Opportunities to Improve K-12 Instruction

Professional Development Catalog

FACTS
EDUCATION SOLUTIONS

With more than 40 years of professional experience, FACTS Education Solutions is a premier provider of custom professional development services to schools and districts. We're driven to enhance the quality of teaching and leadership practices, ultimately supporting teachers and administrators in their quest to elevate success throughout their schools.

We partner with nationally respected educational specialists to provide research-based professional development and integrate the latest in technology to help schools achieve and maintain educational excellence.

The courses featured in this catalog have proven highly successful for content specialists and practitioners and each can be tailored to your school's specific needs.

To inquire about any of the following professional development courses, call 866.213.4249 or email FACTSed@FACTSmgt.com.

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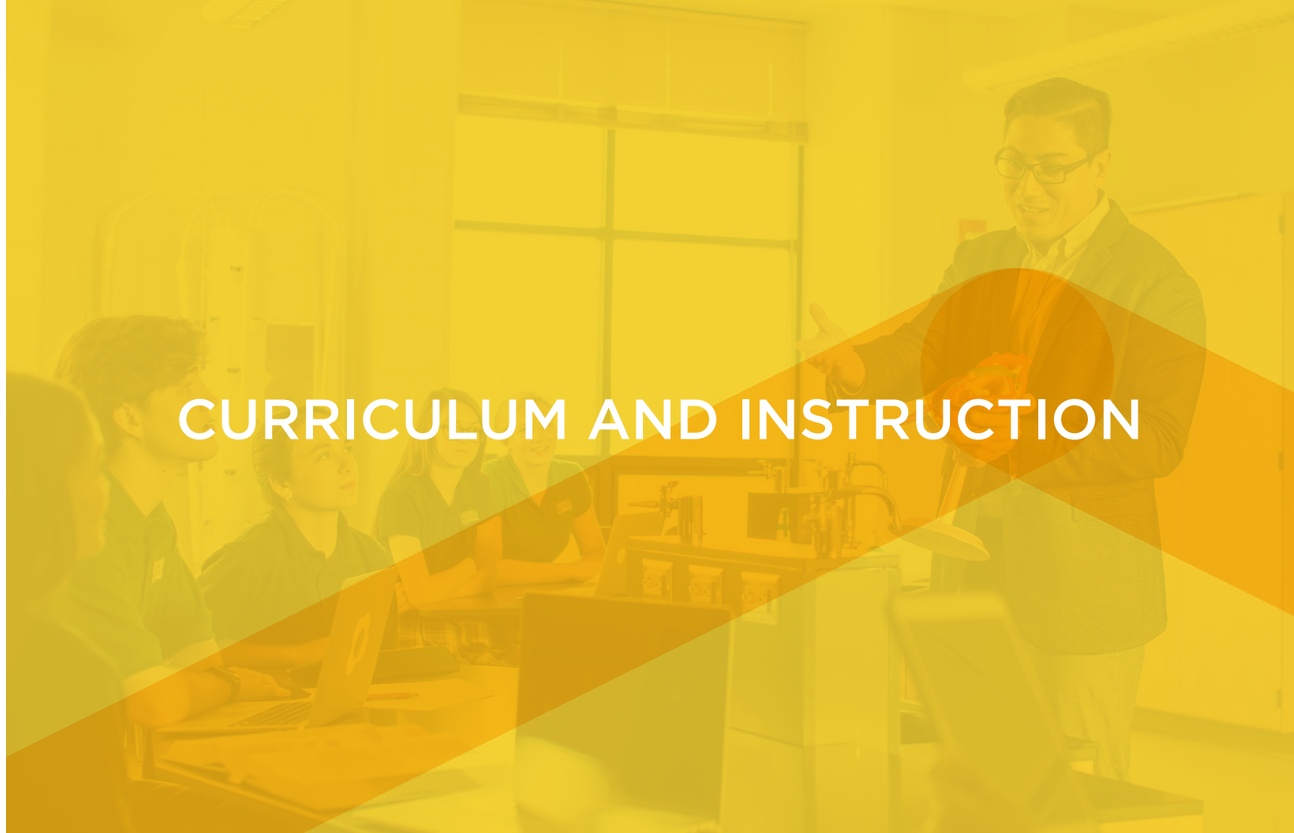

CURRICULUM AND INSTRUCTION

CURRICULUM AND INSTRUCTION

ARGUMENTS, OPINIONS, AND UGs, OH MY!

This workshop helps teachers reflect on their approach to opinion/argument writing instruction. We start with an interactive learning activity, then review research on argument writing, practice creating stronger writing prompts for the three argument types (fact-based, judgment-based, policy-based), and see where to find the most relevant evidence (text, data, etc.). Multiple unit planning tools and sample assessment prompts will be provided for all content areas and grade levels.

CONSTRUCTED RESPONSES, ARGUMENTATIVE ESSAYS, AND OTHER FORMS OF WRITING

During this workshop, participants will take an in-depth look at the production and distribution of writing. This course also covers tips to help students write responses to open-ended questions — occasionally involving contextual information like graphs and charts.

Key takeaways include the ability to guide students to compose content-based argumentative essays. This skill helps students gain a better understanding of the differences between persuasive and argumentative pieces. This workshop helps participants clarify appropriate approaches to teaching each form of writing. The use of graphic organizers and a wide array of resource materials is also investigated.

CURRICULUM AND INSTRUCTION

CROSS-CURRICULUM IMPLEMENTATION OF TECHNOLOGY

This workshop empowers all K-12 teachers to use standards-based instruction that integrates technology and digital tools. Participants learn about a variety of digital resources and apps, and how each is implemented in the instruction of multiple subject areas. In addition, this interactive presentation highlights student work and cross-curricular lesson modifications.

CURRICULUM MAPPING (1 of 2)

There are many research-based models designed to cultivate curriculum and instruction decision making. This includes creating an environment where educators and students are involved in the act of learning including: students as learners, teachers as learners, teachers as designers of student learning, personalized professional learning, and students as co-decision makers with teachers about their learning.

CURRICULUM MAPPING (1 of 2, continued)

The curriculum mapping model, based on Dr. Heidi Hayes Jacobs' work (1997, 2004, 2006, 2008, 2009, 2010), synthesizes aspects of traditional and contemporary models that focus on recognizing and enhancing learning, assessing, and teaching. Dr. Jacobs embraced the earlier mapping work of Fenwick English by articulating types of curriculum maps, as well as the need for vertical and horizontal alignment, cyclic reviews, and ongoing curricular dialogues.

CURRICULUM MAPPING (2 of 2)

Curriculum mapping training is provided as a series of sessions based on the private and/or public school educators' identified level of understanding. Recognizing that mapping is an ongoing process, this training supports the active engagement and collaborative participation in an organization's ongoing curriculum, assessment, and instruction decision making. As the moral of The Tortoise and the Hare conveys: start slow and purposeful to reach sustainability. Throughout this program, educators will learn how to be purposeful in mapping for both short- and long-term educational gains.

EXPOSITORY WRITING

Understanding the new direction of expository writing includes a focus on higher-order questioning, answering the right questions, formal writing process, and using graphic organizers as a tool for expository writing. During this course, the Toulmin Writing Model and information writing will be covered. How to assess expository writing with rubrics and hands-on activities, and how to create common language for writing is also covered.

FIVE ESSENTIAL INSTRUCTIONAL SHIFTS FOR SUPPORTING RIGOROUS STANDARDS

This course covers the five essential instructional shifts that accentuate mathematical practices and the content they support, emphasizing how authentic video in classrooms enhances these shifts. In addition, participants will engage with high cognitive demand tasks and learn how to support them during instruction.

Participants will also explore practices — with respect to teacher and student actions — to help them understand the norms that are supportive of student engagement in the practices. Creating a shared image of classrooms where the focus is on student engagement will also be explored.

The five essential instructional shifts of focus include:

1. Students provide strategies rather than learning them from the teacher
2. Teacher provides strategies “as if” from students
3. Students create the context
4. Students do the sense making
5. Students talk to students

IMPLEMENTING CLOSE READING: What Administrators and Teachers Need to Know and Do

Everyone talks about implementing college and career skills aligned to Close Reading in their schools, but what does that really mean at a practical level for teachers in a classroom setting? This workshop demonstrates how to address key challenges facing schools when looking at implementing college and career readiness skills in the area of close reading.

Participants will learn: best practices for aligning instruction through generating text-dependent questions, how to design Close Reading exemplars, and how to directly prepare students for assessments. Participants will also gain a clear understanding of college and career readiness skills and the teacher-friendly tools they need to successfully implement standards in their classrooms.

IMPLEMENTING MATH STANDARDS

This hands-on workshop incorporates technology interwoven into specific lessons and activities to support the instruction of math standards. Workshop content focuses on the step-by-step processes of teaching decimals, fractions, representations of basic number operations, and number talks — including specific ways to conduct them.

LITERACY DEVELOPMENT FOR ELEMENTARY AND MIDDLE SCHOOLS: Digital Video Series

As an alternative option for professional development, this digital video series allows teachers to participate in training for literacy and reading development at their convenience. Each video is approximately 20 minutes in length and includes research-based strategies and classroom lesson ideas.

This training features the following topics:

- Core knowledge
- Informational comprehension
- Phonemic awareness
- Phonics
- Sight words
- Word maps

MATHEMATICS WORKSHEETS DON'T GROW DENDRITES: 20 Numeracy Strategies That Engage the Brain (K-8)

M-A-T-H is known to be the shortened form of the word mathematics. However, it is also a mnemonic device that stands for "Math Ain't That Hard." This especially rings true when brain-compatible strategies are used to teach mathematics.

Participants will learn to group math content according to the five focal points of the National Council of Teachers of Math. They will also experience how easy it can be teaching groups when students are role-playing, drawing out, or visualizing a word problem. Whether singing multiplication facts or the quadratic equation, teaching math while using 20 brain-compatible strategies makes the content understandable, memorable, and fun!

SIX + 1 TRAITS OF WRITING

This course explores the Six + 1 Traits of Writing and how to build student confidence in writing skills while advancing overall classroom achievement. Discover practical mini-lessons for today's 21st century learners in addition to engaging technology and online literature resources for all levels.

Additionally, learn the common language framework and how to maintain consistency in assessment while motivating students to revise and edit.

FACTS EDUCATION SOLUTIONS

SCIENCE WORKSHEETS DON'T GROW DENDRITES: 20 Instructional Strategies That Engage the Brain

Out of every subject area, science could be the most necessary to teach using hands-on, relevant content. This workshop was originally taught by one of our nation's best science teachers, Warren Phillips. Warren was named the 2004 Disney Teacher of the Year and one of the 2007 USA Today Top Teachers, and has inspired countless students.

During this workshop, attendees will learn to teach selected content standards delineated by the National Science Teachers Association through the use of 20 brain-compatible instructional strategies. This includes singing the States of Matter, learning the story of the Amber Rock to help students understand the discovery of electricity, and witnessing countless experiments that can be replicated in the classroom. This workshop always leaves participants wanting more!

SOCIAL STUDIES WORKSHEETS DON'T GROW DENDRITES: 20 Instructional Strategies That Engage the Brain

In this highly interactive workshop, participants explore situations like the following: cramming for a social studies exam only to forget the material the moment the test is over, unforgettable stories from teachers about historical people and places, forming a living timeline to help remember events in chronological order, and creating a song or completing a project to help compare and contrast land forms or types of government. This course will cover 20 brain-compatible strategies for teaching the social studies standards in ways that are truly unforgettable.

STUDENT AND TEACHER INTERACTIONS THAT PROMOTE CONTENT LEARNING THROUGH LITERACY

During this course, attendees will explore ways to guide students to approach content learning through reading, writing, listening, and speaking. Participants learn how to support students as they decipher complex texts through close, critical reading. By looking at ways to develop strategic text-dependent questions, attendees will be able to drive students back into the text for deeper processing of content.

A key takeaway from this course will be the ability to plan engaging interactions focused on content ideas, building knowledge, and preparing students for writing and presentations. Specific strategies, including conversation cards and generative sentences, will be shared as a way to engage students in content learning.

Attendees will also investigate the use of academic language to support thinking and discourse, and further explore the idea that information and opinion gaps require communication.

THE MOST POWERFUL READING AND VOCABULARY STRATEGIES THAT ENGAGE STUDENTS AT HIGH LEVELS

When students understand what words mean, reading comprehension improves. In this session, participants will learn top strategies to engage students in the reading process, including: how to own words to improve students' reading comprehension, writing clarity, and speaking. Try out these powerful reading and vocabulary strategies to support learners on their journey of reading independent-level texts, instructional-level texts, and complex texts.

THE MOST POWERFUL WRITING STRATEGIES THAT ENGAGE STUDENTS AT HIGH LEVELS

Writing is one of the most rigorous thinking tasks we can ask the brain to do. There are three types of writing that should occur in a classroom on a regular basis. Learn not only how to motivate students to want to write across the curriculums, but to better understand when each can be a powerful strategy. Participants will engage with 10 of the best ways to get students involved in writing about what they are learning. When successfully implemented in the classroom, students can't wait to share their writing and receive feedback from others, ultimately realizing how much more they can learn by writing about their standards.

FACTS EDUCATION SOLUTIONS

CURRICULUM AND INSTRUCTION

UNDERSTANDING AND IMPLEMENTING COMPLEX TEXT SELECTION AND CLOSE READING PRACTICES

Gain a foundation for the complexity of texts and Close Reading instruction, ultimately learning how to show their link to the next generation of assessments. Participants explore best practices and strategies in formulating text-dependent questions and identifying complex texts.

WRITING AS A MEASURE AND MODEL OF THINKING

As schools face increasing accountability and public demand for improved student performance, the need for high-yield, research-based strategies to increase student academic achievement grows. One of the most influential and productive strategies employed by schools is the systemic use of writing as the assessment of curriculum standards. Writing with a focus on modeling and measuring thinking skills produces much more than traditional “writing across the curriculum” methods. In this session, strategies to build writing as a reflection of thinking are discussed. Participants practice “Quick Writes” based on Dr. Robert Marzano’s metacognition power strategies, and plan for thinking/writing targets for all students.

DATA AND ASSESSMENT

ARE YOUR STUDENTS THINKING DEEPLY OR JUST WORKING HARDER? Infusing Deeper Thinking into Instruction and Assessment for All Students

Explore the concept of “cognitive rigor” and dispel common misconceptions about Depth of Knowledge (DOK). This workshop can be customized for specific content areas and/or grade levels (Pre-K-12).

Participants will:

- Understand how the Hess Cognitive Rigor Matrix was developed and how to use it for planning instruction and assessment
- Use content-specific CRMs to analyze a range of instructional and assessment examples
- Use content-specific CRMs to analyze your own assessment examples
- Explore how the CRM illustrates teachers’ and students’ role “shift” with deeper questioning, complex tasks, and strategic scaffolding

ASSESSMENT: How Do We Know They’re Learning?

It stands to reason that if students are not learning from the way they are being taught, then teachers must teach them the way they learn. Whether participants refer to them as multiple intelligences, like Howard Gardner, or to them as gifts, like Marcia Tate, students come to class with many different ways of learning.

Experience 20 brain-compatible strategies for unwrapping those gifts, such as role play, drawing, music, and movement. To help identify whether or not these strategies are effective, participants also experience more than 50 ways (including the use of products and performances) to determine if those strategies are making a difference in student achievement. This workshop deals with both traditional and more authentic forms of assessment, since both forms should be included in a student’s overall portfolio.

DATA-DRIVEN DECISION MAKING FOR SCHOOLS

There is a wealth of data points collected throughout the school year: assessments, surveys, enrollment information, etc. All of these pieces of information can help school leaders identify trends across the school and make informed decisions for improvement.

This workshop reviews the types of data that should be collected, tools that facilitate interpreting the data, and how to use data to reshape school culture/climate, curriculum, professional development, and more. See the effect informed decision making can have on motivating teachers that are in need of a little revitalization of their professional practice. Participants will leave with a plan that can be implemented in their school.

ENGAGING 21ST CENTURY MINDS WITH THE FORMATIVE ASSESSMENT PROCESS:

"The Instructional Cha-Cha's"

The "Cha-Cha-Cha's" summarize the steps toward successfully implementing one of the most powerful strategies we can implement in our 21st century classrooms: the formative assessment process. Students must acquire a small chunk of content based on these standards; they then must "chew" or process that content in different ways. While they're chewing or thinking about the content, educators are checking for understanding and then altering their instruction, if needed.

According to research, this process can double the speed of learning! In this session, participants receive the best pre-assessment and formative assessment ideas to use the next day. When you bring all these pieces together, a data-driven classroom with high engagement and achievement can be attained.

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DATA AND ASSESSMENT

RETHINKING TRADITIONAL ASSESSMENT IN A TECHNOLOGY-RICH CLASSROOM

With so many technology tools available for schools, see how you can leverage mobile devices to engage students and transform assessment into engaging exercises that inspire and motivate our learners. Explore the paperless classroom and tools that can be implemented in your classroom quickly and easily to give more traditional methods a dynamic change. Bring your own device and join our interactive classroom.

THE CONNECTION: Curriculum, Instruction, and Formative Assessment

This workshop provides educators with strategies for implementing formative assessments to measure student progress, plus how to use that data for planning the next steps in the learning process. This training is designed to help educators interpret data to drive instruction and increase student academic achievement. Research-based instructional strategies and resources are used to differentiate instruction based upon assessment results that are explored throughout.

DATA AND ASSESSMENT

THE GOOD, THE BAD, AND THE DATA: Effectively Using Data to Increase Student Learning

Teachers think and hope they're being effective, but how do they really know? By gathering, analyzing, and interpreting student data, educators can improve classrooms or schools. This session examines the ins and outs of Data-Driven Decision Making (D3M), debunking myths, demystifying the process, and developing strategies that can be used at all levels of school management.

THE POWER IN PURPOSEFUL, FLEXIBLE GROUPING

Learn powerful research about how effective flexible, purposeful grouping can be. Participants will be grouped over five different ways throughout the workshop. Be prepared to have fun, move often with a purpose, and acquire the tools to implement this highly differentiated process in a classroom the next day! Gain a better understanding about how daily data collected through the formative assessment process can guide instructional decisions all day long.

FACTS EDUCATION SOLUTIONS

DATA AND ASSESSMENT

WHAT IS HIGH-QUALITY ASSESSMENT?

How can schools move from having a "collection" of assessments to building a coherent assessment system? This workshops applies assessment research and classroom-tested PLC tools and strategies to guide development or refinements of formative, interim, and summative assessments.

Topics include:

- Developing a district assessment philosophy
- Formative assessment uses and examples
- Summative + formative = unit planning
- Use Hess' validation tools to analyze and develop performance assessments
- Planning and best practices for piloting new assessments
- Consider how to use pre-mid-post assessments and student work analysis to document progress across the school year
- Examine what local assessment system blueprints can look like and how increased rigor can be part of your formative and performance assessments planning

DIVERSE AND EXEPTIONAL LEARNERS

BOUNDLESS CREATIVITY

Students with special needs often get stuck in rote memory, knowledge, and comprehension stages. Boundless Creativity breaks that ceiling by teaching what creativity is and providing access to it. We access wisdom by identifying the unique learning formula conditions of all students, providing equitable participation for students with special needs. Then, creative thoughts, insights, and truth are unleashed.

This training focuses on the six-step process revealing how “aha” moments occur, helping attendees develop a superhighway between the left and right brain to open a stream of insights. Attendees will learn the balance between cognitive thought and intuition while opening up the right brain/creative side. It shifts students from an unengaged, “I don’t know” to “I have a great idea!” or “a better solution is...” or “did you ever consider...?”

Teachers will not only benefit personally from learning the process, but students will gain the same brain-changing, thought-releasing, and experience-shifting in their thinking patterns to allow for more intuition and creativity.

GETTING IT RIGHT FOR STUDENTS WITH DISABILITIES

Gain effective strategies for going from stress to success for students with disabilities. This is an experiential workshop where teachers gain new insights into what the student and parent may be experiencing.

LESSON DESIGN WITH TRAUMA IN MIND

The power that comes from understanding the brain, trauma, fear, and learning is earth-moving. It explains the “why” behind so many behaviors that teachers face with students who have experienced trauma. This powerful lever of knowledge, however, only has utility when it can be partnered with practical application. For many teachers, the bridge from knowing to doing is an ambiguous one.

In this workshop participants will be able to learn the nuts and bolts of a classroom learning experience that partners the latest in learning theory and critical knowledge of how a student from a traumatic background might experience the classroom. Participants will walk away knowing how to infuse every aspect of the learning cycle with specific strategies to help students learn.

FACTS EDUCATION SOLUTIONS

RESPONSE TO INTERVENTION

Response to Intervention (RTI) is a powerful problem-solving approach that can greatly expand the capacity of schools to accommodate diverse learners. This workshop gives teachers and administrators the essential techniques, resources, and guidelines to start a comprehensive RTI process in their own schools.

Come prepared to learn:

- Specific components of a successful RTI process
- Three-tiered intervention models
- The use of benchmarking for progress monitoring
- Classroom-Based Measures (CBM)
- Motivational assessment
- Research-based student intervention accountability plans

Participants explore how the law has changed to allow RTI as a means for determining if a child has a specific learning disability and is eligible for special education services.

WHY ARE THEY DOING THIS? (Part 1 of 2)

The brain is rewired in survival-oriented ways that can result in classroom behaviors that leave both students and teachers feeling frustrated and confused. In this workshop, participants will learn what happens inside the trauma-impacted brain, why it is happening, and three specific strategies to help promote more healthy regulation of students. Teachers will walk away with a deeper understanding of students and more equipped to respond in supportive ways within the classroom.

THIS STUDENT JUST _____, I TRIED ____, AND IT DIDN'T WORK ... WHAT ELSE SHOULD I DO? (WHY ARE THEY DOING THIS? Part 2 of 2)

Understanding how the brain is impacted by trauma opens the door to new and unconventional ways of responding to behavior. In this workshop teachers will get a more robust toolkit for supporting students who have not responded to more conventional strategies. With handouts, printables, and desktop strategy lists, teachers will get five concrete things they can implement in their classrooms immediately to help students. Field testing the strategies will ensure teachers have one key strategy to implement for strong classroom management: a solid plan!

FACTS EDUCATION SOLUTIONS

EDUCATIONAL LEADERSHIP

BUT IS IT GOOD? Supporting and Evaluating Technology in Teaching

A school invests in the latest classroom technology and training for teachers, but how is a principal or a teacher to know — during walk-throughs or formal/peer observations — whether this technology is supporting solid pedagogy? Are the students learning, or is it just the latest trend? This presentation examines ways to support, develop, and evaluate the use and effectiveness of technology in the classroom.

EWALK: Classroom Observation

eWalk™ is a classroom observation program for improving and empowering administrators, coaches, and lead teachers as instructional leaders. The eWalk Classroom Observation is designed to develop a continuous, systemic, long-range school improvement program.

eWalk prepares educators to engage in focused visits to the classroom for the purpose of ensuring:

- Instruction meets the needs of all learners
- Instructional management and monitoring of student academic achievement
- Instructional needs of learners are met with appropriate resources and technology tools

The program incorporates alignment to school accreditation standards, proven professional development methodologies, new technologies, and customized training for administrators and coaches. eWalk is designed to support school staff in gaining knowledge in instructional practices that increase student achievement. eWalk is based upon the research findings by Dr. Robert Marzano, Charlotte Danielson, and Mike Schmoker among other noted educational specialists in classroom walkthroughs.

iLEAD 101: Technology Bootcamp for School/District/System

Effective professional development strategies are paramount to the success of any large-scale initiative in a school or district. In this session, we will model best practices by learning effective uses for the mobile device or tablet computer in the classroom and for administration.

Delivering the message is also a critical piece of the puzzle, so part of this session is designed to improve presentation skills and visuals for varying audiences. Three days of training is recommended to gain the full benefit of all the stated areas, however it can be adjusted to focus on specific needs, including: the idea, the plan, the actions, and the award.

This session is designed for school administrators, teacher leaders, teaching coaches, and professional development coordinators, and includes the following leadership topics:

- Moving to a 1:1 or BYOD program
- Strategic thinking for mobile device implementation
- Presentation skills for administrators
- Integrating blended learning into the school curriculum
- Professional development planning
- Developing a productivity workflow workshop session

LEADERSHIP COACHING FOR ADMINISTRATORS AND SCHOOL LEADERSHIP TEAMS

The coaching and mentoring of school leaders and leadership teams has been highly effective in school improvement plans. FACTS Education Solutions supports the development of school leaders, assists to develop a climate and culture in the school that empowers every teacher, and fortifies the leader in making positive school improvements. Therefore, the program can impact every student and teacher in the school.

This coaching and mentoring program is comprised of 10 leadership competencies that revolve around the key attributes of proven leaders. Components can be customized to include on-site and online training to respect the participants' time for professional development. Workshop sessions are customized to address the needs of the individual district or school.

Training is designed to:

- Support the improvement and development of school leaders
- Help school leaders develop a climate and culture that drives student achievement
- Fortify each leader in their pursuit of leading significant levels of school improvements
- Offer multi-level support directly with a top school leadership consultant

FACTS EDUCATION SOLUTIONS

LEADING THE MAPPING PROCESS: Strategies and Tools to Get Started

Whether you're just getting started or well into the mapping process, this session highlights the critical components leaders and leadership teams need to target and ensure successful implementation.

In this session, leadership teams will gain strategies and tools to:

- Identify the support structure needed to implement the process
- Clarify the roles and responsibilities of the team
- Determine possible entry points
- Set realistic short and long-term goals
- Unpack the goals to determine training needs
- Connect it with other initiatives

VOSAIC CONNECT: Helping Teachers Grow

In every classroom, training scenario, or professional observation, important learning moments and opportunities go unnoticed. Vosaic Connect helps you gather, identify, and share those moments using video.

If you've ever tried to provide feedback to teachers right after their class — or worse, a day later — you know how hard it can be to accurately capture thoughts you had in the moment. Recording a video of a teacher allows you to find and share key learning moments that are important for their professional development.

This session explains how Vosaic Connect can help you:

- Capture and upload video using your favorite device. Watch it individually, or with your team, to discover key moments you want to review.
- Create a set of custom buttons you and your team can press every time you see a moment you want to come back to later.
- Use comments to describe your thinking around specific moments or to provide more detailed feedback.
- Compare how different team members viewed and marked up the same video, or share your marked up video with others for feedback.

FACTS EDUCATION SOLUTIONS

EDUCATIONAL LEADERSHIP

TEACHER-LED CHANGE: Teacher Leadership as a Tactical Force for Innovation and Improved Student Achievement

In every school, there are teacher-led innovations and breakthroughs waiting to happen. This session helps teachers rethink their role in leading change and offers some specific, definitive roles in teacher leadership. Participants will start to find their purpose and identify ways to ignite the creative spirit within. This session is fun, highly interactive, and leaves attendees with models in teacher leadership that inform and inspire their work each day.

This session is ideal for schools striving for greater levels of teacher empowerment and ownership of the change agenda. It can also help motivate teachers to rediscover their love for teaching and to perhaps redefine what's possible for them, for their students, and for the profession!

ENGLISH LANGUAGE LEARNERS

ASSESSMENT AND THE ELL: What, Why, and How

This training workshop is designed to help teachers understand formative and summative assessments, what assessments should and should not be graded, and how to use homework to a student's advantage. Learn how to use assessment to drive instruction, plus strategies for teaching students how to prepare for, and anticipate the content of various types of assessments.

ENGLISH LANGUAGE LEARNERS

CLOSE READING WITH ENGLISH LEARNERS

Close Reading can be especially difficult for ELLs who need additional support in order to be successful. This workshop highlights several of the challenges in implementing Close Reading with ELLs and presents potential solutions to these challenges.

COMPREHENSIBILITY: Making Instruction Clear for ELLs

Making instruction comprehensible to ELLs and all students is a critical skill for every educator. This workshop provides practical strategies for making content, language, and literacy instruction more accessible and comprehensible with standards in mind.

DYNAMIC TEACHING STRATEGIES FOR ELLs

Assessment is a critical part of teaching and learning. For ELLs, it is important that we assess students in a way that allows them to demonstrate their knowledge of content and language. A variety of formative and summative assessment strategies, as well as ways to differentiate assessments for students at differing proficiency levels, are presented throughout this workshop.

FACTS EDUCATION SOLUTIONS

ENGLISH LANGUAGE LEARNERS

DYNAMIC TEACHING STRATEGIES FOR ELLs

Learn must-have, research-proven strategies to help ELLs succeed. This engaging and informative workshop shows why rigorous vocabulary development is so important, plus how to generally maximize time spent with ELLs. Discover exciting ways to use music and movement to teach content. Come away with understanding the rationale for writing language objectives, dynamic strategies for reading comprehension, ideas for writing with ELLs that will motivate them, and know how to foster higher-order thinking skills in an ELL classroom. Additional resources for advanced strategies may be available.

HOW DO I BEST MEET THE NEEDS OF ELLs IN MY CLASSROOM? Research-Based Approaches

The population of ELLs is rapidly increasing in schools. This workshop reviews some of the foundational knowledge regarding ELLs, such as language acquisition and proficiency levels. This course also emphasizes a variety of instructional techniques that teachers can easily implement in the classroom to help ELLs, and all students, be more academically successful.

ENGLISH LANGUAGE LEARNERS

PROVIDING FEEDBACK ON CONTENT AND LANGUAGE IN THE CLASSROOM

Feedback is an essential part of the learning process. As ELLs develop content, language, knowledge, and skills, teachers need to be mindful about the proficiency levels of their students. Teachers must also understand the appropriate time and way to provide feedback. This workshop includes ideas on how and when to provide feedback to ELLs on both content and language learning.

RESPONSE TO INTERVENTION FOR ELLs

At some point in every ELL teacher's career, a student will present him/herself as one who struggles. Reach ELLs by enhancing Tier I universal instruction, and gain Tier II interventions that scaffold ELLs with content as they are acquiring English. Finally, learn the sometimes subtle differences between a student with a specific learning disability versus a student who is struggling in his or her new language.

ENGLISH LANGUAGE LEARNERS

RESPONSE TO INTERVENTION AND INSTRUCTION FOR ELLs

Some ELLs need additional instructional support beyond mainstream instruction. This workshop shares guidelines for effective Tier I instruction of ELLs, as well as research-based strategies for providing Tier II and Tier III interventions.

STRATEGIES FOR TEACHING ELLs

These workshops include ELL teacher training to help turn the language development classroom into a language acquisition powerhouse. This course includes background information on language acquisition, cooperative learning techniques to enhance oral and written output, authentic assessment strategies, and much more!

ENGLISH LANGUAGE LEARNERS

USING TECHNOLOGY WITH ELLs

This exciting offering helps teachers of ELLs use technology to scaffold students to their highest potential. ELL teachers are exposed to apps and other technology proven to motivate students learning English, thus increasing the potential for their academic success. Don't miss this opportunity to enhance teaching with technology, and the learning of students, when it's their turn with their own learning device.

WORDSMART: Powerful Vocabulary Development for ELLs

This vocabulary workshop drills down into research on teaching vocabulary development and its startling impact on ELLs. Attendees are shown new ideas to enhance the most important area of language arts. Research-grounded, fun, and brimming with exciting activities that transfer immediately into a classroom, this popular training has received accolades nationwide.

INSTRUCTIONAL STRATEGIES

12 PRINCIPLES OF BRAIN-BASED EDUCATION

How can we possibly learn about brain-based education in a short time? This forward-thinking session explores the cutting edge principles that have “real world implications.” Learn the latest in brain research, find out what’s new in the future for educators, and explore specific strategies to improve student achievement.

ALIGNING INSTRUCTIONAL STRATEGIES TO TEACHER UNIT MAPS

Questioning how to strengthen the alignment in a unit? How can the “right” instructional strategies help ensure rigor in units? This session engages participants in several activities in the alignment process and demonstrates how to rethink units to align the “best” instructional strategies.

Participants will:

- Align instructional strategies to classroom units
- Use criteria to ensure the “best” fit
- Learn about specific strategies that support vocabulary development
- Learn about resources they can access as they work on their own unit
- Integrate instructional strategies to upgrade units and increase rigor

WHAT IS PROJECT-BASED INQUIRY LEARNING?

Develop skills in using problem-based inquiry learning (PBIL) to enhance conceptual understanding, critical thinking, and scientific reasoning. Participants will complete a hands-on PBIL lesson, analyze PBIL curriculum and resources to develop design acumen, and begin designing a PBIL unit for their classroom. This workshop includes integrating digital resources to support PBIL in science. Participants are encouraged to bring a digital device (e.g., iPad, Chromebook, laptop, etc.) to fully participate in the hands-on session.
This course is designed for 7-12 grade science and technology teachers.

ARGUMENT WRITING WITH SECONDARY STUDENTS

Argument writing requires advanced reading, analyzing, synthesizing, and organizing skills as well as other traditional writing skills. In this session, participants receive and practice using scaffolding templates and other resources to help secondary students write arguments on a variety of topics.

BLENDED LEARNING: Tools, Techniques, and Resources (1 OF 2)

The goal of this workshop is to empower traditional classroom teachers with the tools and techniques needed to effectively blend active learning online with dynamic learning in the classroom. In this three-session workshop, attendees will gain the skills needed to cultivate a community of inquiry online to complement and enhance the work done in the physical classroom.

Attendees will explore:

- The power of discussion as a learning tool
- Techniques for using mobiles devices to encourage problem solving, research, and collaboration
- The flipped classroom as a vehicle to create time and space in the classroom
- Strategies for weaving instructional mediums together

BLENDED LEARNING: Tools, Techniques, and Resources (2 OF 2)

The session offers:

- Support materials and concrete strategies for creating a community of inquiry online
- Discussion on how to establish and maintain a virtual safe space, build an online community, support students in saying something substantial, and choose a realistic facilitation role for work done online
- Tips for designing discussion questions, assignments, and online tasks that produce dynamic conversations, engage higher-order thinking skills, and empower students to drive their own learning
- Opportunities to explore the flipped classroom model (with emphasis on engagement around content) and brainstorming on how teachers can create student-centered learning opportunities to build on work online
- Time to explore project-based learning in a blended model.
- Hands-on practice with QR codes and mobile devices, Google docs, Collaborize Classroom, Linoit, Socrative, and other learning apps
- Creating content for blended learning
- Pedagogy and best practices for blended learning

CHOKING THE WEEDS WITH WHEAT: How to Create a Better, Healthier, and Safer Digital Environment for Children (and Adults)

Digital and social media are the tools of time and the language of age. However, with every step forward, there are accompanying problems and challenges. Some of these problems and challenges are anticipated and others a complete surprise. This session identifies and examines the major challenges faced by children living in a digital world, plus those faced by educators teaching them. Though none of these challenges have simple answers, an informed, proactive approach can improve behavior and reduce dangerous situations for students and schools.

CONNECTED! The New Science of Better Collaboration, Team Learning, and Improved Student Achievement

Putting teachers into teams isn't enough. Thanks to technology, innovations in brain research, and the study of human performances, it's possible to employ strategies that help every school work more effectively. This session focuses on using tactical, research-based strategies to unleash the untapped individual and team brain power available in every school. Attendees will get connected, creative, and innovate. This highly interactive session equips participants with tools that can be implemented immediately.

DIFFERENTIATED CLASSROOMS: Building Success Daily

The session places teachers in the students' shoes so they can experience how important differentiation is for success. Teachers will also explore and learn the most important ways to differentiate content, process, and product based on students' readiness, learning profiles, and learning preferences. Upon completion, teachers will be able to implement simple steps for building a highly differentiated classroom so every person can be successful. This course is recommended for schools looking for teacher-wide acceptance of the differentiation model.

INSTRUCTIONAL STRATEGIES

DIFFERENTIATED INSTRUCTION

Providing students with effective, engaging, and varied teaching materials and approaches is key in making sure each student is actively engaged, regardless of their individual learning styles.

Join this workshop to:

- Learn how to maximize engagement by incorporating research-based best practices into a framework for high levels of learning for all students
- Explore techniques to reconfigure the classroom for academically diverse students
- Receive materials to help maximize student achievement
- Discover strategies that maximize classroom engagement
- Incorporate research-based strategies for processing, constructing, and developing differentiated teaching materials
- Receive robust, technologically-rich materials for immediate classroom application

INSTRUCTIONAL STRATEGIES

ENGAGING STUDENTS WITH PURPOSEFUL, FLEXIBLE GROUPING

Learn powerful research demonstrating how effective flexible, purposeful grouping can be. Participants are flexibly grouped in five different ways throughout the workshop. Be prepared to have fun, move often with a purpose, and have the tools to implement this highly differentiated process in a classroom the next day. Ultimately gain a deeper understanding about how daily data collected through the formative assessment process can guide instructional decisions all day long.

FROM ART TO SCIENCE: Best Practices From the Old School and the New School

What's the latest trend in education? The newest fad? This seminar for teachers and instructional leaders looks at trends in education as the field moves from an art to a science. Participants will learn that best practices represent a blend of the art of teaching and the science of learning. Gain high-yield strategies that guide curriculum, instructional alignment, and classroom practices. Demonstrate various ways teachers and administrators have made the best use of the meta-analysis work on instructional strategies by educational researchers and specialists Marzano, Pickering, and Pollack.

FACTS EDUCATION SOLUTIONS

JOURNEY TO THE LAND OF OZ: Teaching Thinking With Heart and Soul

This course was developed for teachers who see test scores whip in like a tornado — leaving them feeling as if they've been suddenly transported to a brand new world; this world is definitely not a place they want to call home. This presentation takes a humorous, yet thoughtful look at the next steps districts must take to build thinking models for students. Participants examine systemic changes that successful schools are making to encourage and impact change in student achievement. Special focus is placed on the research of Marzano, Pickering, and Pollack, and the work of Bloom and Associates.

MANAGING THE 21ST CENTURY CLASSROOM: Organizational and Behavioral Techniques for Today's Teacher

This workshop will focus on helping teachers avoid ineffective classroom management practices by:

- Exploring the role of the 21st century teacher
- Establishing appropriate classroom rules (including those associated with technology use)
- Understanding student-centered motivation
- Recognizing methods of feedback and praise
- Discovering methods of discipline and how to reinforce desired behaviors

MY BLENDED LEARNING JOURNEY: Weaving Together Technology and Tradition

Many teachers feel increasing pressure to teach 21st century students without easy access to 21st century tools. The idea of blending online work with face-to-face engagement can be very daunting. In this session, educators explore how technology can be used to empower both teachers and students in an increasingly digital world.

Learn how to transition from a traditional, low-tech classroom to a blended learning model by capitalizing on students' connectivity and the technology they bring into the classroom. Learn how to build a technology tool belt to create a blended learning model that works for an individual classroom.

Weaving together technology and tradition can make educators more effective, while improving learning outcomes for students.

NOW THAT'S A GOOD QUESTION! How to Promote Cognitive Rigor Through Classroom Questioning

Explore how one of the most fundamental instructional strategies — questioning — can provide the proper scaffolding to deepen student thinking, understanding, and application of knowledge.

Participants will learn:

- Instructional methods and techniques for using questioning to extend and evaluate student learning experiences
- Eight different kinds of questions that challenge students to demonstrate higher-order thinking as categorized by Bloom's Revised Taxonomy and communicate depth of knowledge as designated by Webb's Depth of Knowledge Model
- How to rephrase the performance objectives of college and career readiness standards into questions that will engage and challenge students to think deeply and express and share the depth and extent of their learning

PROJECT-BASED LEARNING (1 of 2)

John Dewey, a leader in education, conveyed that learning should not be just the acquisition of a rote set of skills. He believed learning should be "the realization of one's full potential and the ability to use those skills for the greater good." Project-Based Learning (PBL) provides an educational environment that creates meaningful contexts to apply both academic and success skills that embrace the application of caring about and for the greater good.

There are a variety of definitions and explanations pertaining to PBL. For schools or districts that do not already have a framework in place, there is the BIE Gold Standard Project Based Learning Model, which can be used for both designing project-based curriculum and implementing project-based instruction.

INSTRUCTIONAL STRATEGIES

PROJECT-BASED LEARNING (2 of 2) Learn the Eight BIE Gold Standard PBL Essential Project Design Elements:

- Key Knowledge, Understanding, and Success Skills: The project is focused on student learning goals, including standards-based content and skills such as critical thinking/problem solving, collaboration, and self-management
- Challenging Problem or Question: The project is framed by a meaningful problem to solve or a question to answer, at the appropriate level of challenge
- Sustained Inquiry: Students engage in a rigorous, extended process of asking questions, finding resources, and applying information
- Authenticity: The project features real-world context, tasks and tools, quality standards, or impact – or speaks to students' personal concerns, interests, and issues in their lives
- Student Voice and Choice: Students make some decisions about the project, including how they work and what they create
- Reflection: Students and teachers reflect on learning, the effectiveness of their inquiry and project activities, the quality of student work, obstacles, and how to overcome them
- Critique and Revision: Students give, receive, and use feedback to improve their process and products
- Public Product: Students make their project work public by explaining, displaying, and/or presenting it to people beyond the classroom

INSTRUCTIONAL STRATEGIES

RIGOR BY DESIGN: Looking for Deeper Learning in All the Right Places

Instructional coaches and school leaders can apply their understanding of depth of knowledge (DOK) and strategic scaffolding with walk-through tools. These resources support observation and reflection upon five key behaviors of teachers and students that promote deeper understanding. Classroom 'look fors' include:

- Meaningful classroom discourse and grouping ideas
- Student-to-student feedback; self- and peer-assessment
- Teacher questioning and strategic scaffolding strategies

RIGOR: The Power of Cognitive Engagement

Student learning is the product of three factors: what the teacher brings to the classroom, what the students bring in terms of schema and background, and the actual content of the lesson. These three factors come together in the student work or task. Knowing this, how do teachers plan tasks that maximize learning, and what are the components of a powerful task? This workshop addresses what rigor looks like. While the work is complex, the workshop will help simplify the design process and use humorous anecdotes to illuminate the construction of optimal learning activities.

SCHOOL CULTURE FOR DEEPER LEARNING: How the Right Learning Conditions Can Improve the Performance of Students and Teachers Alike

Research indicates there are proven strategies to create improved learning for teachers and students. This session isn't just about building a positive school culture — it's about developing strategic, actionable practices that align with what we know about the science of learning to increase learning capacity.

This session is designed for schools that are already implementing teaming or PLCs and are looking for strategies to help make their collaboration deeper and more meaningful. It's ideal for schools attempting to improve academic achievement and student outcomes.

SHOUTING WON'T GROW DENDRITES: 20 Techniques to Detour Around the Danger Zones

More often than not, the louder teachers get when reprimanding students, the louder the students become. Learn ways to proactively manage a brain-compatible classroom without raising voices. Alleviate at least 50 percent of behavior problems just by getting to know each student, setting up the physical environment, and delivering engaging lessons. It's possible to alleviate another 40 percent by developing a comprehensive management plan; it's also possible to address the most challenging 10 percent by using techniques for chronic behavior disorders such as oppositional or conduct disorder. This highly-engaging and practical session has been called both professionally and personally life-changing.

SIT & GET WON'T GROW DENDRITES: 20 Professional Learning Strategies That Engage the Adult Brain

Visualize the worst presentation that you have ever been a part of as an adult learner. Now visualize the best one. No doubt there is a considerable difference between the two professional development experiences. In fact, many presenters to adult learners do not realize that having participants sit and get information is not the most effective way to ensure that the information sticks to their brains.

Participants are engaged while learning the answers to the following three basic questions:

- What are 20 strategies I can use to make my professional development experience unforgettable?
- What techniques appear to result in sustained adult behavior change?
- What are 10 things that keep adults living well beyond the age of 80?

This workshop is for anyone who teaches the adult brain, including administrators, staff developers, teacher leaders, instructional coaches and coordinators, college and university professors, and business and community leaders.

STRATEGIES FOR DEVELOPING HIGH QUALITY UNIT MAPS

How can teachers develop high-quality integrated units and use the process to integrate the standards, strengthen alignment, and upgrade units for 21st century learners? During this interactive session, attendees will design strategies to develop high-quality, integrated unit maps in regular classrooms. Participants are encouraged to bring a computer and unit ideas.

STUDENT ENGAGEMENT

What are the qualities of engaging student work? What should teachers look for when documenting student engagement? Research suggests the facets of learner engagement are simultaneously intellectual, academic, and egocentric. In this workshop, participants are taken on a journey through the latest brain research in a humorous, interactive session that integrates strategy, thinking, and engagement; this is truly a three-dimensional approach.

SUMMARY WRITING WITH SECONDARY STUDENTS

In addition to traditional writing skills, summary writing requires advanced reading, analyzing, synthesizing, and organizing skills. Attendees will receive and practice using scaffolding templates and other resources to help secondary students successfully write summaries on a variety of topics.

TEACHING WITH THE BRAIN IN MIND

This session focuses on practical brain-compatible strategies and brain research to increase student academic achievement. All teachers can positively influence students to increase their academic potential. Learn what it takes for students to acquire complex learning, achieve their highest level of performance, and the essential rules on how the brain works. This workshop provides practical instructional strategies that can be implemented immediately in the classroom.

THE BRAIN GAME: What to Think in Today's Schools

Current students will live in a world quite different from the one today. Knowledge of content will not be enough for them to find success in life. Thinking, problem-solving, and communication are required skills for students to survive and thrive in changing times. How will this kind of preparation and instruction change the look of teaching and learning in our classrooms? This session takes a fresh look at Bloom's Taxonomy and the differences between inductive and deductive teaching approaches. All of this will be accomplished within the framework of nine powerful instructional strategies that have maximum impact on student thinking and success. Real-life examples and humor are used to illustrate the power of these strategies.

THE ENGAGEMENT CUBE: What Captivates Today's Learners

The standards are aligned. The teacher is a content wizard. The classroom is well managed and runs smoothly. Yet the students seem to be "going through the motions." How can teachers plan for student engagement? What are the qualities of engaging student work? What is the relationship between engagement, levels of thinking, and effective instructional strategies? This course applies the concepts of Phillip Schlechty's "Working on the Work," using video vignettes of master teachers' classrooms. Participants will discover eight qualities of student work that lead to higher levels of engagement.

UPGRADING AND ENRICHING THE STUDENT BRAIN

We all know the brain can change, but what can be done to target specific changes to accelerate student improvement? This session focuses on the academic and social changes that enrich the brain in positive and lasting ways. Discover how to design a school or classes so every student moves forward, every day, in every class. Discuss how much the arts matter and which matter the most. Finally, learn what instructional strategies will turn struggling students into academic stars.

UPGRADING YOUR UNITS: Instructional Strategies and Digital 2.0 Applications

During this session, participants will engage in activities to review instructional strategies that positively impact learning and increase rigor. Attendees will also learn research-based instructional methodologies and strategies, criteria for selecting the best strategies, and Digital 2.0 applications that support instruction. Participants are asked to bring a unit they have taught to use during this session.

WHAT ARE THEY THINKING: Strategies for Transparency in Learning to Tailor Instruction and Meet the Needs of All Learners

Research shows that timely feedback makes a significant impact on learning and achievement. This session is a rich source of ideas and strategies to give educators the power to make informed instructional decisions.

Attendees will:

- Learn about specific free services/tools that transform assessment (and make teachers' lives easier)
- Examine the advantages of each tool and how to use them effectively to engage students and personalize learning
- Discover how these services/tools can give all students a voice and make thinking visible
- Participate in an activity that can be replicated with staff and students

FACTS EDUCATION SOLUTIONS

INSTRUCTIONAL STRATEGIES

WHAT EXACTLY IS DEPTH OF KNOWLEDGE?

What exactly is depth of knowledge and how does it mark and measure student learning? Explore how students are expected to demonstrate and communicate their level of learning, plus learn how to effectively use the Webb's Depth of Knowledge Model.

WORKSHEETS DON'T GROW DENDRITES: 20 Instructional Strategies That Engage the Brain

Why don't some students understand or recall important content after a 24-hour period? If students are not learning the way they're being taught, then teachers must teach students the way they learn! During this course, attendees will experience 20 instructional strategies — based on brain research and learning style theory — that maximize memory and minimize lapse of memory. Participants will also learn about increasing learning for all students when drawing, metaphor, movement, music, and storytelling are used to teach curriculum objectives and meet international standards. Explore research that shows why these strategies are preferable to others to ensure brains retain key concepts, not only for assessments, but for life!

APPETIZERS FOR YOUR MAIN COURSE

Join this empowering presentation for Pre-K through elementary school teachers that showcases a variety of apps, including how each is implemented in multiple subject areas. This interactive presentation highlights cross-curricular lesson modification examples.

APP SMACK DOWN

In an app smack down, an open forum session is facilitated. Attendees share some of their tried-and-true apps they feel are worth sharing. This is a less structured session featuring an online method of sharing, recording/sharing of app ideas, and total collaboration. Engaging in discussion about the why and how of using apps helps with exploring the use of mobile devices in education.

BOOK BUILDING WITH A MOBILE DEVICE

This session highlights various apps and methodologies that can be utilized in the classroom with special needs students to help them engage in book building. From a book-building app used to explore social skills with a boy with autism, to one that dives into science, this session serves a range of subjects. Discussion of best practices and methodologies are followed by hands-on practice and review of sample books.

COLLABORATIVE LEARNING USING GOOGLE TOOLS AND GOOGLE CLASSROOM

Gain knowledge as well as practical strategies to make collaboration a natural way of learning in a school. Participants explore specific Google tools that create an easy-to-use, integrated way for teachers and students to collaborate. Participants take a closer look at practical workflow models for sharing and collecting assignments. They'll also discover how real-time collaboration, powerful sharing controls, and seamless compatibility make learning more engaging and a teacher's life easier.

COLLABORATIVE LEARNING WITH GOOGLE TOOLS

Fast and easy collaboration is what makes Google Classroom an ideal learning environment. Gain knowledge and practical strategies to solve the workflow problem while making collaboration a natural way of learning. Explore ideas, resources and information about these collaborative tools.

Resources shared during this workshop include:

- Collaborative Notes Template
- Watch YouTube Videos without Distraction
- Photos for Class
- AwwApp
- How to HyperDoc

CREATING A DIGITAL CLASSROOM

Learn how to design a paperless environment from scratch, or to convert a previously papered classroom. Learn to eliminate a file cabinet, flash drive, folders, paper, pencil, and many other classroom materials.

DIGITAL TOOLS FOR WRITING AND PUBLISHING

Children today are writing more than ever. But what are they writing? Is it as ephemeral as the latest text and the next tweet? Or are they writing anything enduring? While some of what they write disappears into thin air, it turns out that many children are writing their own eBooks. There are several resources to help them publish and share their ideas. This workshop highlights several technology-enhanced resources to ensure students are writing and publishing at their optimum level.

ENGAGING AND SUPPORTING STUDENTS WITH CLASSKICK

Classkick is an online tool that allows teachers to increase data and feedback for yourself and your students. Have students work on your content while being able to see in real time what they are doing, remotely intervene if they are not correct, and provide feedback. Students will be able to "raise their hand" virtually within the platform to ask for help or check their answer. There is even a peer review function where classmates can anonymously help each other while providing the names to the teacher to measure participation. This mini-session will drop you into a lesson as a student to experience ClassKick and its features. This is a half-day workshop.

FAILURE IS MY SUPERPOWER: Learning, Growing, and Communicating Through Mistakes, Misdirection, and Dead Ends on the Digital Highway

Despite the best plans and best intentions, many schools' digital initiatives fail. Whether due to underperforming software, disappointing hardware, or unexpected challenges, teachers and administrators must sometimes regroup or "pull the plug" on a digital program.

This workshop provides the tools for a successful failure: evaluating when to change directions, taking appropriate lessons for moving forward, and communicating with staff, parents, and students in ways that maintain credibility. Failure does not have to be an end — it can be the beginning of success!

FINDING THE TIME: How to Integrate Classroom Technology Skills and Still Have a Life

"I understand we need to build a technology-rich classroom, but I have papers to grade!" This session examines attitudes and approaches to developing necessary classroom technology skills without losing one's balance, patience, or mind.

INSTRUCTIONAL TECHNOLOGY

GOOGLE APPS FOR EDUCATION

Discover how digital learning practices and technologies can simplify and transform how students engage, share feedback, and stay organized. This workshop introduces G-Suite and Google Apps for educators, and more importantly, will help teachers develop ways to connect powerful instructional strategies with the collaboration, productivity and communication tools of G-Suite. Explore the tools of Google Drive, Google Classroom, Google Sites and others.

INFUSING TECHNOLOGY WITH HIGH SCHOOL SOCIAL SCIENCE COURSES

This session offers information on integrating technology into teachers' instructional practices and students' learning experiences. Learn to use technology to engage and transform learning environments. Attendees will learn hands-on with others to develop technology-integrated, project-based learning units.

INSTRUCTIONAL TECHNOLOGY

INSTANT FEEDBACK: The Advantage of the Paperless Classroom

Providing students with timely feedback is vital in the learning process, but with large stacks of papers to carry around, it can often take a teacher days to grade and return assignments. With a mobile device, teachers can easily collect, grade, and return work to students from anywhere. This technology also allows teachers to eliminate the need to shuttle student work back and forth from home — or worse — lose assignments. In this session, take a deep dive into the paperless classroom and learn how it can be achieved on the mobile device through simple-to-use apps.

iPAD AND THE CONTENT AREA: Creating Dynamic Instruction

There are many apps that all teachers can use to incorporate technology in the classroom. Let us move beyond single-purpose, skill-focused apps and use the iPad® to reflect the demands and technology expectations of the global community by transforming the way students ask questions, access and acquire information and share their learning. We will explore models for successful iPad innovation and learn tools that foster meaningful, transformative integration within your subject area. Subject areas offered include: ELA, math, science, social studies, foreign languages, and fine arts.

LEARN LIKE A KID: 24/7 Learning With Mobile Devices

This interactive session explores ways students use mobile devices to make learning a 24/7 experience. With mobile devices, learners can practice skills, perform research, collaborate, and produce creative works. This session is a rich source of ideas, resources, and information about learning in a connected world.

MATH INSTRUCTION ENHANCED WITH DIGITAL TOOLS AND RESOURCES

Mobile devices inspire creativity and hands-on learning with features attendees won't find in any other educational tool — from a device that students really want to use. Learn how to leverage mobile devices in the instruction of math to at-risk learners to maximize their potential.

Learn best practices for classroom use, work with apps and sample lesson plans, then explore how to select the most effective apps for at-risk learners. Attendees will also discover ways to incorporate mobile devices into teaching, learning, and assessment processes.

MOBILE DEVICE BOOT CAMP

Mobile devices are transforming the classroom, but how do those individual classroom transformations happen? How do those transformations impact an entire school or district? The most important single factor in determining the success of a mobile device program is professional development. This involves putting together a cohesive and comprehensive professional development plan in coordination with a mobile device roll out. This leverages teacher buy-in to create a collaborative atmosphere that will facilitate the success of a 1:1 mobile device program and have a sustained, long-term impact far beyond the devices themselves.

The goal of the mobile device boot camp is to "train the trainer." By offering an intensive training model, participants leave with the knowledge and resources necessary to be mobile device professional development leaders in their own schools or districts. Training is presented for educators by educators, allowing for participants to learn from their peers currently working in classrooms using the mobile device in a 1:1 environment.

MOBILE DEVICES FOR LEARNING: Flexible, Personalized, and Authentic

With mobile devices, learners can perform research, collaborate, interact with experts, and produce creative works. This session examines unique features of the mobile device that support student learning, plus apps and activities that encourage mobile learning.

MOBILE DEVICES IN THE CLASSROOM: Greatest Hits

This session provides an overview of how 1:1 programs have transformed teaching and learning in schools. Explore top-rated apps used in education to support instruction in academic content areas, data and assessment, reporting, and management.

MOBILE DEVICES IN THE ENGLISH AND SOCIAL SCIENCE CLASSROOM

Witness the transformation from the traditional classroom to an innovative learning environment. While the focus of this session is the English classroom, cross-curricular aspects can be utilized for other languages or social studies classrooms. This session highlights interactive apps, study tools, and creative learning.

MOBILE DEVICES IN THE MATH CLASSROOM

Attendees will learn to implement mobile devices in the math classroom to maximize its potential, including apps and sample lesson plans from an algebra class. Additional topics covered include: how to select the most effective apps for a classroom, ways to incorporate the mobile device into teaching, learning, and assessment processes, and the paperless math classroom. Teachers will examine how it can be accomplished with the mobile device and go hands-on to create their own class.

This course is designed for 6-12 grade teachers.

MOBILE DEVICES IN THE SCIENCE CLASSROOM

Mobile devices inspire creativity and hands-on learning with features not found in any other educational tool. Attendees will learn how to leverage mobile devices in a science classroom to maximize its potential and explore apps that are useful for various hands-on environmental science, biology, and physical science labs. Attendees will ultimately be able to identify how to select the most effective apps for the classroom, including ways to incorporate the mobile device into teaching, learning, and assessment processes.

This course is designed for 6-12 grade teachers.

FACTS EDUCATION SOLUTIONS

MOBILE LEARNING: Connecting the Real World and the Digital World with QR Codes and Augmented Reality

Square codes are showing up more and more in magazines, stores, theaters, and everywhere else. QR codes have the power to link the real world to the digital world. In this session, explore ways to use QR codes and augmented reality to communicate and educate. Attendees are encouraged to bring a smartphone or mobile device with a built-in camera to fully participate in this interactive session.

NAVIGATING NEARPOD — Student Engagement Made Easy

Though technology is an excellent tool for transforming the classroom and increasing student engagement, there will always be students who can lack focus during a lesson. Nearpod, an all-in-one solution for the use of mobile devices in education, can help! You can control the flow of the presentation during a lesson without having to continuously re-direct students. This session will cover how Nearpod is used in a classroom to keep students engaged through various means of interactives easily created by the teacher with existing content. The session will also include a hands-on opportunity to learn how to use Nearpod to build your own presentations.

With technology in the classroom, students sometimes tend to wander off and not focus on the lesson that is being taught. Nearpod, an all-in-one solution for the use of mobile devices in education, can keep students engaged. Users can control the flow of the presentation during a lesson without having to continuously redirect students. This session will present Nearpod in a classroom to keep students engaged through various means of interactives easily created by the teacher with existing content. The session will also include a hands-on opportunity to learn how to use Nearpod to build a presentation. This workshop can be done with laptops or tablets (PC, Mac, Chromebook, iPad, Android, or Windows 8 Tablet).

NOTABILITY: Organization for Students and Teachers

Notability is the go-to app for tens of thousands of students and educators across the world. When used to its fullest potential, teachers can easily organize lessons, presentations, PowerPoints, and notes to get the most from the app. Integration with existing content is key, allowing for guided notes, worksheets, creative projects, diagraming, labeling, and so many more assignments to be created and distributed to students. Learn hands-on from a teacher who has moved teaching from handouts to digital interactive!

NUTS AND BOLTS: Developing a 1:1 Mobile Device Program

If you're considering the deployment of a mobile device program, this hands-on workshop takes attendees from the planning stage through the implementation of a mobile device program. Topics include: leadership, deployment strategies, network infrastructure, apps, content creation, curriculum building, paperless classroom, student engagement, building a support team, protecting devices, configuration and management of the mobile devices, and professional development strategies. Attend to explore apps, iBooks, and courses that assist in designing a program at any level.

SCIENCE INVESTIGATIONS UTILIZING APPS

With science standards having such a strong focus on engineering, we continue to explore the use of the mobile devices in STEM content. From apps that engage engineering skills to apps for building lab reports, this training shows how science class plus mobile device equals great fun and engaging ways to learn and build!

TEACHING WITH IPADS: Reaching Students through 21st Century Learning

This workshop explores the latest brain research on how we learn. We discuss ways to leverage technology to motivate and inspire students, as well as how it can transform instruction and assessment into engaging exercises. Collecting data and providing timely feedback will also be explored.

FACTS EDUCATION SOLUTIONS

TECHNOLOGY INFUSED PROJECT-BASED LEARNING

This class was designed for those who wish they had more time for project-based learning. The shift from breadth to depth with standards-based instruction creates opportunities for students to explore real-world problems and challenges, understand the relevance of what they are learning, and pursue their passions. Take this session to leverage technology and blended learning strategies to empower students, facilitate collaboration, and inspire creativity.

THE TECHNOLOGY REVOLUTION IN SCHOOLS: The Engine That Drives College and Career Readiness

In a world that changes daily, how are teachers, principals, and technology specialists to plan for the future of instruction? The key is not to look at headlines, breakthrough products, or fads, but to examine the greater trends which these support. This workshop examines 10 major trends in technology that will likely have an impact on education. Through discussion and sharing, attendees will explore the possibilities, challenges, and the ways teachers and administrators can prepare for the elusive horizon of tomorrow.

TECHNOLOGY TRENDS THAT WILL CHANGE EDUCATION (AND THE WORLD)

In a world that changes daily, how are teachers, administrators, and technology specialists planning for the future of instruction? This session examines major trends in technology that impact education and outlines the possibilities, challenges, and the ways teachers and administrators can prepare for the elusive horizon of tomorrow.

Love it or hate it, the mobile device is an enormous player in the race to 1:1 technology access. This workshop will address the questions, concerns, and panic of teachers new to this platform by providing a tool kit of applications that can be used in the classroom on day one. While targeted for teachers, the session will also address the training needs of administrators bringing a mobile device 1:1 program into a school.

THE ETHICAL PIRATE: How to Use Digital Resources Responsibly and Legally in the Classroom

Is this good instruction or is it theft? The ready access of digital content has changed the teaching profession for the better, and made it much more complicated. This workshop explores the murky legal realities of fair use and provides some guidelines for ethical and legal use of online resources for teachers and students. This workshop also showcases how teachers can protect their own content.

THE FUTURE OF EDUCATION IN A DIGITAL WORLD

Preparing students to embrace their civic duty to contribute to the virtual world in responsible ways is paramount. This session helps educators build digital skills while understanding how to conduct themselves in a civil manner in the virtual space as professionals. Gain a better understanding about the inception and implementation of social media tools from Google to Twitter to other emerging social networks in order to:

- Better understand their civic, as well as ethical, responsibilities in the digital realm
- Provide a real-time overview of digital media
- Further develop critical and lateral thinking as well as just-in-time learning skills
- Engage and empower students to become active learners who are able to analyze, compare/contrast, and apply acquired knowledge
- Enhance your presentation skills on and offline
- Improve collaborative problem-solving skills

INSTRUCTIONAL TECHNOLOGY

THE POWERPOINT PLATEAU: How We Got On It and How We Can Fly Above

Exciting first experiences of PowerPoint have been transformed to teacher drudgery and student boredom. How did we get here? Can we use PowerPoint more effectively? What other options are available? This session explores these questions to help enhance a classroom experience.

USING DIGITAL APPLICATIONS TO UPGRADE YOUR PROFESSIONAL DEVELOPMENT PLAN

How can professional development structures be upgraded to implement curriculum mapping or any other major school improvement initiative? How can teachers integrate Digital 2.0 applications into their training design and model 21st century skills for their staff? During this session, participants learn strategies to help develop a professional development plan that provides focus and helps to sustain the work long term, including:

- How to craft realistic goals
- The importance of unpacking goals and beginning to draft an implementation plan
- Integrating Digital 2.0 tools to enhance the training and model 21st century skills

STANDARDS-BASED INSTRUCTION

STANDARDS-BASED INSTRUCTION

ACCURATE ALIGNMENT TO STANDARDS

Educators often struggle with developing units of study with quality standards alignment. Sometimes they:

- Inadvertently put the cart before the horse by aligning a developed unit of study to the standards they think "best fit," which leads to too many standards being selected
- Develop a unit of study with thoughtfully pre-selected standards, yet it results in small or large misalignments based on standards' expectations and the unit's learning requisites

There is an art to designing standards-based curriculum, assessments, and instruction. This professional development series will focus on the following:

- First, it is important to have standards literacy to ensure better interpretation of standards expectations
- Second, it is equally important that the standards-based learning expectations in a unit of study are clearly stated, explicitly taught with current students in mind, and authentically assessed
- Third, depending on short- and long-range curriculum, instruction, and assessment goals, it may be beneficial to prioritize standards and aligned skills to aid in instructional and assessment choices

STANDARDS-BASED INSTRUCTION

BEYOND CHEATING: Defining and Teaching Academic Integrity for Shifting Environments

As the parameters of education are redefined, an understanding of what constitutes cheating is similarly challenged. In a world of universal access and constant communication, how do we teach students academic integrity?

CREATING AN ENVIRONMENT FOR TALKING AND COLLABORATION: Guiding Students to Tackle College and Career Readiness Using Productive Group Work

This session looks at ways to support collaborative conversations based on subject matter content. Using the constructs of productive group work, participants learn about strategies, including "Request and Reciprocal Teaching" to support collegial discussions and content-based arguments. Additionally, best practice ideas intended to build a culture of "talk" in the classroom are shared through video and discussion. The session also looks at scaffolds for supporting classroom conversations and helps participants identify quality indicators of productive group work.

DEVELOPING QUALITY UNIT MAPS

As a district or school begins the mapping-to-the-core process, it's important to model, for staff, the development of quality maps. Whether attendees are just getting started in mapping or are in the process of revisiting or editing current units, this session provides them with the tools and strategies to develop high-quality units. Strategies provided can be used to develop units or revise/edit existing ones to ensure quality.

Participants will learn how to:

- Draft quality units using a step-by-step process
- Integrate the CCSS into the units
- Use coaching strategies to ensure high-quality units
- Strengthen the alignment between all elements in the units

FLIP YOUR CLASSROOM INSTRUCTION AND CREATE STUDENT-CENTERED LEARNING

"Bueller? Bueller? … Bueller?" Lecture alone is ineffective whether it is live or online. The challenge with the flipped classroom model is to engage students in the content in a dynamic way. In this session, learn how class time can be used to create learning communities where students communicate, collaborate, and create. Given the myriad of tools at our fingertips, this is becoming easier to do!

PRE-MAPPING: Strategies for Getting Started

How can teachers develop high-quality integrated units, integrating the unwrapped and translated standards into unit maps? How can they use the process to strengthen alignment among all the elements in the unit? During this guided coaching session, learn how to use "coaching strategies" that help teachers think through the critical elements in their units.

Participants learn how to:

- Use a graphic organizer to think through the critical elements in your unit
- Use pre-mapping strategies to identify key elements in the unit
- Determine the integrated curricular areas
- Integrate college and career readiness into the units
- Strengthen the alignment among all the components of a curriculum map

PROJECT-BASED LEARNING IN A BLENDED LEARNING MODEL TO TEACH COLLEGE AND CAREER READINESS

This course is designed for those who wish they had more time for project-based learning (PBL). Using Web 2.0 technology, asynchronous online discussions, and Google apps, attendees will learn how to connect students inside and outside of the classroom to build PBL into the curriculum. Participants will also learn how to create more opportunities for students to work together, explore, problem solve, think critically, and create.

This session presents multidisciplinary project structures that can be easily facilitated in a blended learning model — combining work in the physical classroom with work done online to increase student engagement and get them college and career ready.

Participants will:

- Explore the rigors for their grade level/subject area
- Experiment with Google apps (docs, presentation, drawing, forms/spreadsheets)
- Explore project structures that are cross disciplinary
- Map out a project that integrates web tools and/or Google apps
- Collaborate with peers to create a project

STANDARDS-BASED INSTRUCTION

SQUARE PEGS FOR ROUND GOALS: College, Career, and Life Preparedness for Students (1 of 2)

Schools have always demonstrated excellence in preparing students for the world of the previous generation. But, in a rapidly changing world of complex demands that we cannot yet envision, this pattern is less and less effective. Momentum works against us and we create square pegs for round goals.

There remains a body of knowledge required for daily living and for work in a classroom, but this is being redefined by every present digital tool. There is a new set of learning skills a college student should be comfortable with, such as: productivity software, effectively finding and evaluating Internet resources, or working collaboratively with groups who may be in the same room or may be in different time zones. Without requisite skills, fundamental knowledge falls flat to keep to a schedule, and to focus amidst chaos. Many of the roles formerly left to the teacher have to be internalized, and only through encouraging active learning, rather than passive compliance, can schools develop these more advanced habits.

STANDARDS-BASED INSTRUCTION

SQUARE PEGS FOR ROUND GOALS: College, Career, and Life Preparedness for Students (2 of 2)

Navigating the realities of job search, career building through various positions and fields, and student loan repayment — not to mention the continued challenge of moving out and making a life on one's own — are skills that are never explicitly addressed in a college curriculum. In fact, in most college programs there is little focus on giving students anything more than a degree, a vital — but not comprehensive — ticket to the future.

College preparedness is far more than what is documented on the SAT or found on a transcript. The life and learning skills that students develop in elementary and secondary school are vital to real success in college and more importantly to the round goals of their future.

STANDARDS-BASED INSTRUCTION

STRATEGIES TO BRING THE COLLEGE AND CAREER READINESS STANDARDS TO LIFE

How can teachers engage high school students with college and career readiness standards? Learn the “shifts” and basic information about the new standards and explore the tools and strategies to help students achieve success within the new, higher standards. Proven instructional strategies are demonstrated to support secondary-level academic teachers, providing the rigor and curriculum alignment to address the college and career readiness standards. Participants are encouraged to bring Wi-Fi-enabled devices.

FINAL CUT PRO X FOR BEGINNERS

This workshop is designed to introduce Apple's editing software, Final Cut Pro X (FCP X), to those with little to no editing experience. The advantage for new users of FCP X is that they do not have to 'un-learn' previous versions. Participants will learn how to import material, perform simple edits, and integrate sound and music.

This course is designed for 6-12 grade technology teachers.

FULL STEAM AHEAD! (1 of 3)

Gain valuable insight into the synergy of traditional STEM learning and an arts curriculum. Attendees learn about STEAM course content and technology integration in the STEAM classroom. They are also given valuable resources, including: curriculum, online tools, hands-on projects, and apps used as part of our STEAM workshops.

FULL STEAM AHEAD! (2 of 3)

This two-day workshop series offers attendees the choice of the following STEAM topics:

Nearpod: Students Can Be Engaged in Math

With a mobile device deployment program, students tend to wander off and not focus on the lesson being taught. However, with Nearpod, teachers can control the use of the mobile device during a lesson without having to continuously redirect students. During this session, a presentation will show participants how Nearpod is used in a math class — particularly for quizzes. It puts teachers in students' seats so they can see firsthand how Nearpod works. The session also includes a hands-on opportunity to use Nearpod to build personal presentations.

This course is designed for 7-12 grade math teachers.

STEM / STEAM

FULL STEAM AHEAD! (3 of 3)

This two-day workshop series offers attendees the choice of the following STEAM topics:

Hacking the Humanities: The Mobile Device, Interdisciplinary Studies, and Critical Thinking

This session demonstrates how iOS and other technologies can enhance instruction and promote interdisciplinary studies. Participants will explore how students in interdisciplinary classes are currently using educational technology to apply critical thinking toward all academic areas.

This course is designed for 9-12 grade humanities teachers.

STEM / STEAM

IMPLEMENTATION OF STEAM

This workshop focuses on strategies to plan curriculum based on national standards for math with an emphasis on cross-curriculum strategies in science. Teachers are given customized professional development to address the backgrounds and needs of their students. Training includes engaging activities and strategies for effective implementation of college and career readiness skills. It also addresses those students not proficient on grade level standards, making correct instructional adjustments to escalate their skills and measure their growth.

STEM / STEAM

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STEM / STEAM

INNOVATIONS IN EDUCATION

Augmented reality, virtual reality, drones, 3D printing, robotics, computer programming, and other STEAM related topics are becoming quite popular in education. With so many different tools available it can be overwhelming for a teacher to know where to begin. This session showcases exciting innovations in education and provides participants with a resource for each area to learn more and even begin to incorporate in the classroom. Explore why these skills are important for students today — especially elementary students — as they face an ever-changing landscape of career opportunities that require STEAM skills.

This session is suitable for K-12 teachers and administrators, participants are encouraged to bring a device with them to fully participate in this interactive session.

INNOVATIVE TEACHING WITH MOBILE DEVICES

In today's world, it isn't enough to ask students if they know something. They need to prove they can find it, connect with it, and ultimately use it to create something new. Technology has revolutionized the classroom by helping students see beyond the walls of their classroom.

This workshop takes teachers out of the classroom and into an immersive experience that promotes cross-disciplinary skills to accomplish a project relevant to their subject area. It also helps them gain new, innovative ways to incorporate mobile devices into instruction. Teachers are divided by their content areas — science, English, math, social studies, and fine arts — and are then assigned a facilitator to lead their experience. The activities are different for each subject and culminate in a large group, where every participant can share their finished projects; participants will then discuss how the experience supports STEAM education.

OZOBOT/BIT + SCIENCE TECHNOLOGY ROBOTICS ENGINEERING ARTS AND MATH

The Ozobot STREAM Program is an innovative way to teach subjects like programming, math, and science. Students become more engaged and inspired when topics come alive with the help of Ozobot and/or Bit. Teachers gain access to STREAM-/STEM-based lessons, workshops, and activities, and are equipped to inspire the next generation of computer scientists, engineers, and inventors.

This hands-on workshop provides teachers firsthand experience on programming a robot, Ozobot, and/or Bit. Lessons are aligned to the Next Generation Science Standards and national math standards.

PROGRAM IT!

Get started with basic programming for K-8 grade students by using mobile devices to program apps and robots, such as Ozobot and Sphero. Participants rotate through a variety of hands-on stations to discover how programming can be integrated into their STEM curriculum.

STEM / STEAM

PROJECT BASED LEARNING: Empowering Young Innovators

This workshop explores the ideology behind Project Based Learning (PBL) with emphasis on application in today's classroom. Various PBL subsets (Challenge Based Learning, Design Based Learning, Service Based Learning, etc.) will be discussed. Examples of these methods from current classes are shared and transpired into a unit plan to be deconstructed. The idea of teacher as facilitator and students as teachers is explored as a predominant tenet of PBL.

Participants are able to ask questions and seek help from an expert while creating a full PBL unit that is standard aligned and ready for instruction upon returning to the classroom.

ROBOTICS: Introduction to Robotics Through Mobile Devices

Work hands-on with various mobile device apps designed to help teach the concepts and fundamental functions of robotics in the integration of science concepts. Participants receive all of the apps presented, curriculum resources, and lesson plans.

STEM / STEAM

ROBOTICS WITH SPHERO

Robotics instruction and hands-on learning addresses our nation's need for a well-prepared, creative, yet disciplined workforce, while also teaching valuable leadership and teamwork skills.

This hands-on workshop exposes teachers to inquiry-based activities they can take back to their classrooms. Learn how to help students design, build, program, and document robots using science, engineering, technology, math, and writing skills in a hands-on project that reinforces their learning.

ROKENBOK: Engineering and Design (1 of 2)

Academic researchers and child development experts have known for many years that basic literacies and an affinity for STEAM learning can be gained through dynamic construction, such as Rokenbok. The Rokenbok Dynamic Curriculum consists of project-based technology and engineering challenges, embedded science and math concepts, design briefs with context and rationale, correlation to educational objectives and standards, and the student assessment rubric.

STEM / STEAM

ROKENBOK: Engineering and Design (2 of 2)

The Rokenbok Dynamic Curriculum focuses on the three lessons of fluency:

Level 1: System Fluency

- Introduction to the Rokenbok technology and engineering, step-by-step instructions, science and math fundamentals, and single-solution challenges

Level 2: Creative Fluency

- Introduction to design briefs — design briefs scaffold the creative process and require out-of-the-box thinking — and multi-science challenges

Level 3: Engineering Fluency

- Advanced design briefs introduce 3D modeling, 3D printing, and multi-solution challenges

STEM / STEAM

SHOCKING NEWS! Electronics Made Easy With iCircuit and Mr. Circuit

Attendees work hands-on with a traditional, inexpensive breadboard electronics lab kit. Mr. Circuit is supplemented with iCircuit, a virtual circuit design app. Participants of this course receive iCircuit and create their own virtual circuits, along with actual circuits using a traditional breadboard lab kit with resistors, LEDs, capacitors, and diodes. FAQs, along with electronics curriculum resources, are included. **This course is designed for 6-12 grade teachers.**

SPHERO CORE LESSONS

From polygons to percentages, CORE lessons explore the principals of math and science through programming. SPRK begins with MacroLab, a visual programming app. After completing five MacroLab lessons, students are ready for advanced lessons in OrbBasic, a powerful app for text-based programming. These lessons align with the national curriculum for 3, 4, and 5 grade. Each comes with a step-by-step teacher guide, student guide, and worksheet. Lesson titles include: Time, Speed, and Distance, 2D Geometry, Circles and If Then, Sensors and Random, Percentages, Patterns and Colors, Go To and Variables, and Mean, Median, and Mode.

STEAM: Expanding the STEM Paradigm

Leonardo DaVinci was famously an engineer, architect, scientist and (of course) a painter. Why do our students need to choose just one path? There's a national push to develop strategies to enhance STEM (science, technology, engineering, and math) education by integrating religion, art and design — transforming STEM into STEAM and promoting the intellectual and creative potentials in the process. Explore the journey of one school as they use the power of the iPad to enhance their curriculum, transform learning, and engage in digital formation of the learner through a STEAM concentration certification program that is accredited by AdvancED.

STEM CHALLENGES WITH SPHERO

After completing CORE lessons, students are equipped for STEM challenges. These multi-day experiments encourage creative problem-solving and teamwork. Students concept, engineer, and build contraptions powered by Sphero. After showcasing their creations to the class, open-ended discussions are held to explore which factors led to some designs outperforming others. Created with teachers in mind, most of the additional materials required can be found around the classroom. Each challenge has a teacher's guide and a list of questions to challenge students as they work through the creative process.

Lessons may include:

- Chariot Challenge: Students break into groups to build Sphero-powered chariots and race against a pre-programmed Sphero on the last day
- Bridge Building: Students concept and build a bridge with finite resources, making it possible for Sphero to cross a gap
- Hydro Hypothesis: Students are challenged to build a Sphero-powered contraption that can carry weight across a pool
- Maze Mayhem: Students break out into small groups to write a complex program that allows them to navigate their Sphero through a custom maze featuring tight corridors

STEM / STEAM

STEM: National Initiatives for Young Leaders

What students learn about the science disciplines, technology, engineering, and mathematics during their K-12 schooling shapes their intellectual development, opportunities for future study, choices of career, and much more. How they learn to use these competencies leads to informed decisions about political and civic issues and about their own lives. STEM is rooted in a student-centered learning experience that naturally integrates concepts of science and math with the creativity of engineering using technology to record, create, process and share student outcomes.

This workshop provides a variety of resources and ways to incorporate STEM competencies into lessons rooted in everyday experiences for the 21st century student. Explore topics such as 3D drawing, coding fundamentals, robotics, electricity and basic engineering concepts.

STEM / STEAM

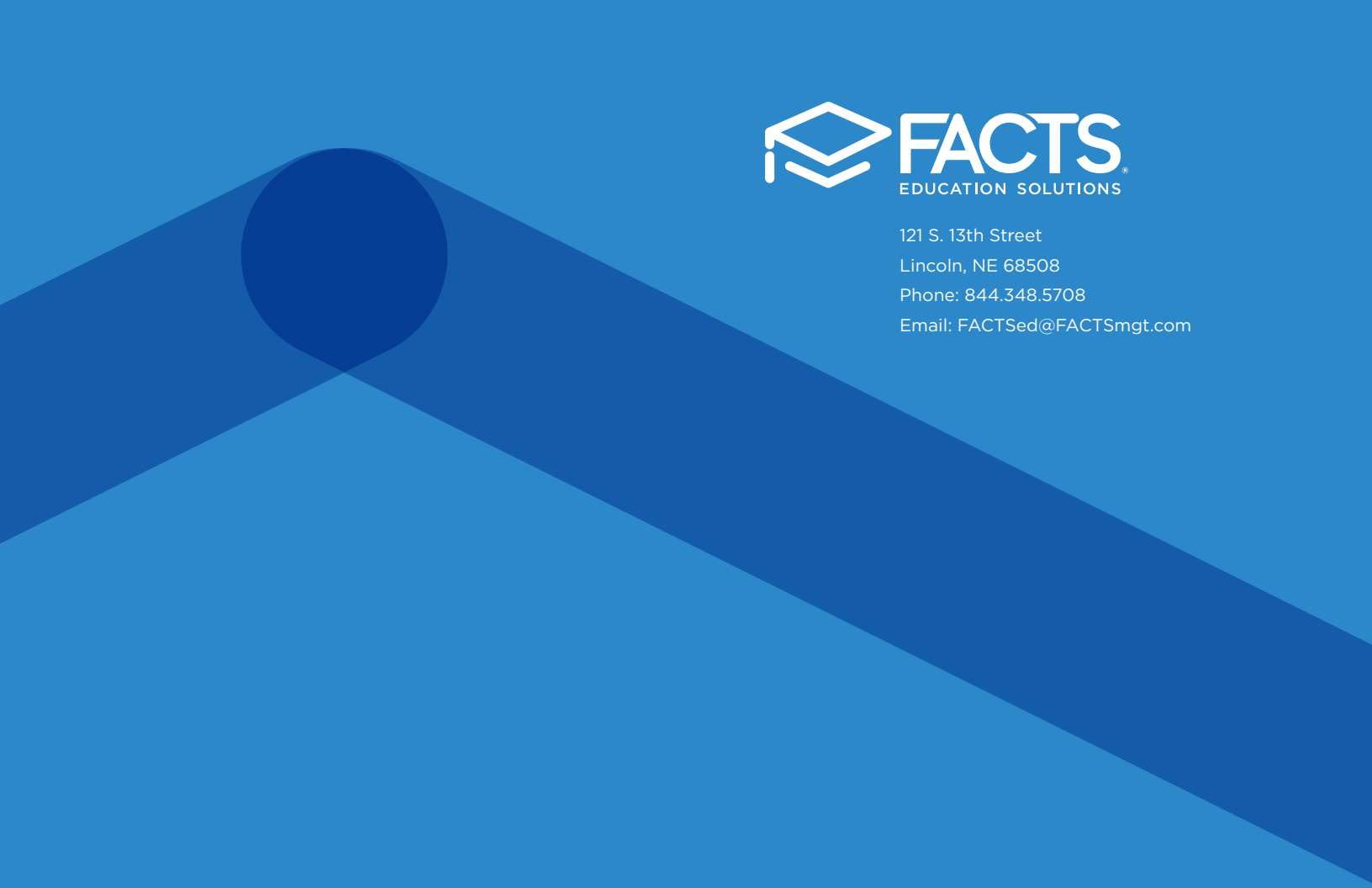
TECHNOLOGY TO SUPPORT STEAM

Experience new methods to integrate STEAM throughout a curriculum. A wide variety of resources — including Google Apps, programming ideas, integration of 3D printing, and simulations — are designed to recharge STEAM curriculum. This hands-on session provides the background to successfully incorporate new levels of technology integration into the classroom.

THE “M” IN STEAM = MATH

Enhance the instruction and integration of math to cross-curricular academic subjects in order to increase proficiency in math and the application of problem-solving skills to everyday situations. Participants are exposed to high-quality lesson ideas, integrating apps and productivity tools, math resources, and project-based units. Participants must bring a digital device (e.g., iPad, Chromebook, laptop, etc.) to fully participate in the workshop. This session provides free vetted websites to support instruction of math addressing career and college readiness skills.

This course is designed for 7-12 grade math teachers.



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