



Glenda Ritz, NBCT
Indiana Superintendent of Public Instruction

Teachers' Toolbox



A content focused resource for classroom instruction

October 2016



You're invited...

HOOSIER HOMECOMING

Saturday, October 15, 2016

12:00 p.m. to 4:30 p.m.

"Hoosier Homecoming" is a free, family fun and learning day to be held in downtown Indianapolis on Saturday, October 15th, 2016 as a signature event of the Bicentennial celebration. "Hoosier Homecoming" will bring families together from all communities across Indiana, to learn more about our shared history, dedicate [Bicentennial Plaza](#) and the [Statehouse Education Center](#) in the State Library, and celebrate the culmination of the [Bicentennial Torch Relay](#).

Read more from the Indiana Bicentennial Commission on [page 3](#).

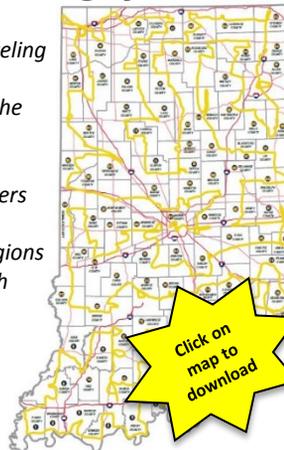
Stop by Superintendent Ritz's office during Hoosier Homecoming to pick a **free book** courtesy of Hoosier Family of Readers!



Is the Torch Relay coming through your town?

Fast Facts:

- *3,200 mile journey across the state traveling through 92 counties
- *The Torch Relay will begin in Corydon, the state's first capital, and culminate in Indianapolis on the Statehouse Grounds
- *The relay was designed to inspire Hoosiers and promote unity across the state by connecting people, communities, and regions
- *Ends on October 15, 2016 and The Torch Relay will conclude on the Statehouse Grounds with a grand celebration for all Hoosiers



Click on map to download



Indiana Bicentennial
TORCH RELAY

View Photos from the Relay! Find photos of the relay on [Facebook](#), [Instagram](#), [Twitter](#) and at [IndianaTorchRelay.com](#)

A Note from...

Pam Wright

Director of Special Education

Dear Colleagues,

Working with your colleagues, whether within your grade level or across grade levels, has become the new norm in schools. Working in isolation with different expectations in separate classrooms has proven unsuccessful for many of our nation's students. The Every Student Succeeds Act (ESSA) clearly articulates the expectation that states adopt challenging grade level content standards that apply to ALL students. According to ESSA, and the November 2015 Dear Colleague letter, having high expectations and allowing ALL students to have equitable access to these standards is a shared responsibility. In the months ahead, the Teachers' Toolbox is just one of many ways DOE will be communicating to the field, working across our own aisles to collaboratively provide tips and tools for refining shared teaching practices. As the Director of the Office of Special Education, I welcome the change. Whether we reach across aisles or hallways, working together will surely lead to better results.

-Pam Wright

In this Issue:

- 2 [High Ability, Alt Ed and Dual Credit](#)
- 3 [Indiana Bicentennial](#)
- 4 [Instruction and Access for All](#)
- 5 [World Languages](#)
- 6 [Social Studies](#)
- 7 [K-12 Computer Science](#)
- 8 [K-12 Computer Science Continued](#)
- 9 [Health and P.E.](#)
- 10 [Elementary STEM](#)
- 11 [Elementary Literacy](#)
- 12 [Secondary Math](#)
- 13 [Secondary ELA](#)
- 14 [Secondary Science](#)
- 15 [Engineering and Technology](#)
- 16 [Business/Marketing](#)
- 17 [Health Science](#)
- 18 [Trade and Industry](#)
- 19 [FACS and WBL](#)
- 20 [Fine Arts](#)
- 21 [Agriculture Education](#)



When I took office, one of my top priorities was to make sure the Department of Education delivered high-quality direct service to public schools

What principals are saying about #OutreachIN



Our Outreach Coordinator is extremely responsive, professional, available, articulate, honest and dependable. Her feedback is great, measurable and actionable. She is extremely friendly, relaxed and very knowledgeable! I am so happy to have her help and input guiding some of my decisions.



The data shows that since the creation of Outreach

193 schools have exited focus/priority status

Outreach has improved schools for more than **108,000** Hoosier students

High Ability

High Ability Coordinator:
[Amy Marschand](#)

Did you know?

High ability students can master content at a faster pace than the typical learner and they are able to use more complex reading selections, grammar, vocabulary, and problems to solve in math. They can work in standards above grade level in their areas of strength. Research in the field of gifted education has also shown greatest achievement gains for high ability learners when they work in a differentiated curriculum with others of similarly high ability. Instead of doing additional work at the same level, students with high ability need to focus on big ideas that tie disciplines together as well as critical thinking and problem solving of complex issues.

Did you know?

Did you know?

Alternative Education

Alt Ed Specialist: [Julia Johns](#)

SY2016-17 Teacher/Student Survey: Each year the Indiana Department of Education asks you to complete a Teacher Survey for your Alternative Education program. We also ask you to administer a survey to your students. These surveys are used to collect data on the Alternative Education program as a whole and are not meant to be punitive to a particular program, teacher, or student. It is our goal to equip programs to provide the best instruction to students that they are capable of and this survey is a means for us to gauge how that may or may not be happening currently. The surveys can be located at:

Student Survey:

[Click Here](#)

Teacher Survey:

[Click Here](#)

FYI: Professional Development Opportunities
What: National Dropout Prevention Conference
When: [Oct 2-5, 2016](#)
What: National Alternative Education Association Conference
When: [Mar 8-10, 2017](#)



Please join our Learning Connection PLC to receive alt ed updates, find resources and collaborate with others in alternative education ☺

[IDOE - Alternative Education](#)

 [Dropout Prevention](#)
[Reading & Writing](#)
[Indiana History Rocks!](#)
[Indiana Authors](#)
[Mindsets in the Classroom](#)
[Secondary English](#)

Noteworthy Articles & TC
[Lack of Motivation](#)
[Motivating Unmotivated Students](#)
[Motivating the Unmotivated](#)
[Engaging Students](#)
[Engagement Strategy](#)

Dual Credit

Update!

Dual Credit Teacher Credentialing

Do you currently teach dual credit course(s) in liberal arts content areas? As you may know, new guidelines regarding teacher credentialing are being implemented beginning with the 2017-18 school year.

The IDOE encourages teachers to contact the institution(s) they are currently working with to see how these changes may affect them.

For more information, please click [here](#).

For questions regarding all things dual credit, please contact Jenny Berry at:
jberry@doe.in.gov

Priority Dual Credit for LA and CTE

What is Priority Dual Credit? Priority dual credit courses (PDC) have gone through an extensive review process **AND** meet the following criteria:

- The course(s) is taught by a high school teacher during the school day
- The cost to student is no more than \$25 per credit hour (a great cost-savings benefit to students!)
- The course aligns with a post-secondary course on the Core Transfer Library (CTL) **OR** is part of a technical pathway leading to a post-secondary credential and/or degree.

A high school **must** have a formal agreement with the post-secondary institution to offer priority dual credit. All priority dual credit courses are listed on the [Priority Dual Credit Crosswalks](#) for Liberal Arts and CTE.

Indiana Bicentennial

Teachers' Toolbox

October 2016

Are you a [Heritage Educator](#)? If you signed up to be a part of this Bicentennial Legacy project, you are invited to a special recognition ceremony with Superintendent Ritz! Please see the details below, we hope to see you on October 15!

Dear Educators, You're Invited....

~Heritage Educators Recognition~

When: October 15, 2016
Time: 10:30-11:30 AM
Where: Statehouse Room 229
RSVP: [Selina Snelling](#)
(317) 233-3457

**attendees may enjoy the festivities taking place throughout the day after the ceremony*

Please join us as we celebrate those who have dedicated themselves to the children of our state. SPI Ritz will formally recognize all heritage educators with a certificate honoring their service to teaching and who participated in this Bicentennial Legacy event.



Indiana Bicentennial 2016



The Bicentennial year is an exciting time to talk about Indiana's history. 200 years of stories, progress and Hoosier pride.

But what about the history that is happening right before our eyes? The Bicentennial is history in the making and every Hoosier has the opportunity to be part of it!

Hoosier Homecoming is a great way to commemorate this special year for Hoosiers of all ages. This event is free fun for the whole family.

Make your way up, down, or over to the Indiana Statehouse Campus on October 15 from noon to 5 p.m. to enjoy this celebration.

There is so much fun to be had at this event, it is hard to know where to start! Enjoy entertainment from the Hunter Smith Band, who sings the official song of the Bicentennial Celebrations, Janet Gilray, who sings the official Bicentennial sing-along song, and so much more. There will be reenactors all around campus portraying some of our favorite Hoosiers from the past. Don't be surprised if you see Abraham Lincoln, Indiana first governor Jonathan Jennings or Garfield around, to name a few!

You and your students will have a free front row seat to history at Hoosier Homecoming. See the dedication of Bicentennial Plaza. Did you know that this plaza was originally planned in 1916 as Centennial Plaza, but the project was never finished?

Be there for the ribbon-cutting at the new Statehouse Education Center – an exciting, interactive way to learn about Indiana's government. Take in the two new public art pieces representing a torch and a time capsule. And of course, watch the last leg of the Indiana Bicentennial Torch Relay.

There will be a variety of activities for kids and adults alike. Enjoy free tours of the Indiana Statehouse, a scavenger hunt by Indiana Humanities, face painting, an interactive photo booth and more than 40 food trucks and artisans. There is so much to do, you'll want to make sure you're there for the whole event!

And don't forget, this event is free. Free parking, free entertainment and free fun! We hope that you and your students will make the trip to Indianapolis to enjoy this once in a lifetime event. To learn more visit www.indiana2016.org or visit the Indiana Bicentennial Commission Facebook page.

Instruction & Access for All

Teachers' Toolbox

October 2016

Discipline Methods : A Form of Access?

Typically, when people think of access to an educational environment, they do not consider the role that school discipline can play in providing appropriate access to all students. Research has identified that exclusionary measures such as classroom referrals to the office, suspension, or expulsion are not effective at reducing or eliminating the reoccurrence of the misbehavior and may even be harmful. Just as appropriate instructional supports are necessary, appropriate disciplinary supports are also required in order for a student to access education. Please checkout the latest Short Share to learn a little more about this topic. Short Share 3-Equity & Access Continued-

<https://youtu.be/RbFVDZ094qQ>(link is external)

Positive disciplinary approaches have been identified as strategies for providing access for students that may have behavioral needs and can also effectively support all students within a classroom setting.

According to the National Association of School Psychologists, positive discipline strategies are research-based procedures that focus on increasing desirable behaviors instead of simply decreasing undesirable behaviors through punishment. These strategies focus on the classroom environment and intentional changes to the environment in order to improve or support student behavior. http://www.naspcenter.org/factsheets/effdiscip_fs.html

What YOU Can DO:

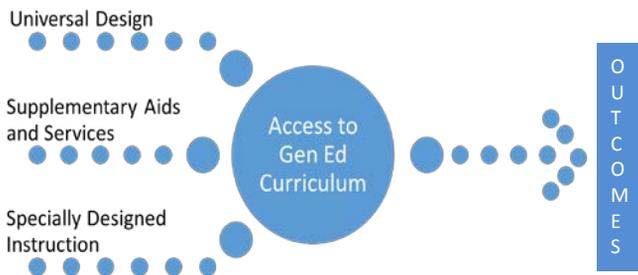
- Agree on Classroom Rules at the Beginning of the Year:
- Check in with Students at the Start of Class
- Be Consistent About Expectations
- Teach and Reinforce Appropriate Behavior
- Maintain Student Dignity
- Be Neutral, Not Accusatory
- Look for the Cause
- Use Restorative Justice

<http://www.edutopia.org/classroom-management-relationships-strategies-tips>

Equity
+ Access
Outcomes



Providing Access: Resources for Teachers



- UDL Lesson Planning Resource: <http://lessonbuilder.cast.org/>
- Planning for All: http://www.cast.org/teachingeverystudent/toolkits/tk_inroduction.cfm?tk_id=21
- Making Math more Accessible for All Students: <http://www2.edc.org/accessMath/resources/strategies.asp>. Teaching Restorative Discipline <https://prezi.com/vmdphdnmjeri/better-than-carrots-or-sticks/>



2016 PATINS State Conference
"We are ALL in this together, ensuring that Every Student Succeeds through Shared Responsibility and High Expectations."

New This Year!

Buy One, Get One (BOGO)

A General Educator's registration fee is waived with each paid Special Educator from the same school district. One day paid gets one day waived. Two days paid gets two days waived. To claim this discount, the General Educator needs to type the Special Educator's full name as the "Code" in the payment section.

[Register Now!](#)

World Languages

Teachers' Toolbox

October 2016

Reading in the WL Classroom

Throughout the Indiana journey for proficiency-based instruction, it's critical that we consider each of the modes of communication: Interpretive, Interpersonal and Presentational. The Interpretive mode of communication encompasses reading, listening and viewing in the target language. This edition of the Teachers' Toolbox is dedicated to just one part of the "interpretive" mode of communication: **Reading!**



ACTFL AMERICAN COUNCIL ON THE
TEACHING OF FOREIGN LANGUAGES

Let me introduce you to the [ACTFL Performance Descriptors](#) for the interpretive mode of communication. These should help you and your students determine where they are and what they're working toward in class. Reading in a WL classroom provides students with a much needed source of comprehensible input. At early levels, reading should be supported with images and cognates to support students' understanding. Don't forget to use close reading strategies & text-dependent questioning to move students beyond low level comprehension. Learn more about strategies from the Blendspace below!

Proficiency Guidelines for Reading

To get you started here, please visit the [ACTFL Proficiency Guidelines](#) first. (See pages 20-24) This document truly helps you see what students can and should be able to do with reading at each proficiency level. For the Level I teachers out there, I bet you have already moved your students from Novice Low to Novice Mid this year. Show these to your students and use them as a guide when building "Can-Do" statements so your students know they're working toward. Encourage them to help you find authentic resources and let them show you what they know and recognize when they share them! Also, you and your students can see samples of readings in your language at each proficiency level on the [ACTFL website!](#)

Content Area Literacy Standards

Did you know that IDOE has literacy standards to help guide every content through the development of literacy skills within each content area. What is interesting is that World Languages, as a content that touches every content area, can fit under either umbrella of the [Content Area Literacy standards](#). Overall, most world language teachers would associate with the technical subjects as that allows you to utilize things like maps, recipes, food labels, instruction manuals, etc. to assist you in meeting these standards. The bonus is that these items are usually authentic resources and are ideal for a proficiency-based instructional environment!

Check out the Blendspace that has been created to support learning more about reading strategies in the WL Classroom! [Click here!](#)

Don't forget... to connect with us at  www.learningconnection.doe.in.gov for IDOE's World Language & Cultures Community

PD Opportunity

IFLTA Conference

November 3-5, 2016

"Working Locally,
Reaching Globally"
Keystone Sheraton - Indy

Symbaloo for you

Check out these two Symbaloo's that I have created for Indiana WL teachers to support your practice. For a variety of reading resources - [Click here!](#) For a TON of general World Language Resources - [Click here!](#)

Do you have a favorite resource to share or a suggestion for a Teachers' Toolbox?

Let me know! → → → →

Get Students Abroad

Now is the time for students to be applying to go abroad on federally-funded scholarships!! Direct any/all interested students to apply at www.nsliforyouth.org for summer or year-long language experiences in critical languages and www.yes-abroad.org for year-long cultural experiences in Muslim countries. October 27th is just around the corner!!



NSLI
FOR YOUTH
Scholarships to Study
Language Abroad



Specialist Contact

Jill Woerner @GlobalEDIndiana
Global Learning and World
Languages Specialist
jwoerner@doe.in.gov
317-234-5705



Social Studies

Teachers' Toolbox

October 2016



Countdown to the Election

Kindergarten-12th Grade Articles

Election Day is around the corner.

In order for students to comprehend the events of the election, they need a lot of background knowledge on elections, voting, and the presidency.

Bring these articles into your classroom:

[K-12 Articles—Countdown to the Election](#)

INDIANA'S BICENTENNIAL MINUTE

The Indiana Historical Society (IHS) proudly announces the launching of the **Indiana Bicentennial Minute**. A media campaign voiced by Hoosier native and broadcast icon Jane Pauley, the project will deliver 52 fascinating Indiana stories of the last two centuries to Hoosiers statewide.

The **Indiana Bicentennial Minute**, endorsed by the Indiana Bicentennial Commission, will be presented throughout 2016. The 52 weekly movie clips will begin airing in January, with each 60-second segment designed to captivate the public and highlight noteworthy moments of Indiana history. Click on the following Dropbox link (updated routinely) to access this resource

<http://tinyurl.com/INBicentMinute>



INDIANA KIDS ELECTION (IKE)



DON'T FORGET TO REGISTER FOR INDIANA KIDS ELECTION.

Under Indiana law, schools must give instruction on the election process two weeks prior to a general election. IKE helps Indiana schools meet this requirement by providing comprehensive curriculum guides as well as a mock election, free of charge, to participating schools. *Note:* The curriculum meets current state academic standards as approved by the Indiana Department of Education. **SIGN UP BY CLICKING ON**

THE FOLLOWING:

<http://inkidselection.com/teachers/teacher-signup-form/>

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

Computer Science

K-12

A message from Julie Alano, President Hoosier Heartland Computer Science Teachers Association

We have worked hard to prepare an entire track of computer science offerings at the upcoming November IBEA Conference. [Register](#) today!

We have also partnered with Nextech to offer a K-12 Computer Science Teacher Meet-Up on Thursday, November 17 from 5:00 to 7:00 at their new location in the Speak Easy Downtown at 47 S Meridian St. There will be food and drinks provided by Nextech and anyone can join for informal conversation about computer science education. Just sign up [here](#) today! Come join us to chat with other computer science teachers which is not something most of us can do every day! If you are in town for the IBEA Conference it is only around a \$10 Uber ride from the conference hotel and then you don't have to pay for parking.

Did you know that Oracle Academy offers free curriculum and teacher training in database and Java courses? You can sign up to become a member for free today to check it out. You can also learn more at the November IBEA Conference as they will be presenting 2 concurrent sessions on their curriculum. academy.oracle.com

CS #4: Introducing JAVA Programs using Greenfoot! and CS #6: Solve it with SQL!

Zulama Game Design Curriculum is an extensive and rigorous curriculum designed at Carnegie Mellon University. In addition to game design and programming courses, they also offer courses in business and marketing of games. The CEO of the company will present a concurrent session at the November IBEA Conference!!! CS #3: Using Game Design to Prepare students for High-Tech Careers zulama.com

Did you know that Nextech is a local non-profit which supports K-12 Computer Science Education? They offer free professional development often even with teacher stipends. They partner with Code.org to offer their national curriculum here in Indiana. Code.org offers 1 of the 5 College Board approved curriculums for the new AP Computer Science Principles (CSP) course. Come learn more about this curriculum at an early bird session presented by Julie Alano, a Code.org CSP Facilitator, at the IBEA November Conference. Stephanie Zircher, Senior Director of Operations at Nextech, will join Julie at a concurrent session about how to get computer science in your school as well. EB: AP Computer Science Principles - Come learn what it is all about and CS #2: Implementing a Computer Science program in your school nextech.org

There are plenty of other sessions being offered by teachers just like you that will provide excellent resources for teaching computer science in your school: CS #3: Tips and Tools for Teaching Computer Science, Karen Podell, Westfield High School; CS #3: CyberPatriot + Cybersecurity = FUN, Scot McAtee, Twin Lakes High School; CS #4: Use MIT's App Inventor to Increase Student Enrollment in your Programming Pathway, Scot McAtee, Twin Lakes High School; CS #4: Web Design Round Table, Kari Richardson, Noblesville High School; CS #5: How to Start a Computer Club, Kent London, Carmel Middle School; and CS #6: Enhance your Interactive Media Course Curriculum, Michelle Pittman, South Bend Community School Corporation.

Take advantage of this computer science professional development! We hope to see you there!!

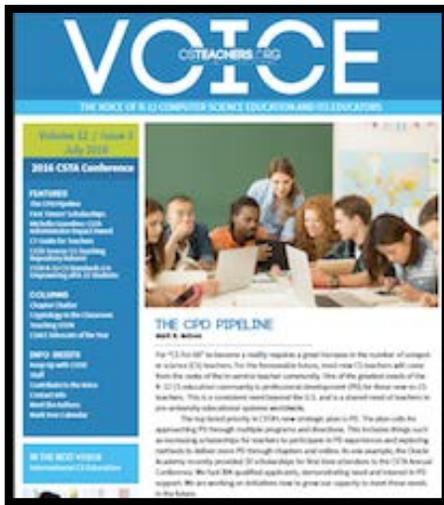
Julie

Computer Science K-12

Teachers' Toolbox

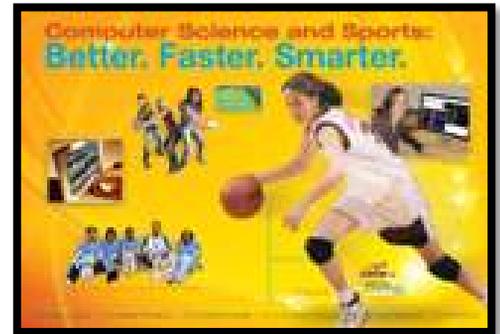
October 2016

Great Resources for Computer Science Educators



Visit the csteachers.org website for resources for free posters, copies of bi-monthly CSTA Voice newsletter, read the CSTA blog, find research, reports, and other useful information that will enhance your computer science classroom.

**FREE
POSTERS
AND OTHER
RESOURCES!**



Computer Science 9-12 (only) Teacher Survey

Click [HERE](#) to submit information about the courses you are teaching this school year, CTSO involvement, licensing, years of teaching, and contact information. This is *strictly voluntary*, but I hope you will take this seven (7) question survey so I can better serve you.

You may receive this request or a reminder many times, but you only need to submit the survey **ONCE**. **October 15** is the **deadline** to submit the survey, so do not delay.

Who should take this survey? Business, marketing, networking, programming, computer tech support, computer science, graphic design, and radio/television teachers should that this survey as we share the BMIT&E umbrella. Please share the survey link and deadline with these colleagues so they may get connected.

Professional Development Opportunities:

Indiana Business Education Association Conference

(Wyndham Hotel, Indianapolis)

November 17-19 – [Conference Information](#)

Computer Science Education Week

December 5-11, 2016

CSTA Annual Conference

(Baltimore, Maryland – Renaissance Baltimore Harborplace Hotel)

July 9-11, 2017 - [Conference Information](#)

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

Health & Physical Education

Teachers' Toolbox

September 2016

Why some schools are sending kids out for recess 4 times a day

For years we've been hearing that many schools have cut back — or eliminated — recess for young children because academics are seen as more important than giving kids a chance to move during the school day. But now some schools are making changes in big ways by sending kids outside four separate times a day for unstructured play. It's part of a new program [called the LiINK Project](#) “which connects play and character development, and is designed to bridge academics with the social, emotional and physical well-being of children”. The Washington Post recently reported about the program, stating that “the program started in the 2015-2016 school year with four schools in Texas that use the program, and four other schools that served as controls. Although it's too early for definitive results, the short-term ones look promising. Kids in the program schools focused better than those in the control groups during the year, and reports of bullying were down.” The principal of the school taking part in the program offered that one result of allowing kids more time for recess has been increased instructional time “because the kids come back in and settle down and get to work because they know they will receive another recess before long.” It has also been found that “kids are solving their own problems much more independently”, resulting in a decrease in the numbers of students being referred to the office for disciplinary action. To learn more about this school's experience, read the complete article at <http://wapo.st/2cyXOtt>.

Join the 20th **Walk/Bike to School Day** Celebration on October 5th!! Go [here](#) to register your school and to access lots of helpful tools and resources for the event!



Virtual Healthy School

CDC's [Virtual Healthy School](#) is an online, interactive school building that allows users to see how the 10 components of the Whole School, Whole Community, Whole Child (WSCC)

Classroom	Cafeteria
Gymnasium	Principal's Office
Counselor's Office	Nurses Office
Playground	Surrounding Community
Home	

The Virtual Healthy School gives life to the [Whole School, Whole Community, Whole Child model](#) through the familiar environment of a school, showing education professionals that schools just like theirs can easily be transformed to meet the needs of the whole child so that every student is ready to learn. This tool can be used by anyone looking to make their local school a healthier place for students and staff.

Resources:

Free Sun Safety Education Program



The Skin Cancer Foundation has developed the free Sun Smart U education program to help teachers expose students to the importance of sun protection and give them the tools they need to prevent skin cancer. The interactive lesson plan features true stories from young skin cancer survivors, medically reviewed Prevention Guidelines, handouts and activities, and can be taught in one or two class periods. Sun Smart U is available in a variety of formats. Information about the lesson can be found [here](#).

Specialist Contact:

Sue Henry, BSN, RN
Health Science, Health & Physical
Education Program Specialist
suhenry@doe.in.gov
317-234-0217

Elementary STEM

Mathematics Instructional Best Practice

Use and Connect Mathematical Representations

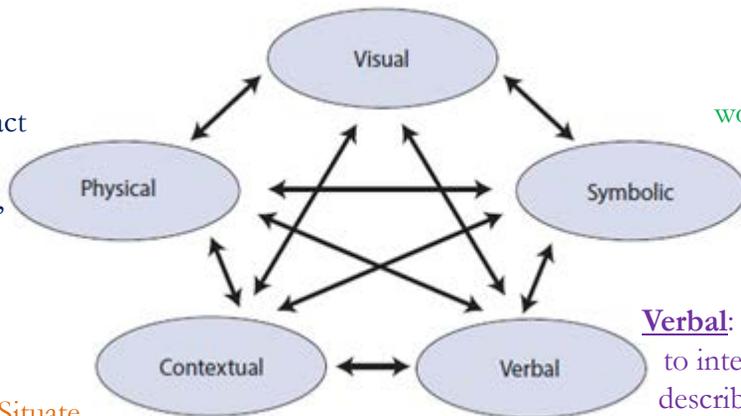
Effective teaching of mathematics engages students in **making connections** among mathematical representations to **deepen understanding** of mathematics concepts and procedures and as **tools for problem solving**.

Principles to Action, pg 24

Being effective in teaching mathematics means that a focus has to be on a variety of mathematical representations. Work with your students on making concepts go from being abstract to concrete. Mathematics is not always clear and cut for students so by teaching students the five different ways of mathematical representations can help students make the needed connections for understandings to the different concepts and ideas. When students learn to represent, discuss, and make connections among mathematical ideas in multiple forms, they demonstrate deeper mathematical understanding and enhanced problem-solving abilities (Fuson, Kalchman, and Bransford 2005; Lesh, Post, and Behr 1987).

Visual: Illustrate, show, or work with mathematical ideas using diagrams, pictures, number lines, graphs, and other math drawings.

Physical: Use concrete objects to show, study, act upon, or manipulate mathematical ideas (e.g., cubes, counters, paper strips).



Symbolic: Record or work with mathematical ideas using numerals, variables, tables, and other symbols.

Verbal: Use language (words) to interpret, state, define, or describe mathematical ideas.

Contextual: Situate mathematical ideas in everyday, real-world, imaginary, or mathematical situations and contexts.

Links:

- [Teacher and Student Actions](#)
- [Understanding Mathematical Connections](#)
- [UDL Guidelines](#)
- [Concrete-Representational-Abstract Instructional Approach](#)
- [Using Visual Representations in Mathematics](#)

Connect with me...

Nick Flowers

E-mail: nflowers@doe.in.gov

Learning Connection Community:

Elementary Math, Science, and STEM

Twitter: @FlowersSTEM

Use #INelemSTEM to showcase the great science, technology, engineering, and/or math activities going on at the elementary setting.

Elementary Literacy

Depth of Knowledge (DOK): An Effective Tool for Educating Students

In order to ensure student learning at the highest levels, practices within our classrooms must be comprehensive and rigorous. Most teachers learned about Bloom's Taxonomy in pedagogy classes during their teacher preparation. In Bloom's Taxonomy, different verbs represent six levels of cognitive processes. However, unlike Bloom's system, the DOK levels are not a taxonomical tool that uses verbs to classify the level of each cognitive demand. The DOK level is determined by the degree of mental processing required by the student to meet the objectives of a particular classroom activity or task.

What are DOK the Levels?

The DOK level describes the kind of thinking involved in the task, not whether it will be completed correctly. A higher DOK level requires greater conceptual understanding and cognitive processing by the student.

➔ **DOK 1** involves recall and the response is automatic. Students either know the answer or not. Level 1 activities require students to demonstrate a rote response, follow a set of procedures, or perform simple calculations. Some examples that represent, but do not constitute all of, DOK 1 performance are:

- Support ideas by reference to verbatim or only slightly paraphrased details from the text.
- Use a dictionary to find the meanings of words.
- Recognize figurative language in a reading passage.

➔ **DOK 2** activities are more complex and require students to engage in mental processing and reasoning beyond a habitual response. These activities make students decide how to approach the problem, involving interpreting and developing relationships among concepts. Tasks could require a closer understanding of text, possibly through the item's paraphrasing of both the question and the answer. Some examples that represent, but do not constitute all of, DOK 2 performance are:

- Use context cues to identify the meaning of unfamiliar words, phrases, and expressions that could otherwise have multiple meanings.
- Predict a logical outcome based on information in a reading selection.
- Identify and summarize the major events in a narrative

➔ **DOK 3** activities necessitate higher cognitive demands than the previous two levels. At DOK 3, students are providing evidence and reasoning for conclusions they draw. In most instances, having students explain and justify their thinking is at a DOK 3. DOK 3 tasks could have more than one correct response or approach to the problem. Some examples that represent, but do not constitute all of, DOK 3 performance are:

- Explain or recognize how the author's purpose affects the interpretation of a reading selection.
- Summarize information from multiple sources to address a specific topic.
- Analyze and describe the characteristics of various types of literature.

➔ **DOK 4** includes those tasks in which students must demonstrate reasoning, planning, and developing connections within and beyond a content area. The standard or assessment item at this level will probably be an extended activity, with extended time provided for completing it. Some examples that represent, but do not constitute all of, DOK 4 performance are:

- Analyze and synthesize information from multiple sources.
- Examine and explain alternative perspectives across a variety of sources.
- Describe and illustrate how common themes are found across texts from different cultures.

Support Tools:

[Link to DOK Wheel](#)

[Karen Hess DOK Video](#)

[Reading Cognitive Rigor Matrix](#)

[Writing/Speaking Cognitive Rigor Matrix](#)

[Math /Science Cognitive Rigor Matrix](#)

[Social Studies Cognitive Rigor Matrix](#)

[Fine Arts Cognitive Rigor Matrix](#)

[Health/Physical Education Cognitive Rigor Matrix](#)



Secondary Math

**Passive Learning: Answers
Answers Transmits
Information**

**Active Learning: Questions
Questions Generate
Information**

Answers .vs. Questions

When you teach do you give more answers or ask more questions? Most teachers give more answers than they ask questions. It is by far quicker, easier and simpler to give answers than it is to ask questions and then wait for students to generate the answers. Giving answers is a way to get large amounts of information to students in a sort amount of time with the least effort by the teacher.

When I was researching what are the best ways teachers can increase the learning of mathematics by their students I confirmed, using a variety of sources, that asking purposeful questions and facilitating classroom discourse increases the student's learning and the retention of the mathematics more than any other methods teacher use in their instruction with students.

Teachers must move from just giving answers to asking questions and not just any questions but purposeful questions. Moving from giving answers and asking questions (typically a DOK - Depth of Knowledge level one type of question) to asking [purposeful questions](#) (typically a DOK level two and three types of question) teachers increase learning. This can be done using higher order thinking questions that require students to see, explain and communicate and the structure of the mathematics. Below are resources ask more purposeful questions.

Teachers must move to [facilitating good mathematical discourse](#) in the math classroom so students are the driving force in their learning. Students must be explaining their processes doing the math and validating their solutions for the problem they are working. Teachers should not be the only person validating solutions and explaining the mathematical procedures being done in the classroom. Teachers should be asking students "Why they approached a problem the way they did" and "Why did they use the process they used to solve the problem". A great way to do this is by asking [Fermi problems](#). These are problems where there isn't a simple easy answer. The answer is in the way you approach the problem. Fermi problems generate discussions and show how the mathematics the students are learning can be used. Below are resources for facilitating mathematical discourse.

A Couple of Fun Problems for You to Challenge Your Skills:

Problem #1 – July 1st 2001 was on Sunday. July 1st 2002 was on Monday. July 1st 2003 was on Tuesday, but July 1st 2004 was on Thursday because 2004 was a Leap Year.

- When did July 1st fall on a Monday again?
- April 1st 2002 was on Monday. When did April 1st fall on Monday again after that?
- September 1st 2003 was on Monday. When did September 1st fall on Monday again after that?
- November 1st 2004 was on Monday. When did November 1st fall on Monday again after that?

Problem #2 – Here are some similar number tricks. What do you notice about each number trick? Explain Why!

Think of a two-digit number. Reverse the digits and add your answer to your original number.

Take any two-digit number. Reverse the digits, and subtract your answer from your original number.

Take any two-digit number. Add its digits, and subtract your answer from your original number.

Take any three-digit number. Reverse the digits, and subtract your answer from your original number.

Take any five-digit number. Reverse the digits, and subtract your answer from your original number.

Specialist Contact

Bill Reed
Secondary Math and
STEM Specialist
wreed@doe.in.gov
317-232-9114

Classroom Questioning Resources: [DOK Question Stems](#)
[Karin Hess's Cognitive Rigor Matrix for Math and Science](#)
[Open .vs. Closed Purposeful Questions](#)

[Short Article About Asking Strategic Questions](#)

Classroom Discourse Resources: [Fermi Questions/Fermi Problems](#)

[Questions to Facilitate Math Discourse](#)

[100 Purposeful Questions that Promote Discourse](#)

[Short Article About Classroom Discourse](#)

Secondary ELA

Teachers' Toolbox

September 2016

Low-Stakes Writing: Writing to Learn, Not Learning to Write

[Edutopia](#) features a flagship series called "[Schools that Work](#)" that highlights practices and case studies of K-12 schools and districts that are improving the way that students learn. The series includes case studies of successful schools, programs, and learning strategies with helpful how-to videos, downloads, and in-depth articles. *Edutopia* featured University Park Campus School in Worcester, MA on how they use low-stakes writing to scaffold instruction, develop student voice, and foster critical thinkers. Below is how they did it:

What is "Low-Stakes Writing?"

A tool to help students build comfort with sharing and developing their thoughts through writing; grading doesn't carry much weight; students have more freedom; and creates ownership in student learning

Strategy 1: Grade Low-Stakes Writing Simply

Students are not being graded on correct answers, but on the effort they put into understanding something new

Strategy 2: Have Your Students Share Their Low-Stakes Writing

Students share their writing with a partner, group, or the class then reflect and revise. Students are more invested in their learning when the answers come from themselves.

Strategy 3: Differentiate Learning Through Group Work

Students are differentiated within groups and share writing assignments with each other and then make annotation on that writing based on group discussion.

Strategy 4: Use Challenge Questions Instead of Giving Traditional Feedback

Students can internalize traditional feedback as insulting, but may take on a challenge as a way to offer an opportunity to learn more and express themselves

Strategy 5: Create Open Questions

Open questions are broad and non-threatening invitations and they can focus on what the students observe and not on specific facts that they are to know.

Use the Election Season as a Teaching Tool for Literacy

[About L2P 2.0](#)

[Register a site/school](#)

[Guidelines for being part of the community](#)

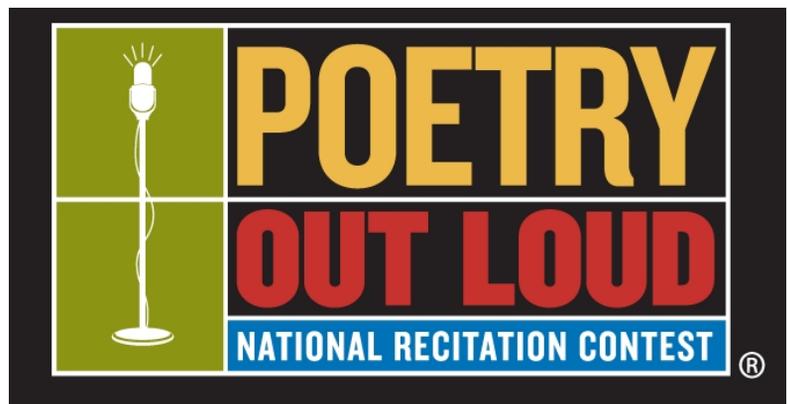
[Resources for Educators](#)



Letters to the Next President 2.0 is hosted by *KQED* and *The National Writing Project* and is a place for America's youth to speak on issues that matter to them in 2016; "The mission of Letters to the Next President 2.0 is to support the development of young people's civic participation by providing a safe and supportive environment for youth writing, media creation, and publishing about public issues and concerns." Teachers, librarians, mentors and other educators are invited to use Letters to the Next President 2.0 to provide an opportunity for youth ages 13 - 18 to publish writing and media about the issues and topics that are most important to them during the 2016 Presidential election. Writers are asked to address their letter to the future US President, whomever that person may be. Letters to the Next President 2.0 asks that writers do not address their letter to a specific candidate or party or advocate simply for a specific candidate or party. They welcome multimedia letters as well as text-based letters.

[See student letters from around the country](#)

Poetry Out Loud is a national recitation competition sponsored by the National Endowment for the Arts and is open to all high school students. Participation is free. Schools can register for the state competition online @ www.surveymonkey.com/r/NLZQQ76 and receive a free programming guide. Registration ends 11/20/16. More information at www.poetryoutloud.org.



Specialist Contacts

[Melanie Martz](#)
(317) 232-9013

[Jill Lyday](#)
(317)232-0867

[Julia Johns](#)
(317) 233-4936

Secondary Science

Teachers' Toolbox

October 2016

Global Learning in Physics

Students learn about Bernoulli's principle with a the idea of wind and an airplane. Why not expand that to connect physics to the whole world with internationalized standards! Here's just one example:

Academic Standard Indicator: PI.7.7

Standard Description: Qualitatively describe the phenomena of both resonance frequencies and beat frequencies that arise from the interference of sound waves of slightly different frequency and define the beat frequency as the difference between the frequencies of two individual sound wave sources. **Suggestion for Integrating**

International Content: Study sound instruments from other countries/areas as they examine sound waves, interference, and beat frequency *New internationalized Science standards will be coming shortly! Please stay tuned!*

Green Ribbon Schools

Does your school do a fantastic job with reducing environmental impact & costs, improving the health and wellness of students, and providing effective environmental & sustainability education, incorporating STEM, civic skills, and green career pathways? If so, check out <http://www.doe.in.gov/ccr/green-ribbon-schools>

Brain Breaks

As fall approaches, days get cooler, daylight hours get shorter, and student energy seems to skyrocket. Don't forget that your students need time for transitions and some built in brain breaks. Check out <http://www.edutopia.org/blog/brain-breaks-focused-attention-practices-lori-desautels> for some great brain break activities/strategies. Research shows that adolescent students attention span runs about as many minutes as their age. Check out some of the research here

<http://www.bu.edu/research/articles/moving-to-improve/>

Science Standards:

<http://www.doe.in.gov/standards/science-computer-science>

Specialist Contact

[Jarred Corwin](#)

jcorwin@doe.in.gov

Secondary Science and
STEM Specialist



Follow us on the

[Learning Connection Science Educator's Discussion Group](#)

Text book caravan will have exhibits and presentations at all of the following sites and there will be digital versions of the various programs.

- ❖ January 17th Marten House
- ❖ January 18th University Inn, W. Lafayette
- ❖ January 19th Avalon Manor, Merrillville
- ❖ January 24th Swan Lake Resort, Plymouth
- ❖ January 25th Memorial Coliseum, Ft. Wayne
- ❖ January 26th Horizon Center, Muncie
- ❖ January 30th Clarion, Clarksville- After school exhibit only
- ❖ February 1st Huntingburg Convention Center
- ❖ February 2nd Possibly Terre Haute but site has not been determined.

Teachers can sign up by visiting their area Service Center website and it should be listed under workshops or Textbook Caravan.

For additional information, contact Ron Buses at ron.buses@hnhco.com



The Verizon Innovative Learning app challenge – the no-coding-skills-needed contest that gives middle and high school students a chance to bring their problem-solving app ideas to life – is now accepting new app ideas for the 2016-2017 competition. The fifth annual challenge invites students across the U.S. to gather teams, dream up ideas, and create concepts for mobile apps that could solve problems in their schools and communities.



The app challenge is open to teams representing non-profit organizations in addition to public, private and parochial schools, who compete for the ultimate prizes: free tablets for each team member, up to a \$20,000 cash prize to support their school or organization, and the chance to turn their app ideas into real, working smartphone apps that will be made available for download. Students can submit ideas from now until midnight on Nov. 18, 2016, and the winners will be named in January and February 2017.

Delivered by Verizon Innovative Learning in partnership with the [Technology Student Association](#), the app challenge is a hands-on learning experience that aims to help students envision brighter futures for themselves as business owners, app inventors, coders and technology professionals.

Learn more and enter on their [website](#).

Connecting Coding to the Engineering and Technology Classroom

How does computer science fit into the engineering and technology classroom? Let me count the ways! E&T is the applied usage of computer science or “coding”. Whether you are coding robots to turn left or revamping computer programs that already exist, these uses are essential to helping students understand how to **apply** computer science in a way that utilizes authentic challenges.

There is a new course available for 2017/18 entitled **Robotics Design and Innovation**. Standards have recently been published on the [DOE website](#).

A webinar to discuss teacher recruitment in E&T will take place on Tuesday, October 4th at 3:30. Interested educators should email mrinehart@doe.in.gov for webinar information.

Content News



TSA and PLTW



Did you know that TSA reinforces PLTW curriculum? PLTW is a national sponsor of TSA and has published this helpful [curriculum correlation guide](#). TSA should be INTRA-curricular. Think you don't have time for TSA? Think again!

Indiana TSA October News:

- October 3-7th is National TSA Week
- [Indiana TSA Competitive List Posted](#)
- Indiana TSA Competition will be March 4, 2017 at Ball State University
- [Affiliate with National TSA](#)
- New Chapter Kit available for Registered Chapters

<http://www.indianatsa.org/>

Indiana TSA

Did you say PD?

Want to get extensive training on 3D printing, including how to build a 3D printer? The IAM-CERT Training complements Introduction to Advanced Manufacturing and is being hosted by 1st Maker Space at Harrison College on Tuesday nights. [Click here](#) for details.

Thank you to all of the teachers that attended the Indiana ACTE Conference and New/Newer Teacher Workshops. The N/NTW Resources can be found on the [DOE website](#).



Specialist Contact

Mary Rinehart

mrinehart@doe.in.gov

317-232-0815

@mrinehartdoe

Business, Marketing, Information Technology & Entrepreneurship (BMIT&E)

Indiana Teacher of the Year Finalist: Dennis Goins, Ben Davis/Area 31 CTE Television



Mr. Dennis Goins helping a student.

Dennis Joseph Goins stepped out of the television industry by faith and created a television curriculum from scratch at the Ben Davis High School/Area 31 Career Center. For the past 14 years, he has served as the Director of BDTV and Performing Arts chair, developing relationships, servant leadership, and student-scholars demonstrating amazing successes locally and globally. With his direction, Ben Davis Television (BDTV) has been consistently recognized in state, regional, and national competitions and achievements.

Dennis received his Master of Education and Principal License from Indiana Wesleyan University, and has earned the Wayne Township Extra Mile Award, 9-time Senior Choice Academic Award, M.G. Raby Distinguished Service award, and the Claes Nobel Educators of Distinction Award from the National Society of High School Scholars. He also was elected to the Indiana Basketball Hall of Fame-Silver Anniversary team, winner of the Vincennes University Pathfinder Alumni Award and a member of the Ball State Telecommunications Hall of Fame. Congratulations Dennis!

“Learning Skills That Pay the Bills” Employability Skills Workshop

(Purdue University,
Student Union)
– October 20-21
– [Conference Forms](#)

IBEA Conference

(Wyndham Hotel,
Indianapolis)
– November 17-19
– [Conference Information](#)

Indiana ACTE 2016 Award Recipients



Congratulations to **Jason Hendrickson** – IACTE Teacher of the Year, **Amanda Graham-Bishop** – IACTE Award of Merit, and **Brian Wolfe** – IACTE New Teacher of the Year.

Left to right: Jason Hendrickson (J. Everett Light Career Center/North Central High School), Amanda Graham-Bishop (Frankfort High School), and Brian Wolfe (Lost River Career Cooperative)

Click [HERE](#) to submit a *voluntary* teacher survey so that I might better serve you. You may receive this request or a reminder many times, but you only need to submit the survey ONCE. **October 15** is the **deadline** to submit. Share with your colleague that teach business, marketing, networking, programming, computer tech support, computer science, graphic design, and radio/television.

Health Science

Keeping Your Health Science High School Students Engaged

Even if you've been teaching Health Science for many years, designing lesson plans and curriculum is time-consuming. But the best resources and lesson plans won't be impactful and effective if your students aren't engaged in the learning. [Applied Educational Systems](#) offers that there are two ways you can make sure your Health Science courses are engaging:

1.) Incorporate Blended Learning

To catch and hold your students' attention, you have to make the material come to life. Combining multiple health science resources in a blended approach will not only keep your students engaged, but will help them learn better. By varying your approach and breaking up the style of learning, you are able to reach all of the students and spend more one-on-one time with those who need it. Examples: Consider breaking up a lecture-oriented course with interesting multimedia aids and hands-on learning tools; Use technology and online resources in your classroom.



2.) Embrace Your Experience from the Healthcare Field

Many health science educators come to the classroom in a non-traditional way. Many have spent time working in the healthcare industry in a variety of chosen careers. While this presents challenges for those who are beginning this transition to teaching, you can turn that experience into an advantage. "Your field-specific experience has given you a wealth of health science knowledge unavailable to career teachers. For example, instead of simply presenting information to your students, you can give them contextual examples you have faced in the industry". Because you have achieved success in the healthcare field, you are uniquely capable of helping your students to have successful healthcare careers.



NCHSE Health Science Instructional Supplements

- **New and Updated web links and Apps!**
- **Lesson Plans and Activities reflecting the updated National Health Science Standards (May 2015)**

These health science instructional materials were designed as a resource supplement, to be used in conjunction with state curriculum resources, plans, and outlines; as well as textbooks and the resources that accompany those textbooks. More information found [here](#).

👉 Special Offer 👈

Participants at the [NCHSE Curriculum Conference in Louisville, KY \(Oct.12-14, 2016\)](#) will have the opportunity to purchase the 4th Edition Flash Drive for \$150 (after the conference price \$300)

Specialist Contact:

Sue Henry, BSN, RN • 317-234-0217
suhenry@doe.in.gov

Indiana-ACTE Conference A Success for Health Science!!!

Health Science was well represented at the IACTE Conference in Indianapolis, September 22-24! Participants experienced six different, and well prepared presentations specific to Health Science! Session included: "Public Health and Infectious Disease Outbreaks: Real World Examples"; "Alternative Medicine-Michael Phelps Does It, Why Don't You?"; "Establishing and Maintaining a Veterinary Assisting Program in Your School"; "Health Science Pathway: Health Science or Biomedical Science"; "HSE Partnership Possibilities with Indiana AHEC: Not One-Size Fits All"; and "The Faces of Public Health". What a great opportunity to network with fellow teachers and get some quality professional development. **But, we need your help for more ideas for next year. What topics would you like to see covered? Got an idea for a presenter or would you like to present about your program? Contact Sue with your ideas!!**

Construction Event Connects Employers and Students



The Indiana Construction Round Table Foundation is hosting a Construction Symposium December 13th at the Ivy Tech campus in Noblesville. This event will be both educational and interactive which will provide students with an overall feel for the opportunities that exist in the construction industry through our universities and construction trade organizations. Activities will include an overview of employment opportunities available in both the Construction and Manufacturing fields; A look at affordable college programs that lead to high wage/high demand jobs in the construction industry; and an economic break down of the earning potential available in the construction industry and a look at labor demand in the field. Students who are currently involved in Career and Technical Education programs as well as students who are interested in seeking careers through higher education in the fields of construction management, engineering, and architecture are encouraged to attend. Registration is currently open. Please contact Ali Brown, ICRF Executive Director at ali@indianaconstruction.org with questions or to express interest in the event. You can also register online at <http://2016icrf.Eventbrite.com>



The Indiana Construction Roundtable Foundation is hosting a Construction Symposium at the Noblesville Ivy Tech Campus in December

SkillsUSA Teams up with SME

The Society of Manufacturing Engineers (SME) and SkillsUSA are teaming up to address the skills gap and fill the manufacturing workforce pipeline. The partnership will provide free memberships to educators and students throughout Indiana. SME's high school membership provides activities to educate students in career opportunities in manufacturing. Members also have access to a mentorship program, scholarship opportunities, competitions, and SME local chapter events. SME Chief Executive Jeff Krause says "Having worked with SkillsUSA on various initiatives over many years, this is yet another way that we can combine forces and make a difference in the lives of the next generation." There are currently more than 600,000 jobs available in manufacturing, with the expectation that number could grow to two million by 2025. You can visit: sme.org/high-school-membership to learn more about the high school partnership. You can also contact Natalie Lowell at nlowell@sme.org.

Opportunities

Lightweight Innovations For Tomorrow (LIFT) and the Center for Design and Manufacturing Excellence, are hosting a new competition that merges the ancient skills of the blacksmith with the digital age of robotics to create new material forming capabilities called Robotic Blacksmithing. Students will form three useful items such as a horseshoe, goblet, and an ultralight-weight truss out of materials of increasing difficulty and importance. To register visit them at

www.roboticblacksmithing.com

Family and Consumer Sciences and Work Based Learning

Teachers' Toolbox

October 2016

Be a Teacher Day

November 18 at Banker's Life Fieldhouse

- A welcome from the Indiana Department of Education
- Concurrent sessions on topics of *Financial Aid, Community Colleges and the Path to Teacher Education, and Professionalism as Viewed by an Administrator*;
- Over 25 university programs are committed to be in attendance to answer specific questions about their teacher education programs;
- *One Size Fits All Improv* group to send you and your students away laughing;
- A free t-shirt; Door prizes; and Tickets to a professional basketball game: Pacers vs Phoenix Suns!

If you need additional information, please contact Carol Werhan at cwerhan@purdue.edu

Student Registration \$7.50, Register your students now, click [here](#)

Finding a Partner Work Based Learning

Focus on "Warm Calls"

Develop a target list

Personal network

Professional network

Vendors

Parents

Advisory board members

Professional organizations



Elements of Successful Partnerships

Equal collaboration

Shared concerns

Each side brings benefits

A way to measure progress



Grant Opportunities

- FCCLA and State Farm Initiative to promote safe driving. Click [Here](#)

AAFCS Annual Conference & Expo



Call for Proposals now open

Click [Here](#)

June 25-28, 2017

FCCLA Teaching Tip

Career exploration is the perfect project for any class. Students use the *planning process* to research careers, assess skills, and form a career plan.



Upcoming Professional Development

- Early Childhood Education Network Meeting
Learn more about the Film Reject
 - October 26, 2016
 - Walker Career Center
 - <https://goo.gl/forms/q1elzFJb7gyMFmxs2>
- Culinary Network Meeting
Tour Second Helpings
Learn about ProStart
 - November 3, 2016
 - <https://goo.gl/forms/Ggw8J6nSv90VrGIA2>



#ProduceChallenge

Are you up to the challenge? Are your students up to the challenge? Who should take the #ProduceChallenge? People who want to eat more fruits and vegetables and incorporate more information about fruits and vegetables into the classroom.

Visit www.theproducemom.com to accept the challenge

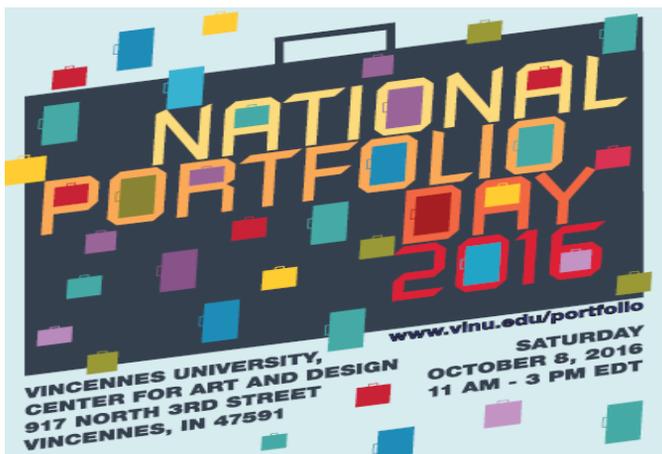
Specialist Contact

Alyson McIntyre-Reiger

317.232.9168

amreiger@doe.in.gov

Fine Arts



The VU Center for Art and Design is located on the corner of Third and College Street on Saturday, October 8 from 11 am – 3 pm.

High school students, parents, art teachers and school counselors are all invited to Vincennes University to meet art school representatives from across the country.

Information will be offered by a variety of college art programs on how to apply, how to prepare your portfolio, and where to get financial aid.



The Council for Art Education provides visual art educators and state art education associations with valuable resources and ideas for promoting their visual art education programs.

CFAE sponsors the **Youth Art Month**, a celebration of the visual arts.

Information for Youth Art Month, including the Flag Design contest can be found here:
<http://councilforarteducation.org/youth-art-month/>



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>

Professional Development

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!*



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.**

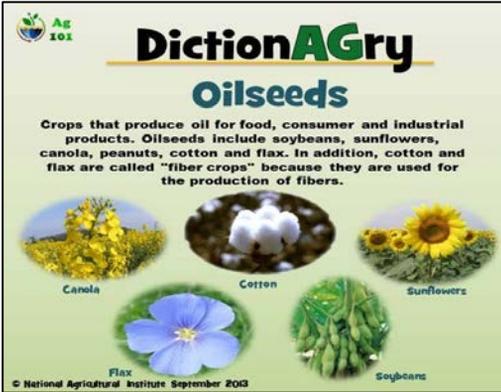
Specialist Contact

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

Agriculture Education

Teachers' Toolbox

October 2016



DictionAGry
Oilseeds

Crops that produce oil for food, consumer and industrial products. Oilseeds include soybeans, sunflowers, canola, peanuts, cotton and flax. In addition, cotton and flax are called "fiber crops" because they are used for the production of fibers.

Canola Cotton Sunflowers
Flax Soybeans

© National Agricultural Institute September 2013



National Teach Ag Campaign

Signing Day at National FFA Convention

Calling all seniors who plan to major in agricultural education Fall 2017. Sign up for a spot at the Teach Ag booth to officially declare that you plan to change lives, make a difference and be a role model by teaching agriculture.

Once you sign up to confirm your spot show up at the Teach Ag booth five minutes beforehand with your team of supporters (ex. agriculture teacher, parents, friends, etc). We take care of the rest.

Contact Tabitha Hudspeth at tabitha.hudspeth@outlook.com with questions.

Location: Booth #2455



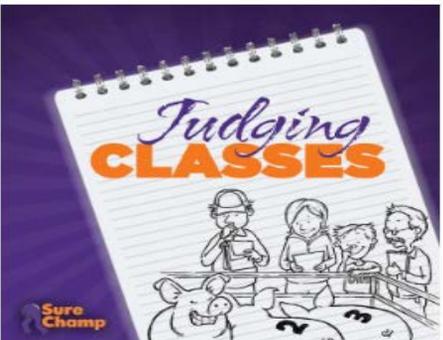
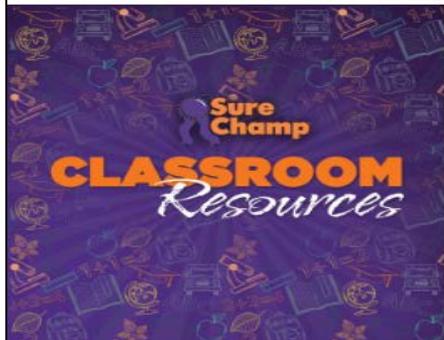
Sure Champ IN THE CLASSROOM

Welcome to Sure Champ in the Classroom!

Sure Champ spends a great deal of time and resources dedicated to content geared promoting the #stockshowlife – some of it fun and lifestyle-based, some inspirational and much of it educational. We want our followers to learn as much as possible and be proud of the lifestyle our world so desperately relies on as their food and fiber source.

We are offering these resources to you to have at your disposal for classroom activities, extra reading material or however you wish to utilize them to enhance your students' learning experience when it comes to agriculture!

This is absolutely FREE!! Click on the buttons below to view the available resources. You can also sign up to receive our "Sure Champ in the Classroom" email series. You will receive a quarterly email jammed packed with great printable pieces that you can download.



Harvesting: Crops & Careers

Indiana Farm Bureau is offering an K-12 educational resource from National Agriculture in the Classroom called "Harvesting: Crops and Careers". It is a seven lesson unit that educates all grades levels about production and harvesting of wheat and other grains.

More Information can be found [HERE!](#)

Professional Development

Nov. 29-Dec. 3 – NAAE Vision

(Early Bird ends 10/28)

Jan 19 – IAAE Winter Workshop

Specialist Contact

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