

The Wednesday Reader

May 17, 2017

Today's edition will be the last Wednesday Reader for the 2016-2017 school year. Thank you all for your contributions, reading, and dedication to your students and the business education profession. Have a great spring, enjoy summer, and see you during one of the three Summer Update workshops. The first Wednesday Reader for the 2017-2018 school year will be Wednesday, August 30.

Register Today for the FREE Business Education Summer Update & Get Grad Credit from MSUB

This summer, while enjoying the calms and the wilds of Montana this summer, plan to take a day for some “Hands on” exploring of the STEM branch of Business Education. If you are looking for a little summer adventure, *and a college credit*, mark your calendars for the 2017 Montana Business Education Summer Update Workshops.

Three (3) regional workshops will offered across the state for Montana’s Business Education Professionals. The 2017 Summer Update Workshops topics will include the financial education program Hands on Banking®, getting “plugged into” activities for integrating Computer Science principals, and Cyber Teacher Certification.

One (1) graduate-level continuing education/professional development credit from Montana State University Billings will also be available to workshop participants for \$99 who complete additional requirements.

Workshops will be held

- Monday, July 31 at Glacier High School in Kalispell;
- Wednesday, August 2 at Skyview High School in Billings; and
- Friday, August 4 at Capital High School in Helena.

Workshops will be facilitated by Montana Business Education Specialist Eric Swenson. Attendees will gain hands-on experience with the free, fun, and engaging financial education program from Wells Fargo Hands on Banking®; participate in and receive instructional resources for implementing computer science principals using engaging games and puzzles that use cards, string, crayons from CS Unplugged; and begin the journey to earn Cyber Teacher Certification via LifeJourney’s National Security Administration Day of Cyber.

In addition to all the information and fun activities, Summer Update Workshop participants will receive Hands on Banking® curriculum materials for teens (grades 6-8), young adults (ages 15-21), and Entrepreneurship (including starting, managing, & growing a business); the complete CS Unplugged collection of learning activities; and have the opportunity to become a certified Cyber Teacher.

Below is the schedule for each of the three locations: July 31, Kalispell at Glacier High School; August 2, Billings at Skyview High School; and August 4, Helena at Capital High School.

- 8:30-9 am: Registration
- 9-9:30 am: Welcome & Introductions
- 9:30-10:30 am: Hands on Banking®
- 10:30-10:45 am: Break
- 10:45-Noon: CS Unplugged
- Noon-1 pm: Lunch (On your own)

1-1:30 pm: Business Education Curriculum Update
1:30-2:30 pm: Cybersecurity Instructional Resources & Cyber Teacher Certification
2:30-2:45 pm: Break
2:45-3:45 pm: Cyber Teacher Certification, cont.
3:45-4 pm: Wrap Up & Closing

Come for the day and leave with some fresh AIR—*Activities, Instructional Materials, and Resources*—to start out the new school year.

Registration can be completed at <https://goo.gl/forms/XVUTzqwKFOfMFiaq2>. If you have problems accessing the link via the Google “shorthand” URL, here is the longhand version of link, https://docs.google.com/forms/d/e/1FAIpQLScYtFK0u03RrUfVJoCOxxLyrtdTJLrAQki0twD1iU5SfEg6IA/viewform?usp=sf_link.

Please complete registration by Friday, June 23. A registration confirmation will be sent after your registration has been processed.

These workshop will be offered free of charge with up to six (6) OPI Renewal Units available. Participants who complete the Cyber Teacher Certification program and submit a copy of their earned certificate will be eligible to receive six (6) additional OPI Renewal Units. Proof of an earned Certificate of Completion must be submitted by Friday, August 18, 2017 to receive the additional six (6) units.

Participation in one of the 2017 Summer Update workshops is required in order to earn the six (6) OPI renewal units through this offer to receive renewal units for the completion of the Cyber Teacher Certification.

If you want to earn a graduate-level continuing education/professional development credit, Montana State University Billings is proving one (1) credit for \$99. Summer Update participants who want to earn the credit will need to

--attend the workshop for the full day at one of the three locations,
--complete the online Cyber Teacher Certification training and submit a copy of the earned certificate,
--and a develop and submit a lesson plan with associated instructional materials utilizing any of the information and materials gained from the workshop.

To register with MSU Billings for the credit and to submit payment for the \$99 fee please go to <https://extendedcampus.msubitings.edu/wconnect/CourseStatus.awp?&course=E181PDMBES1&Publish=ANYWAY>. The credit is listed under the course title *Montana Business Education Summer Update Workshop*, EDCI 589-450.

Summer Update participants can earn either OPI Renewal Units or College Credit, but not both.

Any travel and lodging expenses you may incur to attend can be paid for by either Perkins and/or State CTE/VoEd funds. Please note: Perkins funds cannot be used to pay for the credit.

Please let me know if you have any questions or need additional information.

High School Capture the Flag – FREE Online CS Competition

HSCTF 4 (hsctf.com), an online computer science competition, will be running from May 20-27.

HSCTF is a free online programming and cyber security competition organized by high school students for high school students.

Last year, in HSCTF 3, we had over 2997 competitors. Competitors in High School Capture the Flag (or HSCTF) will learn computer science skills, and use ingenuity to discover a series of increasingly hard to find "flags" encrypted, hidden, or otherwise stored somewhere difficult to access.

HSCTF includes topics such as computer security, programming, algorithm design, and programming language design.

Prizes will be awarded to the top teams. Any team of size 5 or less of high school age or younger living in the US is eligible to win.

You can register & sign up for email updates at hsctf.com.

If you have any questions, email us at contact@hsctf.com.

Free STEM Curriculum and Professional Development Offer

The STEM Academy, Inc., is excited to announce the renewal of their commitment to provide best of class, standards based STEM curriculum and professional development support for 2,500 U.S. middle and high schools for up to a three year term.

Russell Mickelson, CEO of The STEM Academy, Inc., "We are fortunate to be able to renew our commitment to promote education equality in America by offering our best of class STEM curriculum and professional development programs for 2,500 U.S. middle and high schools. We remain steadfast in our dedication to provide student experiences which unlock the doors of opportunity to 21st century STEM careers."

How it Works

The first 2,500 public education middle and high school institutions to respond will receive STEM 101 curriculum licensing and professional development by registering at www.stem101.org.

**Offer expires January 1, 2018*

Eligibility Requirements

Qualified schools will commit to implement STEM 101 project activities, adopt units to enrich existing instruction, or offer STEM 101 courses during the 2017-18 academic school year. Schools will also commit to have participating instructors complete online STEM 101 instructor orientation training prior to curriculum utilization.

STEM 101 Middle Grades Courses

Grade 6 | Discovering STEM; Grade 7 | Designing with STEM; Grade 8 | Investigating STEM Skills

STEM 101 High School Courses

Introduction to Engineering | Principles of Engineering | *3D Modeling featuring Autodesk Inventor, Solidworks and Autodesk Revit

**Not eligible for free offer*

STEM 101 Career Pathway Exploration Project Library

Agriculture | Architecture | Aviation | Coding | Biotechnology | Electronics | Energy | Engineering | Design | Food Science | Information Technology | Manufacturing | Medical | Sustainability | Transportation

Benefits

- Increase student enrollment and success in STEM and non-STEM courses.
- Provide all instructors with access to a proven cross-curricular, standards-based STEM curriculum foundation.
- Increase teacher effectiveness with a virtual, on-going professional development program.
- Compatible with industry leading software resources.
- Single source shopping for STEM 101 project-based supplies at enasco.com.

How to Get Started

- (1) A school representative notified STEM 101 of intent to participate by requesting a free trail account at www.stem101.org
- (2) STEM 101 will then activate a 30-day term STEM 101 curriculum evaluation license for your school. The purpose of the evaluation term is for your school STEM leadership group to qualify STEM 101 alignment with existing school site curriculum via STEM 101 state and national standards correlation tool.
- (3) Following the evaluation term STEM 101 will issue the license agreement for your school which includes (3) year term access to STEM 101 middle or high school curriculum and professional development program.

Registration Now Open for ACTE's 2017 CareerTech VISION in Nashville

Spring weather may have just started, but now is the time to start thinking about attending the Association for Career & Technical Education's (acteonline.org) [2017 CareerTech VISION conference in Nashville, December 6-9](http://www.careertechvision.com).

Early-Bird Registration is now open and is available through July 14 at \$395.00 for Montana ACTE/ACTE members.

Complete conference details—including links to registration, conference agenda, and travel and hotel info—can be found at www.careertechvision.com.

Joy and Beauty of Computing Courses Offered at MSU-Bozeman this Summer!

The Gianforte School of Computing is pleased to offer TWO 2-credit summer MSSE courses for Montana teachers, *Computer Science in the Classroom: Computational Thinking for Teachers*, a.k.a. *Joy and Beauty of Computing* and *Computer Science in the Classroom: Joy and Beauty of Data*.

Joy and Beauty of Computing (JBC) –

Teachers not able to enroll in the *Joy and Beauty of Computing* course for Montana teachers at the University of Montana, June 12-16 have the option to enroll in the course at MSU-Bozeman, **June 13-17**. Due to the popularity of the course, MSU-Bozeman will offer the course to teachers who were not able to enroll at UM or are unable to travel to Missoula. Stipends are available for teachers.

Joy and Beauty of DATA (JBD) –

Montana State University (MSU) will offer a new Master of Science in Science Education (MSSE) course for Montana teachers, “Computer Science in the Classroom: Joy and Beauty of Data,” **July 17-21, 2017** on MSU’s campus in Bozeman.

The JBD is a 2-credit course and is intended for 7-12 grade teachers who want to learn how to incorporate computational ideas in the classroom. In addition, teachers who take the course will be introduced to the broad area of data science and will extend their knowledge of the Python programming language. High school teachers who complete the course can potentially teach CSCI 1xx, The Joy and Beauty of Data, as a dual enrollment course.

The course builds upon the pre-requisite course, “Joy and Beauty of Computing,” previously offered at MSU (2014-2016) and offered this summer at the UM and MSU-Bozeman.

The course will be taught by Dr. John Paxton, Director, Gianforte School of Computing, Montana State University.

Stipends for Montana teachers is available for both courses. For more information and how to apply, please contact Diana Paterson, MSSE Associate Director, 406.994.5679 or msse@montana.edu.

Learn Scratch this Summer Online from UNI "Introduction to Programming Using Scratch" Course

The University of Northern Iowa is pleased to announce it will once again be offering the online course "[An Introduction to Programming using Scratch](#)" during the summer of 2017. This course has been taught to approximately 150 participants EACH of the last three summers.

The course will run from June 5 - July 14 and will require a TOTAL commitment of approximately 20-25 hours. The pace of the course is up to the participants who may start and end at their convenience at any time during the course offering—so long as the course is completed by July 14.

The course assumes no prior programming experience and will include material on teaching Scratch for Logo, storytelling, text interaction, and game playing, as well as coverage of some advanced topics. Each of the six units is a blend of 60-90 minutes of lecture videos (roughly 5 minutes each), hands on guided activities, and independent programming assignments.

Participants may complete the course for personal interest FREE of charge. Participants interested in earning 1 hour of graduate workshop credit (suitable for license renewal in the state of Iowa) have the OPTION of doing so for a fee of \$100 billed by the University of Northern Iowa.

Further details and the registration form are available at: www.cs.uni.edu/~schafer/outreach/cs4hs/

Please feel free to contact Ben Schafer at schafer@cs.uni.edu with questions or additional information.

Registration is Now Open for MIET 2017 in Great Falls – June 13 & 14

The [2017 Montana Institute on Educational Technology \(mietttechdays.weebly.com\)](http://mietttechdays.weebly.com) will be held June 13 and 14 in Great Falls at Great Falls College MSU.

Registration is now open with the Early-Bird rate of \$110 available through May 19.

Participants will be able to earn up to 15 OPI Renewal Units or one (1) or two (2) graduate credits from Montana State University Northern.

Complete MIET 2017 details—including registration, costs and requirements for graduate credit, and Institute schedule—can all be found at mietttechdays.weebly.com.

EverFi Announces Three \$1,000 529 Scholarships for STEM

Did you learn something from [Future Goals - Hockey Scholar](#) that sparked your interest in STEM skills? Enter the STEM Scholarship Competition to share your story. Three winning students will receive a \$1,000 529 College Savings Scholarship and have their stories featured on the EverFi blog.

[The STEM Scholarship Competition](#) is open to U.S. students who have completed at least one lesson in Future Goals - Hockey Scholar during the 2016-2017 academic year. Entries must be received by May 12, 2017 at 5:00pm EST.

Future Goals - Hockey Scholar is a [standards aligned](#), online STEM course that brings science, technology, engineering and math (STEM) concepts to life through the game of hockey. Learning modules will build student's understanding of foundational STEM concepts, develop scientific and critical thinking, and highlight STEM careers.

If you are interested in learning more about the program, or have questions, reach out to Cari Turner at cturner@everfi.com or 406.204.2224.

Pace GenCyber: Cybersecurity Summer Workshop for High School Teachers

The Seidenberg School of Computer Science and Information Systems at Pace University (Pleasantville, New York) invites you to attend a seven-day summer workshop aimed at introducing high school teachers to diverse topics in cybersecurity, free of cost.

The workshop will include lectures, hands-on exercises, presentations by industry professionals, group discussions, and lesson design projects. By the end of the program, participants will develop lesson plans that integrate cybersecurity concepts into their curricula or after-school programming.

Participants will receive a \$1,250 stipend upon completion of all workshop sessions and activities.

Topics will include:

- Basic Concepts in Cybersecurity
- Cryptography
- Access Control
- Biometrics
- Cybersecurity Analytics

Program details and application instructions are available at www.pace.edu/seidenberg/gencyber.

For more information or for questions, please contact gencyber@pace.edu.

This workshop is supported by the GenCyber program, and funded jointly by the National Security Agency and the National Science Foundation.

Belgrade Business Ed Department Looking for Information & Input from the Field

Belgrade High School business teachers Nancy Francis and Leslie Peterson are looking at adding WordPress to their Web Design class and are wondering if there are any school using WordPress.

If you are using WordPress and/or have information and resources you would like to share, please contact Leslie at lpeterson@belgradeschools.com.

GAERF 2017 Student Design Competition

The [Graphic Arts Education and Research Foundation](http://www.gaerf.org) (GAERF) (www.gaerf.org) is having their ninth annual student design contest. This year's theme is MAGnify!

Students are encouraged to design and print a full-page magazine ad for a product of their choice that is linked to digital media that demonstrates the role that print plays in today's multichannel media mix. The contest is open to all secondary and post-secondary students studying graphics communications/printing, advertising, graphic design, or interactive media program.

Entries selected by GAERF will be judged by a panel of industry professionals. Winners and their instructors will be notified by July 17, 2017.

1st Place Awards: \$2,000 plus a two-day all-expenses paid trip for the student and instructor to attend PRINT 17, September 13-14, 2017, in Chicago, IL (one secondary school winner; one post-secondary school winner).

2nd Place Awards: \$1,500 (one secondary school winner; one post-secondary school winner).

3rd Place Awards: \$1,000 (one secondary school winner; one post-secondary school winner).

Entries must be submitted by teachers/instructors, and are due June 2, 2017. Visit GAERF's [website](#) for the contest entry form and rules.

Explore Game-Based Karel, Turtle, and 3D Modeling Courses in NCLab for FREE

The NCLab Team (nclab.com) is pleased to announce the release of new versions of the popular Karel Coding, Turtle Coding and 3D Modeling courses.

These courses **are** free for educators. Visit <http://nclab.com/teachers/> to request your free professional development license. Major improvements include dozens of self-graded quizzes and performance tasks (creative projects) aligned to Common Core, NGSS and CSForAll standards. In addition, NCLab has implemented many other minor features based on instructor and student feedback.

Karel Coding

Learn programming with the engaging power of a computer game. Students solve fun mazes, write programs in a simplified Python language, and earn karate-like belts and certificates. Designed for complete beginners as well as for students who already know Scratch. Ages 10-99.

Read more at nclab.com/karel-coding-course.

Turtle Coding

Students are introduced to Python coding by drawing beautiful patterns with the Python Turtle. They learn how to use the Creative Suite to create their own designs, save them in their NCLab account, export them for laser cutting and 3D printing, and share them online. Ages 11-99.

Learn more at nclab.com/turtle-coding-course.

3D Modeling

This course introduces students to Constructive Solid Geometry (CSG) by building models they know from games, sports and movies. Students also learn how to use the Creative Suite to create their own models, save in their user account, export for 3D printing, and share with others online. Ages 12-99.

Discover more about 3D Modeling at nclab.com/3d-modeling-course.

Fun Facts and Trivia

Easter Island is a Chilean island in the southeastern Pacific Ocean, at the southeastern most point of the Polynesian Triangle.

Easter Island is also called Rapa Nui.

The three corners of the Polynesian Triangle include the island groups of Hawai'i, East Island, and New Zealand.

Easter Island is famous for its 887 extant monumental statues, called moai, created by the early Rapa Nui people. In 1995, UNESCO named Easter Island a World Heritage Site, with much of the island protected within Rapa Nui National Park.

It's a common misconception that the Easter Island statues are just heads (although some have been buried up to their necks over time). They in fact also have torsos, with most ending at the top of the thigh, while some are complete kneeling figures.

Each statue represented the deceased head of a family ancestry line.

Just one quarter of the statues were ever installed with nearly half still remaining at the quarry site and others sitting along the way to their intended locations

The largest raised moai is called "Paro". It weighs 82 tons and is 32.15 feet tall. The average size of all the statues is 13 feet tall and weighs 14 tons.

Easter Island is one of the most remote inhabited islands in the world with the nearest inhabited land—Pitcairn—1,289 miles away and the nearest continental point in central Chile is 2.182 miles away.

Easter Island is a special territory of Chile that was annexed in 1888.

According to the 2012 Chilean census, the island has about 5,800 residents, of whom some 60 percent are descendants of the aboriginal Rapa Nui.

The name "Easter Island" was given by the island's first recorded European visitor, the Dutch explorer Jacob Roggeveen, who encountered it on Easter Sunday—April 5—in 1722.

The volcanic peak of Terevaka is the tallest point of the island at 1,663 feet above sea level and along with the volcanoes of Poike and Rano Kau, give the island its triangular shape.

Issues of the Wednesday Reader are archived on the Montana Business Education Association (MBEA) website at www.mbea.info. The Wednesday Readers are under the Newsletter section and listed most-recent first.

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"You don't make decisions because they are easy; you don't make them because they are cheap; you don't make them because they're popular; you make them because they're right." ~Rev. Theodore Hesburgh