Welcome back from CCR!

Welcome back, teachers! We hope your summer was relaxing, rejuvenating, and satisfying! To start the school year off, the CCR division has created a short video introducing different topics. Click on the image below to see the video.

Topics in Video:
- ESSA
- Science and Computer Science Standards
- Indiana’s Bicentennial Resources and Events
- IDOE Events Calendar
- IDOE Website Redesign
- Teachers’ Toolbox
- Learning Connection

From the Office of Student Assessment

For ISTEP+ Grades 3-8, [items and scoring](#) notes have been released for ELA, Math, Science, and Social Studies. ISTEP+ Grade 10 items and scoring notes will be released later this fall after cut score setting. Any questions, contact the IDOE Assessment specialists.

New Teachers’ Toolbox Email

Would you like to subscribe* to Teachers’ Toolbox??

Do you have an idea or suggestions for a feature in Teachers’ Toolbox?

Email us at [teacherstoolbox@doe.in.gov](mailto:teacherstoolbox@doe.in.gov)

*To subscribe send an email with your first/last name, email, school corporation, and zip code.

FREE Field Trips Available

The Indiana State Museum is offering free field trips this year and has several educational programs available. Check out the links to the left to see what is available for you and your students!

Sponsors:

- [Indiana State Museum](#)
- [Field Trip Info](#)
- [Field Trip Inquiries](#)
- [K-12 Education Program Guide](#)
Lilly Endowment Teacher Creativity Fellowship

Lilly Endowment is inviting applications to an annual fellowship program that provides support to K-12 educators in Indiana to pursue an imaginative project that infuses their busy lives with personal renewal and intellectual revitalization. Previous fellowship winners have traveled worldwide to understand the cultures reflected in their increasingly diverse student populations, traced their own ethnic identity and family tree, and pursued their interest in the arts, scientific exploration, and the natural world. The program is open to licensed K-12 educators working in public and private schools in Indiana. Applicants must have at least three years of professional experience in education.

http://www.teachercreativity.org/

Target Field Trip Grants

Deadline: August 1 - September 30, 2016 It's become increasingly difficult for schools to fund learning opportunities outside the classroom. To help them out, Target launched Field Trip Grants in 2007. Since then, they've made it possible for millions of students to go on a field trips. Each grant is valued up to $700. More info HERE.

Disney Summer of Service

grants will offer young change-makers (ages 5-18) $500 to gather their friends and turn creative ideas into projects that will positively impact their communities. Application Deadline: September 30, 2016. Learn more HERE. http://ysa.org/grants/youth-grants/disney/

Fuel Up to Play 60

The competitive, nationwide funding program can help your school jumpstart and sustain healthy nutrition and physical activity improvements. Funds can be used to conduct in-school promotions focused on creating a healthier school and to implement Healthy Eating and Physical Activity Plays. Funds can also be used for professional development, nutrition education materials, and physical education equipment & materials. https://www.fueluptoplay60.com/funding/general-information

September 2016 IDOE Webinars

<table>
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<th>Monday</th>
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| 12 AM (ET): Hacking the Computer Science Standards K-8  
Register here | 13 AM (ET): STEM School Certification  
Register here |
| 1 PM (ET): Hacking the Computer Science Standards K-8  
Register here | |

Hacking the Computer Science Standards K-8

Please join the IDOE Science Content Specialists for a webinar discussing Computer Science Standards K-8. This session will review the newly created and adopted computer science standards for kindergarten through eighth grade. You will leave with an understanding of the DOE’s vision for the standards, their structure and grade bands, and an overview for professional development that will be offered for successful implementation.

STEM School Certification

Please join the IDOE College and Career Readiness Division for a webinar discussing STEM Certified Schools. Specialists from the IDOE will be discussing the STEM School Certification process, resources, and website. Schools at any stage (Developing, Initial, Approaching, and Full) are encouraged to attend to ask questions and gather information. If your school is thinking about applying for certification during the 2016-2017 school year, it would be beneficial for a member of the STEM leadership team to attend.

Teacher Grant Opportunities

Lilly Endowment Teacher Creativity Fellowship

Lilly Endowment is inviting applications to an annual fellowship program that provides support to K-12 educators in Indiana to pursue an imaginative project that infuses their busy lives with personal renewal and intellectual revitalization. Previous fellowship winners have traveled worldwide to understand the cultures reflected in their increasingly diverse student populations, traced their own ethnic identity and family tree, and pursued their interest in the arts, scientific exploration, and the natural world. The program is open to licensed K-12 educators working in public and private schools in Indiana. Applicants must have at least three years of professional experience in education. http://www.teachercreativity.org/

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The College and Career Readiness Division along with the Outreach Division facilitated Summer PD at seven sites around Indiana this summer. PD sessions focused on best practices, new science standards, literacy, world language, IN Bicentennial and leadership.

Hoosier Family of Readers: CLASSROOM CHALLENGE

Teachers, welcome back to school! As you are creating your lesson plans, please consider including your classes’ participation in the Hoosier Family of Readers Teacher Classroom Challenge. Superintendent Glenda Ritz and the Hoosier Family of Readers team challenge classrooms throughout Indiana to celebrate the Indiana Bicentennial by reading 200 books, either digital or print, before December 31, 2016!

When you reach the challenge goal, take a photo of your class with a visual that displays your accomplishment! Be creative! To share your progress, complete this form upload your photo, and click Submit. You can also share your classroom’s progress with us on social media by mentioning the Hoosier Family of Reader’s Twitter or our Hoosier Family of Readers Facebook page.

Do you work or volunteer at a Title I (or Title I eligible) school OR a program that serves at least 70% low income families? If so, please register with our partners First Book. First Book offers high quality books at both free and reduced cost. Registration is free and easy! Each registration that the Hoosier Family of Readers program refers will count to our total. Once we refer 2,000 registrations, First Book will send us a truckload of books to distribute to classrooms across the state.
Hopefully you enjoyed some free time (😊) this summer to review the Indiana High Ability ELA Units (Teacher's Toolbox July 2016). If you did look at the units, you probably noticed an emphasis on 21st Century Skills. These skills can be incorporated to any and all classrooms.

### Collaboration
Students are encouraged to work in pairs or small groups to carry out many learning activities and projects, to discuss readings, and to plan presentations.

### Communication
Students are encouraged to develop communication skills in written, oral, visual, and technological modes in a balanced format within each unit of study.

### Critical Thinking
Students are provided with models of critical thinking that are incorporated into classroom activities, questions, and assignments.

### Creative Thinking
Students are provided with models of creative thinking that develop skills that support innovative thinking and problem solving.

### Problem Solving
Students are engaged in real world problem solving in each unit of study and learn the processes involved in such work.

### Cross Cultural Skills
Students read and discuss works and events representing the perspectives of different cultures. They have opportunities to analyze different perspectives on issues.

### Technology Literacy
Students use technology in multiple forms and formats to create generative products.

### Social Skills
Students work in small groups and develop the tools of collaboration, communication, and working effectively with others on a common set of tasks.

### Information Media Literacy
Students use multimedia to express ideas and project learning.
Understanding Executive Functioning and Its Connection to Learning

What is Executive Functioning?
According to the Center of the Developing Child at Harvard University, "executive function and self-regulation skills are the mental processes that enable us to plan, focus attention, remember instructions and juggle multiple tasks successfully." Our brains are not simply born with these abilities, we "are born with the potential to develop them."

What does Executive Functioning have to do with Learning?
These skills have been strongly correlated to positive school and life outcomes. Children with high executive functioning skills exhibit positive school behaviors, good performance in school, and good health and life decision-making behaviors. These children are creative, flexible, organized, emotionally controlled and ready to learn.

Normal Development
The ability to make a mental image in one’s mind in order to anticipate the future is a developmental skill. Some students may have delays in developing these skills which require explicit teaching of planning and executing tasks and providing support in these areas. Executive function and self-regulation skills depend on three types of brain function: working memory, mental flexibility, and self-control. These functions are highly interrelated, and the successful application of executive function skills requires them to operate in coordination with each other.

Development of Executive Functioning Skills:
2 years old: NOW
3-5 years old: 5-20 minutes
1st grade: Several hours
3rd grade: 8-12 hours
12-16 years old: 2-3 days
17-23 years old: 2-3 weeks
23-35 years old: 3-5 weeks
(Jacobsen and Ward, Cognitive Connections)

Additional Reading & Resources for Review:
- http://blog.brookespublishing.com/7-tips-for-helping-students-avoid-overload/

Apps to Support Executive Functioning:
- Calm (an app for meditation and mindfulness) http://www.calm.com/
- Kid-friendly meditations and exercises promote regulation and use of language http://www.cosmickids.com/
- Doodle Buddy (for iOS) provides personally relevant images (such as classroom settings) and allows users to snap pictures and add annotation
- Can Plan (free for iOS with in-app purchase for full features), which allows for task analysis with photo and audio supports incorporated into a calendar

MAGIC TRICKS TO SUPPORT EF:
- Organize the classroom to Reduce stimulation and disorder.
  - Auditory: Put tennis balls on chair legs; use rugs and wall hangings to absorb noise; consider white noise machines or fans to block out unavoidable noises; and allow students to use earplugs and headphones.
  - Visual: Dim harsh lighting, declutter surfaces and walls, and allow students to wear a baseball cap or sunglasses to help blunt the effects of too much visual stimulation.
  - Olfactory (smell): Try to avoid using scented cleaning products, perfume, gum, and soaps.
- Break daily agenda into units of time, provide a photocopy of this to students to highlight as they complete parts of their day
- Use “real life” visuals to demonstrate what a completed task looks like (take photos)
- Help students to backward plan their work (Start with Done)- Get Ready, Do, Done-Strategy
How much time is needed for Math and Science?

Indiana code does not require a specified amount of time that must be spent on mathematics and science curriculum and instruction. It only specifies that a school corporation’s curriculum includes mathematics and science. (IC 20-30-5-7)

Current research places the focus on the quality of the instruction, not the quantity of instruction. A student that has a 60-minute math block instructed with research-based best practices will have better success and retention than a student with a 90-minute math block instructed without research-based best practices.

When you structure the math block, you need to identify the core math instruction (Tier 1). Within Tier 1 instruction you will differentiate to meet the needs of your students. If you move from a 60-minute to a 90-minute core math block, you need to focus on the quality of instruction. Then outside of your core math block will be Tier 2 instruction.

Mathematics Instructional Best Practice

Establish mathematics goals to focus learning

Effective teaching of mathematics establishes clear goals for the mathematics that students are learning, situates goals within learning progressions, and uses the goals to guide instructional decisions.

Teachers and students need to be able to answer crucial questions:

- What mathematics is being learned?
- Why is it important?
- How does it relate to what has already been learned?
- Where are these mathematical ideas going?

Goals or essential questions motivate learning when students perceive the goals as challenging but attainable (Marzano 2003; McTighe and Wiggins 2013).

Referring to goals during instruction allows students to be more focused and better able to perform self-assessment and monitor their own learning (Clarke, Timperley, and Hattie 2004; Zimmerman 2001).

Teachers can discuss student-friendly goals as appropriate during the lesson so that students see value in and understand the purpose of their work (Black and Wiliam 1998a; Marzano 2009).

Teachers can discuss student-friendly goals as appropriate during the lesson so that students see value in and understand the purpose of their work (Black and Wiliam 1998a; Marzano 2009).

Reources:
- YouTube Video
- Teacher and Student Actions

Check out my Learning Connection community “Elementary Math, Science, and STEM” for announcements on upcoming webinars and a fall book study.

Children’s Book Corner for Mathematics

Addition  Multiplication
Subtraction Division
Shapes Geometry
Graphing Telling Time
Fractions Estimation
Money Probability
Measurement Other Math
Numbers/Counting
The purpose of the Literacy Focus of the Month is to provide guidance to administrators and teachers for supporting a monthly, school wide instructional focus based on best practices and evidence based strategies in literacy. This "user-friendly" FOCUS and support tools will assist districts and schools in the implementation of reading instruction in classrooms across multiple grade levels, as well as different subjects/content areas. The topics in the FOCUS range from policies and procedures to the five essential components of reading as identified by the National Reading Panel. The support tools are devoted to strengthen administration and teacher content knowledge and foster discussion by focusing on one topic each month during grade level or faculty meetings. Although the monthly focus will highlight and supplement a specific procedure or skill, it is impossible to teach the components in isolation; therefore, the Literacy Focus of the Month should serve to present a school-wide shared commitment to literacy.
**Tech Tool Highlight**

Have you heard of “diigo”?? It is a web-based way to annotate and comment on webpages. Once an annotation is done on a webpage, it records it into a library that can be accessed from anywhere. There are many other features; being able to create groups to share pages and annotations with, ways to create an outline, and ways to tag the different entries for easy searching. “diigo” is accessible from Chrome, Firefox, and Internet Explorer, as well as has an iTunes and Google Play app. Melanie Martz shared this tool at multiple IDOE eLearning conferences this summer; if you were there, share it with others!

**Online library**

**Edutopia** Find: “The 8 Minutes that Matter Most”

Brian Sztabnik, featured blogger on Edutopia.org, Talks with Teachers blogger, and The Best Lesson Series editor talks about how the beginnings and endings of lessons are the ones that matter most in his blog post “The 8 Minutes that Matter Most.” Below is a snapshot of what he shares in his post—check out the post for more details!

**Beginnings:**
1. Trend with YouTube
2. Start with Good News
3. Cross Disciplines
4. Write for 5

**Endings:**
1. Level Up
2. Exit Tickets
3. Mimic Social Media
4. Post-It Power

**Indiana NCTE Affiliate**

A group of Indiana Educators are working to revive the Indiana Affiliate for NCTE, National Council of Teachers of English. To join the Indiana Affiliate go to this google form.

**Teacher Reads**

Although we all already have tall “To Read” piles; here is another (although my not super new) to add and may benefit your classroom as well. Mary Cay Ricci’s Mindssets in the Classroom: Building a Culture of Success and Student Achievement in Schools is “inspired by the popular mindset idea that hard work and effort can lead to success. This resource provides educators with ideas for ways to build a growth mindset school culture, where students are challenged to change their thinking about their abilities and potential.” Read chapter one of Ricci’s Mindssets in the Classroom here.

**Resources to learn more about the “Mindset Idea”**
- Mindset Pinterest page
- Carol Tomlinson on mindsets in the classroom
- “Mindsets in the Classroom” Downloadable Tools and Resources for Educators
- Mindset PPT
- Mindset by Carol Dweck
- Teacher Education Review Podcast

**Specialist Contacts**

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The Indiana Department of Education is sponsoring the Indiana Kids Election program
Students throughout Indiana will get a chance to make their choices for president, governor and senator through a
mock election this November. The students will vote November 8th, the same day adults go to the polls for the
general election. Organizers say the Indiana Kids' Election is based on the premise that voting is occasionally done by
inspiration, but more often by habit. The program seeks to emulate the election process. Students participate in
voting milestones such as registering to vote on or before October 11. Under Indiana law (IC 20-30-5-4), schools are
required to give instruction on the election process two weeks preceding a general election for all students in grades
6-12. The Indiana Department of Education, the State Bar Association, and the Indiana Secretary of State are all
sponsoring this Bicentennial Legacy Project. Visit www.inkidselection.com to sign up today!

Visit the DOE Civics Webpage
“...a foundation in civics is not a luxury but a necessity. Students today absolutely need a sense of citizenship, an
understanding of their history and government, and a commitment to democratic values. They need to know their
rights—and their responsibilities. Civics cannot be pushed to the sidelines in schools.” (Former U.S. Sect. of Ed. Arne Duncan)
http://www.doe.in.gov/standards/civics-education

Specialist Contact: Bruce Blomberg, Social Studies Specialist, bblomberg@doe.in.gov, 317-232-9078

LOOKING FOR SOME GOOD BICENTENNIAL MATERIAL? TRY THESE LINKS:

BICENTENNIAL RESOURCES ON DOE WEBSITE
These Bicentennial Resources aim to honor our state’s 200 years of history. These links offers the
reader a guide to our state. It offers information about our history, government, our emblems and
symbols, and historic sites throughout the state, museums and much more. It is our hope that the
reader will find hours of enjoyment revisiting Hoosier History. Click on the flag to access resources.

• Bicentennial Resource Guide: A number of Bicentennial resources as well as a list of Indiana Historic Sites and
Historical Markers is located in this guide.

• Destination Indiana: From the Indiana Historical Society - Destination Indiana brings Indiana's history to life
through thousands of images and hundreds of stories about our Hoosier heritage. All 92 counties are included!
   http://destination-indiana.com/#&sort=popular

• Indiana Territory: documents the formation of Indiana from the Northwest Territory, through various stages as
Indiana Territory. Includes discussions of finances and slavery. William Henry Harrison's life and career is

• Indiana Statehood: Provides details about the process, the people, and the times that led to Indiana's acceptance
as the nineteenth state on December 11, 1816. http://www.in.gov/history/files/instatehood.pdf
Building Culture in the Science Classroom

Setting the culture of a science classroom is imperative for students to work and grow as scientists. Pointing out that the most brilliant of scientists do not get it right on the first try and that we learn just as much from wrong answers as we do from right is needed. Modeling this behavior is important. As educators, we find the balance between being the authority in the room while having the ability to showcase making mistakes and learning from them. Highlighting that it is ok for students and the educator to make mistakes, be human, and grow from those mistakes should be evident. A few ideas for ways to start setting this environment; instead of going over the class rules and expectations have students break into groups and act out the expectations either correctly or incorrectly. Start the year with a simple lab, one that students can make multiple mistakes, but learn from them; penny drop lab, measurement lab, making a peanut butter and jelly sandwich procedural lab, baking soda and vinegar lab, etc., cold call on students questions about the class rules and expectations, but whoever you call on first must give an incorrect answer and then pick a separate student in the class to correct their answer. Lastly, emphasize that your classroom is not a competition. There is room for all students to be successful. Rather than tearing down a fellow student, make it known from the start that we want to collaborate and lift each other up. For more ideas on activities to set the mood see: [http://www.stevespanglerscience.com/lab/experiments/back-to-school-science-that-sticks/](http://www.stevespanglerscience.com/lab/experiments/back-to-school-science-that-sticks/) [http://www.nelark.net/Chemistry](http://www.nelark.net/Chemistry) Check out the Library of Congress for some ideas on using primary science texts in the classroom. [https://blogs.loc.gov/teachers/2016/06/primary-sources-in-science-classrooms-size-scale-and-scientific-communication/](https://blogs.loc.gov/teachers/2016/06/primary-sources-in-science-classrooms-size-scale-and-scientific-communication/)

From Science Memorizing to Science DOING

Gone are the days of the one room school house where students memorize aloud random facts. Educators no longer need to be the “Sage on the Stage”. As the world around us continues to change and grow, education needs to as well. This transition from memorizing science facts to “doing” science makes classrooms engaging, learning meaningful, and is best practice. The new Indiana Academic Standards for Science 2016 supports this transition by including the content standards (what the students work with), in addition to, the science and engineering process standards (how the students work with the content).

Science Standards: [http://www.doe.in.gov/standards/science-computer-science](http://www.doe.in.gov/standards/science-computer-science)

ISTEP + Released Items and Scoring Notes

Be sure to examine the Spring 2016 Guide to ISTEP + Scoring for grades 4 and 6 on the [http://www.doe.in.gov/assessment/istep-grades-3-8](http://www.doe.in.gov/assessment/istep-grades-3-8) webpage. Grade 10 ISTEP + will post at a later date, after cut scores are determined.
Relating the Mathematics Directly to Your Students

As the old saying goes; “You never get a second chance to make a first impression.” This is true but you might just be able to sway your new students into diving into the mathematics you are teaching. You need to include their experiences in the math you are teaching. You either will be or have already started classes with your new students. How much do you know about your students? How can you relate the math you will be teaching to them? Below are a couple of ideas that might help you relate the math you are teaching to your students.

Dan Meyer has created an interesting “Who I Am” worksheet that students fill out and return so you can use their experiences in the math you are teaching throughout the year. Bring in the student’s personal connections to the math being taught and problems given in class. You can access the “Who I Am” Sheet here. This comprehensive information allows you the ability to relate the math you will be teaching to your students. Use their favorite team, sport or book in a problem you give for homework, on a quiz or test. You may only hit a few student’s interests each lesson or chapter but by the end of the year you should be able to relate problems to ever student in some way. Another possible tool to use for a similar purpose is the “10 Question” PowerPoint. You can access the “10 Question” PowerPoint here. Use the responses to help involve your students in the process of working and learning the mathematics.

Another great way for students to get involved in the math, is for you to use them as a resource for the problems. For instance a fun warm-up that will strengthen the student’s computation skills is to have five students randomly choose unique numbers from 1 – 25 (you can go greater than 25 but it gets much harder the greater the number.) An example might be 14, 6, 2, 17, 10. Then have a sixth student choose a target number. An example might be 5. Students much use each of the 5 original number exactly once to write an equation that equals the sixth target number. So a possible solution might be \(6 - \frac{14}{17 - 10} / 2\) = 5 or \(2 + \frac{6}{14 / (17 - 10)}\) = 5. What is so great about this warm-up is the students choose the numbers and there is almost always more than one correct solution. Try it for yourself. It always works!

Math Reference Sheet Resources

Have you been looking for some reference sheets you can hand to your students at the start of the school year to help them have additional resources they need at their fingertips. So have I!! I will be posting Math Reference Sheet Resources for as many secondary math classes I can find and/or create at the bottom of the Mathematics Web-Page on the Indiana Department of Education web-site. Starting later this month, check back often to see if there is something you can use for your classes.

http://www.doe.in.gov/standards/mathematics

And example would be a new Pre-Calculus resource: Trig Tricks and Tips reference chart published by Marian University faculty

Global Learning in Mathematics

Each of you strive to make the math that your students do relevant to everyday life so why not add its relevance to the world as well? There are resources out there to help you get started. Our Indiana Academic Math Standards have been internationalized to help provide you with examples of just how to integrate global thinking into your math class daily. Here’s an example:

**Academic Standard Indicator:** G.TS.5 (Geometry)

**Standard Description:** Solve real-world and other mathematical problems involving volume and surface area of prisms, cylinders, cones, spheres, and pyramids, including problems that involve algebraic expressions.

**Suggestion for Integrating International Content:**

Have students use historical data relating to the thickness and area of glaciers around the world to determine their volume at various points in time.

Click HERE for a link to 6-12 internationalized standards for Math!
Preparation for The New School Year

A Few fun items that are Totally Acceptable to start the new school year:

1. To enjoy fresh veggies from your garden and brag about it to anyone who will listen
2. To purchase a Fitbit for the upcoming school year to track how many steps you really take each day (you can even challenge your ag teacher friends!)
3. To enjoy the networking and friendships you gain from your state or regional teachers' conference
4. To make a "bucket list" of new things to do and try for the upcoming school year with your students and colleagues
5. To buy a new planner or calendar for the upcoming school year that shows off your personality!
6. Have fun! It’s a long year with a lot of contests, classes and conventions, so enjoy but don’t forget to take time to yourself!

National Teach Ag Ed Day

The 2016 National Teach Ag Day has been slated for September 22. The National Teach Ag Campaign is an initiative to bring attention to the career of agricultural education, get students thinking about a possible career in agricultural education, and support current agriculture teachers in their careers.

Growth Energy will host a live webcast celebration from Sioux Falls, SD, that day. Take time to show your students how rewarding teaching Ag Ed can be.

More info here: http://www.naae.org/teachag/

Discovering Farmland

Need help with easy lesson plans while away? Check out Discoveringfarmland.com. This website is set to engage students with glimpses into agriculture using lessons and activities in everything from sustainability, new sciences behind farming, and entrepreneurship. Several lessons and videos are available for use.

Bowers Advances

Kraig Bowers, Fairfield HS, was named the National Assn. of Agricultural Educators Region IV "Ideas Unlimited" winner.

The Ideas Unlimited contest is designed to give members an opportunity to exchange classroom, SAE, leadership, and other teaching ideas. Applicants must submit an application describing their idea and then make a presentation at the region contest. Bower's idea, creating the "Ag Ed Discussion Lab" on Facebook, was chosen as the best idea from the six-state region. He will now present the award-winning idea to the entire nation at the National NAAE Convention this November in Las Vegas, Nev.

The Ag Ed Discussion lab is a group page on Facebook which allows ag teachers from throughout the nation to ask questions, share ideas and share lessons with their fellow ag teachers. Bowers created the page last August and now has over 4,000 subscribers nationwide.

Region IV, which is the largest region in the nation by membership, consists of Indiana, Ohio, Kentucky, Michigan, Illinois and Missouri.

The Ideas Unlimited Contest is sponsored by National Geographic Learning and Cengage Learning.

Join here: Ag Ed Discussion Lab

Professional Development

Sept. 22 – CTE New Teacher Summit
(Early Bird ends 9/1)

Sept. 23-24 – CTE Conference
(Early Bird ends 9/1)

Nov. 29-Dec. 3 – NAAE Vision
(Early Bird ends 10/28)

Specialist Contact

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Design Thinking and PBL

If you have tried a new strategy in your classroom in the past, you are certainly not alone. As educators, we are all searching for those “golden” opportunities for students that meet standards yet are genuine and simple to grade at the same time! Chances are you have heard of and/or tried project-based learning (PBL). But have you tried combining design thinking and PBL? Creating a true PBL experience can be hard work for the educator up front, but provides genuine and scaffolding opportunities for students. Design thinking with PBL lends itself to the engineering and technology courses with ease because of the nature of the content. A great way to use design thinking and PBL is using the Technology Student Association (TSA) competitions as part of your curriculum. TSA competitions can be used for many different courses. Article Source: Edutopia

Technology Student Association (TSA) is an career and technical student organization focused on middle school and high school students engaged in science, engineering, and technology (STEM). Competitions include dragster, flight, robotics, future technology teacher, and much more! Competitions can be adapted for classroom instruction and align to Engineering and Technology Standards. There will be an Indiana competition in the 2016-2017 school year. If you are interested in becoming a chapter advisor and starting a chapter, please contact Mary Rinehart at mrinehart@doe.in.gov. Becoming a chapter allows you to gain access to the competition rules to use for classroom instruction. New chapters may qualify for a grant from the champion fund from National TSA to offset membership costs. Learn more about National TSA website at http://www.tsaweb.org/

SPOTLIGHT ON SAFETY

Regardless of what your shop or lab looks like and the kinds of tools you use, you need to adequately prepare your students to be safe in the lab. Clearly laying out your requirements by creating a list of rules and/or requirements is one way to accomplish this. Parents could sign the sheet before your first project. You could also give a quiz over the safety concepts taught in class. Pair this with a lesson and signs about safety to hit a safety home run. Make it an additional goal to model safety all year for your students. Click here to see examples of safety contracts. Have an example to share? Post it to the Shop/Lab Safety folder in the Indiana Engineering and Technology Education Community in the Learning Connection.

The Robotics Design and Innovation Standards are currently under public review. This new course will be available starting Fall 2017. Please help us review these by completing this survey.

Environmental Sustainability will replace Biotechnical Engineering (PLTW and Non-PLTW) in the 2016/17 school year. The new standards are on the IDOE website.

Resource Central

◊ BlendSpace is a digital space to plan lessons and gather resources. You can share your lessons with students and/or other teachers. You can also download lessons created by other teachers. Visit https://www.tes.com/ to make your FREE account.

◊ The K12 Engineering Education Podcast is a podcast for all the educators, engineers, entrepreneurs, and parents out there who are interested in getting kids into engineering at younger ages. Listen to real conversations among various professionals in the engineering education space, as we try to find better ways to educate and inspire kids in engineering thinking.

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317-232-0815
mrinehartdoe
It's the first day of school and you are a Level 1 teacher! You're pumped, your students are excited and then... you don't speak any English to your students! You'll be exhausted, things will take longer, but you will be meeting the needs of all of the learners in your classroom if you can infuse 90% TL the right way. Keep reading for strategies!

Target Language Infusion through infographics!

Staying in the target language much easier if your students have graphics to help them have context. These work at upper levels too. You can go much farther by utilizing graphic representations of the material you are trying to present.

Pinterest is a GREAT resource for finding infographics. Your students can create them too! Give them a try!! Follow my board: www.pinterest.com/jwoernerdoe/infographics

If you are ever curious about professional development events that apply to world languages offered by IDEO, check out the new calendar on the Events page. Use the tag “GLWL-PD” to search for events!

http://www.doe.in.gov/calendar

Comprehensible Input – How?

Maintaining 90% usage of target language in the classroom is tough, but doable. In order to make sure that students can join you on your target language journey, you must make sure that the input that you’re giving them can be understood by them. For the theory side of this, consider Stephen Krashen’s and his research about 2nd language acquisition and the need for comprehensible input. From the practical side of things, consider ACTFL’s position on use of the target language in the classroom. This includes ensuring that you use body language, gestures, and visual supports and that you scaffold instruction, provide frequent feedback and conduct numerous check for understanding. I encourage to read about more strategies to avoid the use of English in the classroom by Helena Curtain.

Here's another great article about the "how to" for TL usage in the classroom! Here's one about the use of podcasts to infuse listening comprehension.

Don't forget... to connect with us at www.learningconnection.doe.in.gov for IDEO's World Language & Cultures Community
**Physical Education Program Checklist**

*How can you improve learning outcomes in PE? What can you do to ensure your PE program is meeting the needs of all students?*

In 2015 SHAPE America released a guidance document that provides teachers, administrators, curriculum specialists, teacher educators and parents a hands-on tool for improving the strength and quality of PE programs across the nation.

Some of the ways the *Physical Education Program Checklist* can be used to improve your program include:

- **Get an honest assessment** – The 19-point checklist will help you review and improve your program across the *Essential Components of Physical Education*, including policy and environment, curriculum, appropriate instruction, and student assessment.
- **Identify areas of opportunity** – The checklist will point to the strengths and weaknesses in your program, helping you to identify resources needed to move the program forward.
- **Start an informed conversation** – Use your completed checklist to make positive changes. Meet with your school administrator and other partners to develop an action plan.


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**Classroom Instructional Resource:**

PBS LearningMedia provides access to free digital content and PD opportunities designed to improve teacher effectiveness and student achievement. “*Map of the Human Heart*” is an animated feature that “illustrates how the chambers of the heart contract and relax in synchrony to push blood through the pulmonary and systemic loops of the circulatory system. Watch oxygen-depleted blood being pumped to the lungs, where it acquires oxygen before traveling back to the heart and ultimately being distributed throughout the body”.

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**Looking for Some Grant Opportunities?**


   **Grant Highlight:** – Target Field Trip grants. Each grant is valued up to $700. **Deadline:** Applications accepted August 1 - October 1


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**Health and Physical Education Academic Standards Revision:**

In the 2016-17 school year, the Indiana Department of Education plans to evaluate the current academic standards for both content areas. If you are interested in being considered to be a part of the review committee, please contact your specialist listed below.

**Want to Be Connected?…**

Be sure and join the IDEO Learning Connection and the “IDOE Health Educators” and/or the “IDOE Physical Educators” Community to receive updates from the IDEO and communicate with educators from across the state.

**Specialist Contact:**

Sue Henry, BSN, RN
Health Science, Health & Physical Education Program Specialist

[suhenry@doe.in.gov](mailto:suhenry@doe.in.gov)

317-234-0217
Trends Impacting High School Health Science Curriculum:
What recent trends in healthcare and education will affect your health science curriculum?

TREND: CONCEPT-BASED CURRICULUM
Concept-based curriculum starts with a wide concept, and then drills down to the details. Why does it matter? Using concept-based curriculum allows your students to form a better foundation to prepare for certifications.

TREND: FROM HEALTHCARE TO HEALTH
Because the healthcare system is shifting toward prevention and wellness, your curriculum will need to change as well. What can you do? Look at the National Prevention Strategy to get ideas for new additions.

TREND: ENGAGING DIGITAL NATIVES
Your students need more than lectures. A lack of engagement will result in lower grades and higher turnover of students in your program. How can you fix it? Try something new! There are many blended learning resources you can try to keep your students engaged.

TREND: ENGLISH LANGUAGE LEARNERS
More and more ELLs are entering schools and CTE programs. These students want to learn, but need help succeeding. How can you help? Consider letting your students use a translation tool in the classroom so they can see English next to their native language.

For more information: http://bit.ly/29LwEiU

Connect me...PLEASE!

- Do you want to be able to connect with other health science teachers to share ideas and strategies for the classroom?
- Would updates from the IDOE on important and helpful information and resources be beneficial?

The good news is that there are TWO systems in place to make that happen!
1. Join the IDOE’s Learning Connection; then be sure and join the “IDOE Health Science Educators” Community. Questions? Call Sue Henry.
2. A new IDOE group email system will begin to be used in the 2016-17 school year. Be on the look out for emails from Sue, filled with updates and resources!

Resources:
- www.webadventures.rice.edu – Online science and health related games, quizzes and information that give students experiences exploring virtual clinical trials, science careers, forensic science, body systems, and more.

Specialist Contact:
Sue Henry, BSN, RN
Health Science, Health & Physical Education Program Specialist
suhenry@doe.in.gov
317-234-0217
How do you get students moving in the classroom?

- Incorporate physical activity into lesson plans
- Take a walking tour of the neighborhood architecture for Interior Design
- Shaking cream to create butter exposes students to the process of making butter, helps them investigate molecular changes and learn about lactic acid from overuse of muscles.
- Allow students to complete texture rubbings of natural elements in Fashion and Textiles as you explain the elements of design
- Integrate brain breaks into lesson plans

“Movement isn’t a break from learning; movement is learning.”
Aleta Margolis as featured in The Washington Post

Building an Education Pathway Indiana is experiencing a teacher shortage. How can you help?

- Build your education pathway by offering Education Professions I and II
- Tap your best and brightest students to be future teachers
- Recruit diverse and non-traditional students
- Promote K-12 teaching including secondary content areas: Ex. Science, Math, etc
- Highlight the intrinsic rewards of teaching
- Maintain a positive environment in the classroom
- Participate in Be a Teacher Day-coming in November

Explore the Employability Skills Framework and Categories

- Applied Knowledge
- Effective Relationships
- Workplace Skills

Professional Development

Indiana ACTE Conference
September 23-24, 2016
Marriott East
Indianapolis, Indiana
Registration Information
Multiple sessions related to FACS and WBL
New Teacher Workshop
September 22, 2016

Specialist Contact

Alyson McIntyre-Reiger
317.232.9168
amreiger@doe.in.gov

FCCLA Empowers over 160,000 Youth Nationally

Two national officers elected from Indiana
Rylie Seaver-President-East Central
Shelby Lake-VP of Development-East Central

Nationals by the numbers:
- Indiana FCCLA received a membership award for increasing membership by 9%
- 159 attendees from Indiana representing 22 chapters
- 76 STAR event competitors received 30 Gold medals and 37 Silver medal

FCCLA Adviser Workshop is open to anyone interested in learning more about FCCLA. August 31, 2016 J. Everett Light

FCCLA Fall Rally October 5, 2016 at Purdue University
To find out more or start a chapter visit www.infccla.org

Teachers’ Toolbox August 2016
The Indianapolis Museum of Art offers a number of resources that can assist an educator. The IMA’s Creative Classroom e-newsletter brings information about the museum’s events and exhibits. The IMA has extensive online resources and activities, lesson plans, and reference library. The IMA also offers PGO opportunities. For more information: [IMA Teacher Resources](http://www.imamuseum.org/19stars)

With approximately 1,000 works of art on display and 10,000 works total in the collection, the David Owsley Museum of Art offers a rich resource that can enhance a variety of class subjects.

The quality and variety of the contributions of Indiana's artists have created legacies of regional, national, and international distinction that are highlighted in honor of the state's bicentennial year. Docent-led tours of the 19 Stars exhibition are available daily.

For more information: [http://www.imamuseum.org/19stars](http://www.imamuseum.org/19stars)

Professional Development

**Fall 2016 offers several PD opportunities for various segments of Fine Arts**

**August 20** – General Music Fall Workshop, Butler University, Indianapolis

**August 27** – Northern Indiana General Music Workshop, St. Mary’s College, Notre Dame, Ind.

**September 8-9** – Southern Indiana Symposium & Clinic, University of Evansville, Evansville, Ind.

**November 3** – Beginning & Developing Teachers Workshop, Butler University, Indianapolis

**November 11-12** – Art Education Association of Indiana State Convention, Hamilton Southeastern HS, Fishers, IN

* If you know of any other PDs, please let Celya know!

**Specialist Contact**

Celya Glowacki
cglowacki@doe.in.gov
317-234-5719

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**Calling all Fine Arts Teachers:**

In the 2016-17 school year the Indiana Department of Education plans to evaluate course standards. If you are interested in being part of the review committee please contact your specialist listed below with your name, subject area, school and contact information.
The president of the Indiana Business Education Association (IBEA) is Robin Hubbard who teaches at Twin Lakes High School in Monticello. Information about the organization can be found at [www.in-ibea.org](http://www.in-ibea.org). Membership dues are $25 a year. Contact membership director, Karen Hirshey, at khirshey@sacs.k12.in.us for more information.

The president of the Indiana Marketing Education Association (IMEA) is Troy Davis of Yorktown High School. Dues are $10 a year. Contact membership director, Amber Reed, at areed@bps.k12.in.us for membership details.

**Upcoming Events:**

- **Digital Citizenship Week** - September 12-16
- **New and Newer Teacher Workshop** (Indianapolis) - September 22
- **IACTE Conference** (Indianapolis) – September 23-24
- **Ball State Business and Marketing Education Conference**, (Ball State Alumni Center, Muncie) - September 23
- **IBEA Conference** (Indianapolis) - November 17-19

**Congratulations MOS U.S. Champions!**

This past June Indiana had five students place in the top 10 for the United States Microsoft Office Specialist Championship in Orlando, Florida. These teachers had students compete and place:

- Robin Perry, Brownstown Central, 8th place in Word 2013
- Amy Hollingsworth, Blue River Valley, 4th place in Excel 2013
- Marjorie Slamkowski, Portage, 5th place in Excel 2013
- Angela Rhoads, South Newton, 7th place in PowerPoint 2013
- Darla Harrington, Tri-County, 9th place in Word 2010

**Program Leader Contact**

Dena Irwin, State Program Leader
and Ann Schreck, Indiana’s Certiport Deployment Manager.

<table>
<thead>
<tr>
<th>Dena Irwin</th>
<th><a href="mailto:dirwin@doe.in.gov">dirwin@doe.in.gov</a></th>
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Julie Alano is Indiana’s president for the Computer Science Teachers Association (CSTA). Julie is a mathematics and computer science teacher at Hamilton Southeastern High School northeast of Indianapolis. Julie can be reached at jalano@hse.k12.in.us. Membership for the Indiana CSTA chapter and the national organization is FREE to those that wish to join. Contact Phil Sands at psands@purdue.edu for Indiana membership information. Access the national CSTA website at https://www.csteachers.org/page/IndividualMembership to learn the benefits of membership.

Meet Your Professional Affiliate President

Julie Alano, CSTA President

Be sure to join the IDOE – Computer Science K-12 “user created” community on the Learning Connection today to start receiving information related to CS!!

Upcoming Events:

- Digital Citizenship Week - September 12-16
- New and Newer Teacher Workshop (Indianapolis) - September 22
- IACTE Conference (Indianapolis) – September 23-24
- IBEA Conference (Indianapolis) - November 17-19

Program Leader Contact

Dena Irwin ◆ dirwin@doe.in.gov ◆ 317.233.6004

K-12 Computer Science standards can be found at http://www.doe.in.gov/standards/cte-business-marketing-information-technology, then click the webpage link or PDF file.
EverFi creates online curriculum resources for schools and they are available at no cost. The courses range from digital literacy, entrepreneurship, STEM, character development, financial literacy, and more. To learn about these resources and to gain access, visit everfi.com/k12, or contact Ben Gwynne - bgwynne@everfi.com

Industry representatives, community leaders, and policymakers will meet to discuss the state of manufacturing in Indiana. The Indiana Manufacturers Association is hosting a series of public seminars around the state. The talks will focus on regulatory issues, as well as our most pressing issue - a lack of skilled workers for our high-tech, high-wage 21st century manufacturing industry. There are five seminars scheduled throughout the state.

ACTE Offers Employability Training for Students

The Association for Career & Technical Education is partnering with Today’s Class to offer curriculum on improving “Employability” or “Soft Skills”. Today’s Class offers courses in career training, career transitions, and workplace soft skills to help train the next generation of the American workforce.

Recent surveys conducted by the Society for Human Resource Management (SHRM) show 31 percent of current job applicants do not have adequate writing skills. Forty percent of hiring managers also consider current applicants lacking in critical thinking.

In addition to the need for soft skills, employers have also noted the shortage of technical skills needed for current and future job openings in the manufacturing sector. With the help of curriculum from Today’s Class, your students will gain the edge they need to secure future employment.

You must be a member of ACTE to purchase the curriculum. Visit them online at https://www.acteonline.org/about/.

ACTE is the largest national education association dedicated to the advancement of education that prepares youth and adults for careers.

Resources

- EverFi creates online curriculum resources for schools and they are available at no cost. The courses range from digital literacy, entrepreneurship, STEM, character development, financial literacy, and more. To learn about these resources and to gain access, visit everfi.com/k12, or contact Ben Gwynne - bgwynne@everfi.com

- Industry representatives, community leaders, and policymakers will meet to discuss the state of manufacturing in Indiana. The Indiana Manufacturers Association is hosting a series of public seminars around the state. The talks will focus on regulatory issues, as well as our most pressing issue - a lack of skilled workers for our high-tech, high-wage 21st century manufacturing industry. There are five seminars scheduled throughout the state.

  You can join the discussion by RSVP’ing Kathy Gundle at kgundle@imaweb.com.

Happenings

Mark your calendars for the Indiana ACTE Fall Conference. That happens September 22-24th at the Marriott East in Indianapolis. You can hear from dynamic guest speakers, industry professionals, and network with other CTE instructors. New teachers are encouraged to attend the New Teacher Workshop on September 22nd. Visit www.indianacte.org to sign up.