prism
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Newsletter

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Upcoming 2016 Moodle Training Courses

We are offering three FREE online Moodle training courses beginning in February. We offer Professional Growth Plan (PGP) points for each course.

Basic Moodle for Teachers (10 PGP Points)
February 9 - March 8

A basic introduction to Moodle 3.0.2. You will learn how to build a classroom course and populate it with files, assignments and quizzes.

Intermediate Moodle for Teachers (10 PGP Points)
February 10 - March 9

A continuation from the Basic Moodle for Teachers course. Choose this course if you already have Moodle experience and would like to learn how to use some of the more advanced features like wikis, databases, lessons, and RSS feeds.

Advanced Moodle for Teachers (10 PGP Points)
February 11 - March 10

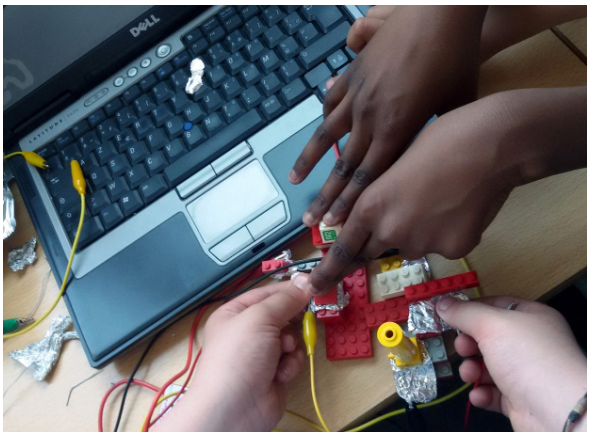
A continuation from the Intermediate Moodle for Teachers course. This course will take the Intermediate level course a step further as participants learn advanced gradebook features, groups and groupings, conditional activities, and the workshop activity module.

All of the courses are completed online at your-own-pace during your own free time.

If you would like to register for a course, please visit the PRISM website, log-in, and click the 'Event Registration' link. Use the drop-down menu to select the appropriate course and click the 'Registration Form' button. You will see a complete description of the course. To sign up, scroll down and enter your information. You should receive a confirmation email. If you do not receive a confirmation email, please contact us.

Unlocking the Code for Robotics in the Classroom

by Julia L. Dweck - Edutopia



In President Obama's final State of the Union address, he expressed the importance of "helping students learn to write computer code." In a recent YouTube video for Code.org, Obama spoke to students, urging them to "master the tools and technology that will change just about everything." Obama is correct. Our students' focus must shift from passive purveyors of technology to creators of programs, apps, and inventions. We must push them past low levels of static reception into a dynamic mindset, highlighting and nourishing thought and imagination to improve our world.

The elephant in the room is the cost associated with computer science technology. Programs like Code.org, Khan Academy, and others offer a viable solution. They're free to educators and parents, offer motivational incentives, and attract students with highly colorful graphics and relatable character interfaces, such as zombie attacks or familiar video game characters. Sites like these are the first step to introduce coding into the classroom.

Robotics is the next step. Over the past few years, the market has witnessed the rise of robotic tools -- like Sphero, Wonder Workshop and Lego Mindstorms -- that teach students how to code. At its core, robotics moves students away from the solitary interface of a computer screen and into an active social community. Not only does the space of the student's world increase in size, so do the benefits that computer science has to offer.

Teachers know what their students need emotionally, socially, and academically. Therefore, teachers should be properly armed to advocate for change, when needed. Here are five reasons to consider purchasing robotics for the K-12 classroom.

1. Sensory Learning

Children learn with all of their senses, and robotics aligns more naturally with the active, hands-on development of a K-5 student. Studies have shown that a multi-sensory approach activates a larger number of cognitive connections. Robots like Dash and Dot from the Wonder Workshop encourage students to touch, build, measure, follow, run, and skip beside Dash, as this bright blue bubble on wheels treks across a grid, avoiding obstacles or launching ping-pong balls. Students are emotionally and physically engaged, making increased neural connections that result in active learning and enhanced long-term experiential recall.

2. Improved Socialization

Social learning is nothing new. Back in the 1970s, Albert Bandura established the most well-known theory of modern social learning, which purported that people learn from each other through observation, imitation, and modeling. This line of thinking still holds true today. Communication and collaboration are critical skills to prepare young people for the world outside the classroom doors. Robotics challenges offer students opportunities in all forms of socialization, including (and most importantly, developing) burgeoning listening skills, and considering and evaluating alternate perspectives.

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Unlocking the Code for Robotics in the Classroom

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By now, you are probably wondering, “Why robotics?” While it’s possible to integrate hands-on learning and opportunities for increased socialization by other means, the third reason is critical to robotics.

3. Opportunities for Hands-On Innovation
Daniel Pink theorizes that the 21st century has witnessed an altered mindset in the global market. In this new world, the MFA is worth more than the MBA. While computers can be programmed to attend to logical, linear outputs, creativity and innovative thinking can never be automated. This gives rise to costly implications for our students. While preparing them to calculate, spell, and recall the names and locations of states on a map, are we balancing the curriculum with opportunities to problem solve and ask the questions that bring forth innovations? Robotic challenges offer students exciting opportunities to build and express their imaginations. There is an authenticity of purpose inherent in bringing the seed of an idea to fruition: from the brainstorming phase to construction of artifacts that have real world value.

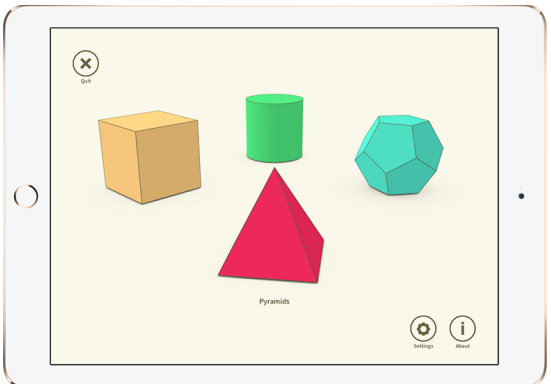
4. Raising the Level of Rigor
The highest levels of Bloom’s Taxonomy (Benjamin Bloom, 1956) are application, analysis, synthesis, and evaluation. At these peak levels of thinking, students begin to consider real-world applications for knowledge. Facts and ideas become building blocks with which they can construct innovative applications, products, and inventions. Jobs in the 21st century will require our students to perform at the highest levels of thinking. And yet, how often are we providing them with these opportunities?

5. Cost-Effective Investment
Robotics programs vary in cost, but one unifying factor is that they are generally non-consumable. This translates into valuable returns for multiple classes over subsequent years. Of course, there are typically updates that are needed, but their cost is considerably less than those related to the impact that the solitary computer experience is inflicting on our students. Chiropractors have witnessed an influx of children experiencing headaches and back, neck, and shoulder pain resulting from sedentary lifestyles and excessive use of computers. Conversely, robotics gets students up and moving, lowering associated health costs and risks.

Read more online at: http://www.edutopia.org/blog/unlocking-code-robotics-in-classroom-julia-dweck

Educational Apps for Android and iOS Devices

Shapes - 3D Geometry Learning



Learn, teach and explore different types of 3D solids and help students understand geometry in a pleasant way.

'Shapes' uses the power of mobile devices to enhance teacher capabilities and provide possibilities to show things that cannot be shown with physical tools. It can help to create interest and enthusiasm in school mathematics classes at all levels.

The app was verified and approved by the Faculty of Mathematics and Computer Science at Adam Mickiewicz University of Poznan. It was specifically prepared to support the teacher in the classroom, but can also be used as a tool for self-study. From now on there is a save and print option available for each net so that the kids can explore solids outside the app and improve their manual skills as well.

Discover a fascinating world of solids like prisms, pyramids, solids of revolution and Platonic solids. Start from the simplest and gradually explore the most complex ones. Engage your students with a new Nets Creator mode. Let them build solids from scratch and discover hundreds of unique net combinations.

* * * * * *

The app won App Award 2014 in the education category, was awarded with a 4-star Educational App Store certification and became a proud member of Moms With Apps program!

Shapes' features:

- Select 27 unique shapes
- Choose from a variety of: prisms, pyramids, Platonic solids and solids of revolution
- Unfold shapes into different net combinations
- Learn about number of faces, edges and vertices for each solid
- Build solids from scratch in Nets Creator mode
- Explore transparent surfaces mode
- Highlight the vertices and edges
- Color selected elements
- Use simple gesture control
- Rotate the shapes in any direction
- Zoom in and out by pinch and spread gestures
- Align to basic position by double tap
- Save and print chosen net

Read more at: http://shapes.learnteachexplore.com/

This app is available at:

Google Play Store for Android devices
Apple App Store for iOS / Apple devices.

Professional Development Opportunities

2016 Indiana Natural Resources Teacher Institute

The application process is now open for the 2016 Indiana Natural Resources Teacher Institute.

The Indiana Natural Resources Teacher Institute is a multi-day professional development workshop that will bring 18 teachers from across the state to Morgan-Monroe State Forest to see firsthand how forestry works in Indiana. Sessions include training in Project Learning Tree, tours of public and private forest lands, forest industry facilities, and forestry research in Indiana.

The Institute will begin on Monday, June 20 at 4:00 pm and conclude on Friday, June 24, 2016 at 12:00 pm. Our base of operation will be the Forestry Training Center at Morgan-Monroe State Forest near Martinsville.

There is no cost to educators participating in the Institute. Teachers will stay in the Training Center, sharing one of the 10 sleeping rooms. Meals will be provided. Participants will receive Project Learning Tree and Indiana specific teaching materials and a set of field tools for conducting activities.

For more information or to receive an application, please contact:

Donna Rogler, IN Project Learning Tree Coordinator
IN DNR Division of Forestry
317-234-5143
https://www.plt.org/
drogler@dnr.IN.gov

American Geosciences Institute/ExxonMobil Exploration Teacher Leadership Academies

ExxonMobil Exploration and the American Geosciences Institute are pleased to announce that they will be holding the eighth annual Leadership Academy in Earth science and STEM for elementary school teachers in Houston, Texas, June 19-24, 2016. The program starts with a reception and dinner on the evening of Sunday, June 19th, and concludes at noon on the 24th.

ExxonMobil Exploration and the American Geosciences Institute are pleased to announce that they will be holding the eighth annual Leadership Academy in Earth science and STEM for middle school teachers in Houston, Texas, July 17-22, 2016. The program starts with a reception and dinner on the evening of Sunday, July 17th, and concludes at noon on the 22nd.

Please send names and e-mail contact information for nominees to Laura Rios, Education Specialist, American Geosciences Institute, at llm@agiweb.org. Please use the subject line “Middle School Teacher Leader Academy Nominee” for middle school and “K-5 Teacher Leader Academy Nominee” for elementary.

For further details see attachments: K-5 Leadership Academy.docx
Middle School Leadership Academy.docx

Upcoming Events

NSTA National Conference
March 31 - April 3, 2016
Nashville, TN

5th Annual STEM Forum & Expo
July 27 - 29, 2016
Denver, CO

Attendee Registration
Please note: To register online, you must be logged into the website as the person who is attending the conference. Please click here if you wish to join NSTA and save $90 on your conference registration for the 2016 Nashville national conference and the 5th Annual STEM Forum & Expo hosted by NSTA.

To begin your online registration, please select the conference you'd like to attend:
- NSTA National Conference
- 5th Annual STEM Forum & Expo

If you would prefer to register by mail or fax, please download a registration packet (PDF), which includes both registration and membership forms:
- Nashville National Conference
- 5th Annual STEM Forum & Expo

What PRISM Can Do For You!

- Easily find the perfect teaching and learning resources from our library of over 4,000.
- Save a list of your favorite resources for quick retrieval.
- Create and share lesson plans that teach your subjects utilizing your favorite resources.
- Develop online classrooms with interactive assignments, lessons, quizzes and more!
- Store your classroom materials online so that they are available to you from any computer.
- Reach your students more effectively by using web media for the digital age.
- Earn PGP points by completing PRISM led online Moodle course – either Beginning Moodle or Intermediate Moodle courses are available to you at no cost several times throughout the year.
- Select from free learning resources that emphasize visualization, rich context, staged-problem solving, and electronically enabled collaboration / communication.
- Augment your own dynamic presence in the classroom with teaching tools that mirror the skills needed for success in higher education and the 21st Century workplace.

*Through our strong support from the **Lilly Endowment** and others, we are constantly growing and improving. Check our site regularly to see what new resources you can use in your classroom.*

www.rose-prism.org