MCCB News

Fall 2014

MCCB President's Letter



Colleagues,

Here are three words of advice that I have found helpful: switch it up. Over the years, I have discovered that students really enjoy different teaching strategies. We all know that using multiple teaching methods works well when trying to help the diversity of students we teach. Making class time engaging is very important and a great way to engage students is to keep the classroom a dynamic environment by presenting the material many different ways. Here are some of the techniques I like to use when I "switch it up" in my face-to-face courses (many of these can be used in an online format too):

- Show an animation or video about a concept/topic. It doesn't need to be long. Just as long as it pertains to a topic being discussed.
- Use clickers or have students use their cell phones or laptops to respond to questions. If your school does not have clickers, you can use the website b.socrative.com to setup a page which will work with student cell phones or laptops. I really like to use clickers after covering a lecture or before an exam. It helps you get an idea of how the class is doing and it helps students evaluate their learning to that of their peers'.
- Talk about your real-life experiences or ask students if they have experience with a

Inside this issue:	
MCCB President's Letter	1—2
NEW Feature! Campus Corner: GRCC Celebrates 100 Years	3-4
Science Prof Online	5-7
Advertisement: McGraw-Hill Connect	8
MCCB Fall Conference Details: Delta Register by October 10!	9—15

MCCB News

President's Letter (cont.)

certain topic/concept. For example, I like to discuss some of the research I conducted as a graduate student and trips I took that are biology-related. I have found that these stories help my students learn the concepts better.

- Instead of individual quizzes, give group quizzes. These quizzes allow students to learn from one another. I do give a few individual quizzes to make sure some students do not rely on others to do well. I also switch up the groups so that students work with many different students throughout the semester.
- Discuss current topics in the news. I tell students to let me know if they find "something cool in the news" that deals with a biology-related topic. This can be done in a non-majors course as well as majors courses. I have found that it makes students feel more engaged if they can send me things they find in the news and if they are able to discuss it during class. I tell them "one reason I love biology is that there is always something new to learn".
- Draw with them instead of just showing it on a slide. When we cover difficult topics that are hard to visualize, I like to draw the structures/concepts. Taking the time to draw and label can really help students learn at a deeper level.
- Have them work on problems/questions during class. I like to pose a question and have students work on it during class. I always give them the option of working with others on the problems/questions. I then usually pick a student to share their answer with the class. Sometimes they use the whiteboard space to show the class their answer or they just discuss it.

These are just a few of my favorite ways to switch it up during class. I'm sure there are many, many more. I look forward to talking with some of you at our conferences about other ways to switch it up. Hope to see many of you at Delta College.

Tim Periard

Lansing Community College

Campus Corner: GRCC Celebrates 100 years

Submitted by: Holly Hoare

For our first "Campus Corner" article, I decided to write about my own college. Grand Rapids Community College is celebrating 100 years this academic year and as Michigan's first Community College, it felt like the appropriate place to start.



Below is a brief summary of our early years, provided by the GRCC website:

Grand Rapids Junior
College was established
on Sept. 21, 1914, after
University of Michigan
faculty passed a resolution
encouraging the
establishment of junior
colleges in Michigan. The
college operated out of

Central High School, 421 Fountain St. NE, until 1924. The course offerings, based on University of Michigan offerings, were mathematics, history, rhetoric and composition, German, Latin, biology, and physics. All of them were focused on college transfer. The college's first graduating class numbered 49 students, who paid \$60 per year for tuition. The following year, to encourage enrollment, tuition was reduced to \$40 per year for Grand Rapids residents and \$50 for nonresidents.

Campus Corner (cont.)

Grand Rapids Junior College received its initial accreditation from the North Central Association of Colleges and Secondary Schools. The college has been accredited continuously by this association, which has since evolved into the Higher Learning Commission of the North Central Association of Colleges and Schools, for the past 100 years.

The course catalog listed seven transfer curriculums: literary, pre-med, pre-law, engineering, teacher's normal, business administration, and home economics. The catalog also included seven occupational curriculums: commerce and finance, secretarial work, mechanics, art and industry, public school music, library training, and nursing.

For more on GRCC's 100 years visit: http://www.grcc.edu/100th

GRCC Biology Department: Then and Now



Please take a moment to check out some awesome then and now pictures in the PowerPoint attached to this email.

MCCB News Fall 2014

ScienceProfOnline.com: Free Biology Education Resources for Instructors, Students & Parents

from Tami Port, MS, Biology Instructor at Kalamazoo Valley Community College and Chief Executive Nerd of ScienceProfOnline.com

ScienceProfOnline.com is a web resource I started developing several years ago, in cooperation with Colorado high-school science teacher Alicia Cepaitis, MS. The purpose of the site was to make all of the biology teaching materials that we have created over the years available, free of cost, to other instructors, students and parents. Below is a summary of what the site offers.

Free College & High School Biology Resources

SPO features completely developed and classroom-tested college-level microbiology, cell biology, general biology, and soon anatomy & physiology course materials. Resources available include PowerPoint lectures, laboratory exercises, homework assignments, practice test questions, study guides, sample syllabi, as well as a science photos and video library. These college and high school materials are organized a couple of ways:

<u>Virtual Classrooms</u>

These are the main pages where I have my microbiology and cell biology students go to directly access course material during the semester. These are essentially

Newsletter Themes

For the Winter Newsletter, please consider submitting an article about....

Biodiversity

"Oh! The theme I've been waiting for all my life."



Science Professor Online (cont.)

ready-made micro and cell classes that any instructor teaching these subjects could use. Currently we have instructors and students from 100 countries around the world and all 50 US states utilizing our resources as complete courses or pick and choose pieces to supplement lessons. All resources can be modified and customized to suit the individual using them.

For examples of these course main pages see:

The Virtual Microbiology Classroom: http://www.scienceprofonline.com/virtual-micromain.html

The Virtual cell Biology Classroom: http://www.scienceprofonline.com/virtual-cell-main.html



"Instructors Corner" Main Pages

Rather than being organized as a complete course that students would access directly, "Instructors Corner" Pages have links to all of the site's teaching resources organized by topic. So if an instructor is looking for a basic inorganic chemistry or molecular genetics lecture and supporting class materials, these can easily be found in the "Instructors Corner". For an example, see:

The Science Prof Online "Instructors Corner": http:// www.scienceprofonline.com/instructors-corner/instructors-cornermain.html

Free Grade School, Home School and Parent Science Education Resources

I have young children and wanted to do more home science projects with them. So I also developed an area of the website for kids, where we could post the science experiments and activities that we do at home. Topics include frog metamorphosis and care, flatworm regeneration and care, pond life, home microbiology experiments. We are also developing a new monarch butterfly metamorphosis page and a section recommending additional kid friendly science resources. Many of these topics include detailed observations, experimental design, science coloring pages and word search activities. As with the Virtual Classrooms described above, the kid science topic pages can be used, as is, for class science projects, or teachers

Science Professor Online (cont.)

can pick, choose and modify any of these resources.

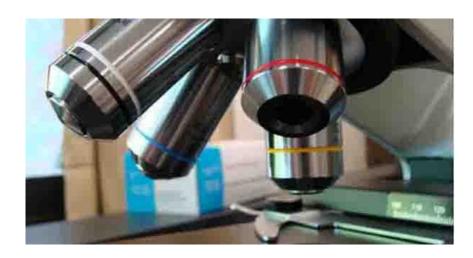
The main page for these kid science activities is our Home School and Classroom Science

Main Page: http://www.scienceprofonline.org/home-school-science-biology-curriculum-experiments-activities.html

More about ScienceProfOnline.com Website

The ScienceProfOnline.com website does have some advertising on it. These ads generate a very modest income from the site that helps compensate us for the thousands of hours we have put into making our teaching materials available. We continually try to hone the ads to be minimally obtrusive and maximally relevant to the topic of the page they appear on.

The materials on ScienceProfOnline.com are particularly useful for new instructors looking for fully-developed, classroom-tested resources as well as experienced instructors seeking some new materials to add to their curriculum. MSTA members, please feel free to contact me with any questions or comments on the ScienceProfOnline.com website.









Easy to Use: Maximize your time and save your students time by helping them to zero in on exactly what they need to know now.

- Straightforward course and assignment set up
- Effortless Grading
- Mobile
- Simple LMS Integration: access your Connect assignments with one-click access and grade sync from your campus learning management system
- Powerful Reporting: generate a number of powerful reports and charts that let you quickly review the performance of a given student or an entire section

Tailored to You: Connect features a customizable suite of digital teaching and learning tools, including:

- Learning Outcome assignment creation and reporting: create assignments using tagged content and run reports based on those tags that measure specific learning outcomes
- Integrated super-adaptive LearnSmart Advantage™ products
- McGraw-Hill Tegrity™ lecture capture software
- Integrated eBook
- Customizable content: edit any of our existing materials or upload your own

Get Connect Biology. Get Results. McGraw-H

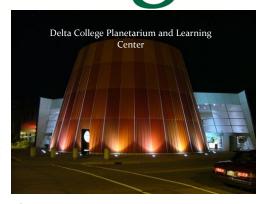
McGraw-Hill's Connect Biology offers a number of powerful tools and features to make managing assignments easier, so you can spend more time teaching. Students engage with their coursework anytime from anywhere in a personalized way, making the learning process more accessible and efficient. Connect Biology optimizes your time and energy, enabling you to focus on course content and learning outcomes, teaching, and student learning.

McGraw-Hill Connect strengthens the link between faculty, students and coursework, helping everyone accomplish more in less time. Innovative, adaptive technology engages students in the course content so they are better prepared, are more active in discussion, and achieve better results.

Get Connected. Get Results. mcgrawhillconnect.com



Join up this Oct. 17-18 for the MCCB Fall Conference hosted by Delta College in Bay County, MI. With the Bay City Planetarium as the main venue, you will want to keep all of Friday and Saturday available in order to take advantage of the extended agenda that is being offered.



Afternoon arrivals by 4pm Friday will have several pre-conference events to attend. At the Planetarium, they can view two special showings entitled "Mysteries of the Great Lakes" at 4pm and "Dynamic Earth" at 5pm. On the main Delta Campus, participants can meet in the atrium of the F-Wing at 4pm and take a tour of the newly redesigned Health Sciences Wing on campus that was designed to look like a hospital. Be sure to check out the Nursing SIM labs upstairs, the Dental Hygiene Clinic on the main floor, and the living wall that creates oxygen and filters water for this LEED certified building! As we all join back together Friday night at the Planetarium, prepare to journey back in time as a local trapper from 1800's Michigan, Ephraim Williams (played by Kyle Bagnall from the CNC), talks about the flora and fauna of the area as





you enjoy a themed dinner from that period. Afterwards, participants can enjoy the night life in downtown Bay City.

On Saturday, there will be 2-3 tracks of speakers at any given time, so come prepared to learn many new things for your classes. Corporate sponsors for the weekend's meals are *eScience Labs*, *McGraw Hill*, and *Pearson*, so we will leave plenty of time during the conference for you to see their new products.

In order to help conference organizers prepare properly, we would like your preregistration to arrive by Monday, October 10th. You may use the preregistration form included in this newsletter, or get it later on the MCCB website (www.mccb1.org), or even register and pay online at the website itself! The website link also includes a map of the local area (with the events marked), a description of all the events, a detailed agenda as the weekend nears, and great rates from sponsoring hotels for folks who register early.

Conference highlights will include topics such as **Genetics** (Mandy Ross: DNA Fingerprinting of *Phragmites australis*, Dr. David Stanton – DNA Fingerprinting: Zebra Mussels in Lake Michigan, and Dr. Dennis Gray: The Genomic Origins of Methylbutenol Synthase), **Ecology** (Dr. Edward Baker: Lake Sturgeon Restoration and Management in the Great Lakes, and Dr. Jill Witt: Forest and Wildlife Ecology), **Anatomy and Physiology** (Carla Murphy: "Flipping Out" in Exercise Physiology and Nutrition, and Dr. Jason Carter:

Sleep and Cardiovascular Health - Is Sleep Deprivation the New Silent Killer?), and **Teaching Pedagogy** (Maggie Moffett: Bridging the Gap -The Challenges and Strategies for Teaching "Generation Y", Dr. Ashley Moerke: Incorporating Undergraduate Research into Science Curricula – Examples from Aquatic Biology, and Dr. Eric Simon: Using Technology to Enliven Class).





Be sure to leave time after the conference on Saturday afternoon to tour the Tobico Marsh area at 4pm with Delta's own Wendy Baker before you head home! Please mark your calendars and Kris and I look forward to seeing you at Delta in October.

Mark Robertson Professor of Biology mgrobert@delta.edu 989-686-9262 Kris Nitz Instructor of Biology kristophernitz@delta.edu 989-686-9564

Pearson is hosting a technology workshop on

Innovations in Teaching

Improving Outcomes through Technology

Friday, October 17th.

Delta College – Main Campus

1 PM – 3:30 PM

Complimentary lunch for registered participants

This workshop *requires* a separate registration via the following site:

pearsonhighered.com/myevents/MCCB2014

MCCB Fall Conference Special Events

Attendees at the October 17-18, 2014 Fall Conference hosted by Delta College at the Bay City Planetarium (website at: http://www.delta.edu/planet.aspx) will be given several exciting opportunities to explore the surrounding natural areas, tour our newly renovated state-of-the-art Health Science Building (in F-Wing), and to attend two special viewings of newly released Planetarium shows.

4-4:45 Friday Oct. 17, Film at the Bay City Planetarium

The nature production, *Mysteries of the Great Lakes*, is as much a celebration of Earth's greatest freshwater ecosystem as it is a rallying cry for protection. The story will take audiences on an inspiring voyage through these amazing inland seas. In the film, a few stops along the way highlight the stories of three key species - one each



from water, air and land. The film also turns the camera on us, as humans - by touching on the human interface with the Lakes including the role of shipping to commerce, the use of the Great Lakes' water by the millions of people who rely on it for life, and the general sense of well-being that people receive from simply being near these massive bodies of water.

5-5:45 Friday Oct. 17, Film at the Bay City Planetarium



Dynamic Earth explores the inner workings of Earth's climate system. With visualizations based on satellite monitoring data and advanced supercomputer simulations, this cutting-

edge production follows a trail of energy that flows from the Sun into the interlocking systems that shape our climate: the atmosphere, oceans, and the biosphere. Audiences will ride along on swirling ocean and wind currents, dive into the heart of a monster hurricane, come face-to-face with sharks and gigantic whales, and fly into roiling volcanoes.

4-5:00 Friday Oct. 17, Allied Health and Nursing Building Tour at F-Wing Atrium, Delta College Main Campus

The Delta College Health Professions Building (F-Wing) renovation project included 91,484 square feet of renovated space and 950 square feet of additional space for a hospital-size elevator. Construction and renovation of the \$20 million facility started in the summer of 2013 in order to minimize the disruption to students and faculty. With Delta College's strong emphasis on sustainability, the building incorporated the LEED (Leadership in Energy and Environmental Design) standard of construction.

Focusing on innovative design and the highest level of sustainable construction, the project was designed to:

- Upgrade medical and dental equipment
- Create multi-disciplinary laboratory and simulation rooms
- Increase flexibility for future programs
- Create a critical care simulation area and multimedia laboratory
- Optimize classrooms and common spaces



Create interactive space outside the classroom for students and faculty

MCCB conference attendees who would like to view this new facility are invited to congregate in the main floor atrium of the F-Wing at 4pm on Friday. Visitors will then be guided on a facilities tour by Delta staff members Kara Reder (Health Lab Assistant) and Lori Kloc (Education Simulation Specialist and Learning Facilitator).

4-6:00 Saturday Oct. 18, Tobico Marsh Tour, Group Departure from Bay City Planetarium)



After the last two speakers on Saturday, attendees will be given the opportunity to tour nearby Tobico Marsh with Wendy Baker (Professor of Biology) as their guide. Wendy has been out to the marsh many times in the past due to her field courses and personal fieldwork. Tobico Marsh in

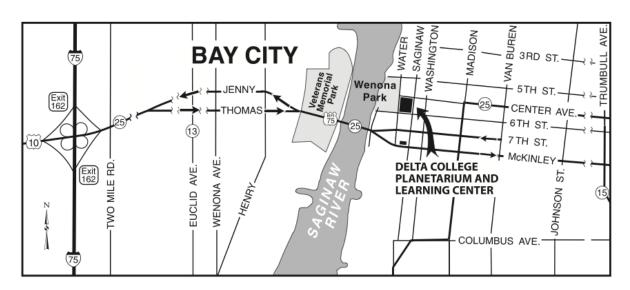
the Bay City State Recreation Area is one of the largest open-water marshes remaining on the Saginaw Bay, but contains much more than just the marsh. On a short hike you can traverse several different types of habitats, from cattail marsh,

to brushy shrub areas, to upland hardwood forest. The shoreline is layered with sandy dune ridges, which once were at the water's edge, but were left high and dry as the Bay receded over thousands of years. A boardwalk, two 40-foot observation towers, and a floating marsh dock with fixed spotting scopes offer excellent wildlife viewing along the Frank N. Andersen Trail. The Saginaw Bay



Visitor Center features displays, dramatic dioramas, and a spectacular multiimage slide show. Enjoy the Field Observation Room with its wildlife feeding area, new floating dock with fixed spotting scopes in marsh, new boardwalk along the Saginaw Bay shoreline, also with fixed spotting scopes for watching shorebirds. A new rail-trail connection to the Bay City Riverwalk improves access to the park, as well as providing an alternate transportation route and travel way for wildlife. Watch for Caspian terns and black-crowned night herons, which are very common. In May, you may see pike and carp spawning in the open water around the bridges and boardwalks along the trail. This area is an excellent funnel for migrating warblers in the spring. Bitterns are also seen here. The two observation towers allow a bird's-eye view into the surrounding treetops. White tailed deer are occasionally seen in the early morning—especially at the northern end of the trail, and hikers report regularly seeing otter, beaver, gray and red fox, coyote, and Blanding's turtle.





MCCB News Fall 2014

Upcoming Conferences

National Association of Biology Teachers (NABT)

November 12-15, 2014 in Cleveland, OH

Michigan Science Teachers Association

February 26-28, 2015 in Grand Rapids, MI

National Science Teachers Association (NSTA)

March 12-15, 2015 in Chicago, IL

American Association of Anatomists

March 28—April 1, 2015 in Boston, MA

Human Anatomy and Physiology Society (HAPS)

May 23—May 28, 2015 in San Antonio, TX

American Society for Microbiology

May 30—June 2, 2015 in New Orleans, LA

Association for Biology Laboratory Education (ABLE)

June 23-26, 2015 in Boston, MA

MARK YOUR CALENDARS! MCCB Fall Conference

October 17-18, 2014......Delta College

Executive Committee

President: Tim Periard (Lansing) President Elect: Kris Nitz (Delta)

Past President: Matthew Badtke

(Jackson)

Secretary: Mario Lamberti (Oakland)

Treasurer: Darrell Davies (Kalamazoo

Valley)

Standing Committee

Communication—Membership: Katie LaCommare (Lansing)

Communications—Newsletter: Holly Hoare (Grand Rapids)

Nomination/Elections: Leigh Kleinert (Grand Rapids)

Spring Conference Organizer: Susan Dentel (Washtenaw)

MCCB (Michigan Community College Biologists) provides a state-wide forum for sharing instructional techniques and upto-date information for teaching college-level biology. The organization fosters communication, friendship, and unity among the biologists of the twenty-nine community colleges in the State of Michigan. Our logo reflects the location of those 29 colleges. Two state-wide conferences are held annually.

Founded in the early 1980's, MCCB began as an offshoot of COSIP (the College Science Improvement Program). Two COSIP groups were originally created in Michigan: a southern group of colleges (associated with the University of Michigan/Dearborn and directed by Dr. Hertzler) and a northern group of colleges (associated with Central Michigan University and directed by Dr. Carl Scheel). The initial meeting to form a statewide organization of community colleges took place at Delta College in 1981. The first slate of officers was elected at that time, with Eldon Enger as President and Janet Dettloff as Vice-President.

Mission of MCCB

- To promote an interest in biology.
- To improve the teaching of biology by providing opportunities to share and discuss instructional techniques and teaching methods.
- To provide opportunities for updates on current topics and trends in biology.
- To facilitate the exchange of ideas and foster communication, friendship and unity among the community college biologists in Michigan.

