this session is to optimize delegates' ability to provide a physically literate enriched classroom for their students.

Presenter: Amanda Stanec, Founder, Move Live Learn
Strand: It's Elementary
Audience: K-6 Teachers
Location: 262

Data Visualizations: Reading and Writing Data with High School Students
Whether they're viewing a graphic on the nightly news, creating a pie chart to accompany their English essay, liking an infographic in their Facebook feed, or engaging with charts and graphs when doing scholarly reading, high school students see and create a lot of data in visualized form. And those visualizations don't always follow the rules they learn in math class: data may be cherry-picked, truncated, or displayed in non-traditional ways. In this session, we'll talk about emerging practices to establish "rules of thumb" to help high school students navigate this new genre of reading and writing.
Presenter: Kristin Fontichiaro, Author and Professor, University of Michigan
Strand: Contemporary Literacy
Audience: 7-12 Teachers, Curriculum Specialists
Location: Maker Lab

Conference Close

4:10 – 4:30 PM
Brauer Auditorium