



**24<sup>TH</sup> Annual Conference**

Association of Faculties for Advancement of Community College Teaching

**Proceedings**

**of the**

**Twenty-Fourth Annual Conference**

Association of Faculties for Advancement  
of Community College Teaching

***Fusing Education Strategies: Past  
Successes and Emerging Opportunities***

January 9 and 10, 2014  
Hosted by Prince George's Community College  
301 Largo Road, Largo, Maryland 20774

# AFACCT Conference 2014 Proceedings

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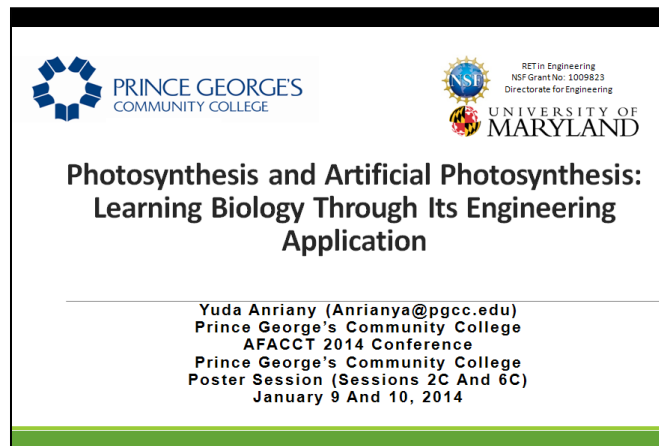
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# Photosynthesis and Artificial Photosynthesis: Learning Biology through Its Engineering Application

*Sessions 2.C-6.C: Poster Session: January 9-10, 2014*

An interdisciplinary approach is a useful way to engage students, broaden their perspective, promote exploration and bring relevance to students' learning. This poster presentation offered an example of how this approach was used in engaging students in learning photosynthesis at the molecular level. Students were introduced to the concept of artificial photosynthesis in a type of solar cell. A curriculum element was developed that integrated the lecture materials, a hands-on laboratory activity, and a literature research assignment. By learning biology from an engineering perspective students developed better appreciation of their knowledge as it was applied in another discipline, since solar cells are highly relevant to their lives. At the same time, they developed critical thinking as they compare and contrast the basic principles in natural and artificial photosynthesis. Students' evaluations and comments about the approach and some suggestions on how this interdisciplinary approach could be used in other fields were also discussed. This curriculum element was developed as part of the implementation of the Research Experience for Teachers (RET) program at the University of Maryland College Park- Clark School of Engineering.



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**Nancy Calder.** *Howard Community College.* [ncalder@howardcc.edu](mailto:ncalder@howardcc.edu)

**Loraine Frey.** *Howard Community College.* [lfrey@howardcc.edu](mailto:lfrey@howardcc.edu)

**Jon S. Cooper.** *Howard Community College.* [jcooper@howardcc.edu](mailto:jcooper@howardcc.edu)

## A Global Initiative: Collaboration with the Library in Engaging Students through Web-Based Research

*Session 6.4- January 10, 2014*

At Howard Community College, many program coordinators have collaborated with the library and *Credo Liberati* in producing reliable websites that students can access in order to research significant issues pertinent to their coursework. This initiative is in its infancy but has proven to be successful since its conception last year. Three of HCC's programs, the Physical Therapist Assistant Program (PTA), the Emergency Medical Services Program (EMS), and the Medical Laboratory Technician Program (MLT) were given the opportunity to trial this pedagogy in multiple ways. This unique tool fosters student-to-student collaboration, enhances global distinction, meets the requirements of accreditation agencies, ensures that students know how to cite research sources, and instills a sense of professional development in the programs' students. The students seem to enjoy this pedagogy and are actively engaged. They appear more confident with their ability to locate reliable sources of evidenced-based research to guide and support their clinical skills that coincide with their didactic learning experiences. Since last year, it is observed that the students improved their research and collaboration skills as well as exercised their critical thinking and communication skills.

<p><b>Presenters:</b> Nancy Calder, MT (ASCP), MAEd Loraine Frey, PT, DPT Jon S. Cooper, MS, Paramedic</p> <p><b>Howard Community College</b></p> <p><b>Presentation Title:</b> A Global Initiative: Collaboration with the Library in Engaging Students through Web-Based Research</p> <p>AFAACT '14 Conference, Prince George's Community College</p> <p>Session: 6.4 Friday, January 10, 2014 at 11:40am</p> <p><b>Contact Information:</b> <a href="mailto:ncalder@howardcc.edu">ncalder@howardcc.edu</a> <a href="mailto:lfrey@howardcc.edu">lfrey@howardcc.edu</a> <a href="mailto:jcooper@howardcc.edu">jcooper@howardcc.edu</a></p>	 A poster for the 'Global Initiative' presentation. It features a dark grey header, a white middle section with the text 'GLOBAL INITIATIVE' in large orange letters, and a purple footer with the Howard Community College logo and the slogan 'You Can Get There From Here'.
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## Using the Symposium Format to Promote Rigorous Learning in Your Courses

*Session 7.1: January 10, 2014*

This workshop addressed one of the greatest challenges facing college professors: getting students to take responsibility for their own rigorous learning. This session's attendees learned how to incorporate the symposium format into courses in a variety of academic disciplines to motivate students to read critically, discuss, think deeply, and meaningfully apply course content. Participants discussed how to use symposia as end-of-semester culminating projects to promote the application of key course content and rigorous learning, while they coach students to stretch themselves beyond what they think is possible. In addition to discussing approaches to make connections to course concepts, theories and skills, participants brainstormed and shared practical applications for their own disciplines. Directions, sample rubrics, and student self-evaluations were distributed.

**Bobbi Dubins.** *Allegany College, MarylandOnline, [bdubins@allegany.edu](mailto:bdubins@allegany.edu)*

## Preparing to Teach Online: MarylandOnline's Inter-Institutional Faculty Training Project (COAT)

*Session 4.10: January 9, 2014*

MarylandOnline, a consortium of 20 community colleges and senior institutions in Maryland, shared key instructor competencies covered by its international faculty training project "COAT-Certificate for Online Adjunct Teaching." The COAT course was designed to address the challenge of providing quality training for faculty wishing to transition to teaching online. As enrollment in online courses increases, institutions (especially community colleges) struggle to provide quality training for instructors. The COAT course is fully online, offered year round, and available to anyone.

In addition to discussing the skills and competencies needed to teach successfully online, this session related competencies covered by the COAT course to the needs and interests of session attendees. Common questions include "What skills do you need to teach online?", "What are some best practices for teaching online?" and "How do I get started teaching online?"

Originally designed for adjunct instructors, the COAT course has attracted the interest of full time faculty members, academic administrators, instructional designers and even K-12 teachers since its first offering in 2010. To date, nearly 600 instructors from 68 institutions, 22 states, and 5 countries have completed the course.



<http://www.marylandonline.org/coat>

Bobbi Dubins  
MarylandOnline  
COAT Project Director  
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AFACT'14 Conference  
Session 4.10  
Thursday, January 9, 2014  
3:10-4:20  
Prince George's Community College

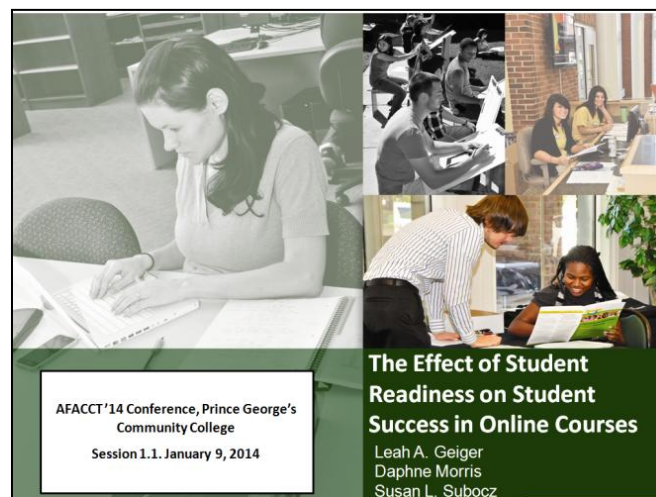
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**Leah A. Geiger.** *College of Southern Maryland.* [LeahG@csmd.edu](mailto:LeahG@csmd.edu)  
**Daphne Morris.** *College of Southern Maryland.* [DaphneM@csmd.edu](mailto:DaphneM@csmd.edu)  
**Susan L. Subocz.** *College of Southern Maryland.* [SSubocz@csmd.edu](mailto:SSubocz@csmd.edu)

## The Effect of Student Readiness on Student Success in Online Courses

*Session 1.1. January 9, 2014*

This research determined the effect of student readiness on student success in online courses that were of quality course design; were taught by experience, engaging instructors, and were delivered within a well-supported and familiar LMS. The research team hypothesized that student success in well-designed courses (those that meet the Quality Matters standards) and that are taught by experienced, engaged faculty are most influenced by student readiness factors including individual attributes (such as motivation), life factors, comprehension, general knowledge, reading rate and recall, and typing speed and accuracy. A goal of the study was to determine which of these factors correlated most closely to student success. Results of this study indicated that, when course design, instruction, and LMS are held constant, only typing speed/accuracy and reading rate/recall were statistically significant as measured by the *SmarterMeasure* instrument and correlated to student course retention and course grade. Recommendations for further research are made.



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**Rachel Heinhorst.** *College of Southern Maryland, [Rheinhorst@csmd.edu](mailto:Rheinhorst@csmd.edu)*  
**Krista Keyes.** *College of Southern Maryland, [kkeyes@csmd.edu](mailto:kkeyes@csmd.edu)*

## *Making Literature Exciting: Beating the Poetry Resistance*

*Session 7.3. January 10, 2014*

Introductory literature classes are a diverse mix of students, and many of these students are in the class to fulfill necessary prerequisites. This means the class is a must, needed, not necessarily desired. This presents a challenge to instructors teaching these classes as the material covered may only interest a small percentage of those taking the class. It is important to encourage class participation; however, it is never easy to accomplish. Poetry, short fiction, and drama are examined in the introduction to literature course, and I have found that some students come in resisting these genres, claiming it hard to find the messages they send, and some students simply say, "I don't get it." This becomes the challenge. How can we, as teachers, show our students how to *get it*? Because I love literature, and because I love my job, I have searched for ways to get students connected. I have found poetry to be the genre most often resisted, and made it a goal to help students overcome this resistance. I tell them even if they are not pursuing an English major, there is some piece of writing they can connect to and once the connection is made, they will turn to literature more often than not. I also tell them that participating and putting in effort often opens up new ways of thinking, and of course a happy class.

Music, YouTube, and Twitter have assisted my classroom instruction as they offer fresh, innovative, current ideas. I know that students sometimes spend more time on Twitter, YouTube, and listening to music than they do studying, so bringing these popular trends into the classroom adds layers of credibility to anything I have to say.

Students accept the invitation Pop Culture sends; they *feel* the music, memorize lyrics, spend hours watching and making videos others can connect to, and this is all because something spoke to them, something made a connection to their emotions, so if this invitation can come to them, in the classroom, attached to assignments that seem to be shielded by kryptonite, then maybe the shield will fall and a connection can be realized.

***Making Literature Exciting:  
Beating the Poetry Resistance***  
*Session 7.3. January 9, 2014*

- o **Rachel Heinhorst.** *College of Southern Maryland, [Rheinhorst@csmd.edu](mailto:Rheinhorst@csmd.edu)*
- o **Krista Keyes.** *College of Southern Maryland, [kkeyes@csmd.edu](mailto:kkeyes@csmd.edu)*

AFACCT '14 Conference  
Prince George's Community College  
Session 7.3. January 10, 2014

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**Ronda Jacobs.** *College of Southern Maryland, [rondaj@csmd.edu](mailto:rondaj@csmd.edu)*

## Online Teaching is NOT a Spectator Sport

*Session 3.7. January 9, 2014*

Ever wonder how to keep your online students engaged? During this presentation faculty learned to grab student attention and keep students involved. They learned how to communicate, set expectations, keep the momentum going, and make it to the finish line with 80% of students passing, not because grades were curved but because students earned their grade. By midterm, most students are now submitting high end work because of what you as the instructor learned to implement at the beginning of the semester. You learned how to motivate students online. Participants 1) discussed proactive (things you set up before the class starts) and active (things you do while the class is running) teaching techniques to engage online students so that students want to sign in and do their work well and 2) identified communication strategies to motivate students through announcements, weekly expectations, grading templates to individualize feedback, and opportunities for grade improvement... such that by the time the semester ends, grading is taking a quarter of the time that it did at the beginning of the semester.



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**Barbara Johnson.** *College of Southern Maryland.* [barbarj@csmd.edu](mailto:barbarj@csmd.edu)  
**Mary Johnson.** *College of Southern Maryland.* [maryj@csmd.edu](mailto:maryj@csmd.edu)

## Librarians in the Classroom: Embedded Librarianship

*Session 4.9: January 9, 2014*

Our presentation communicates real classroom experience from both the faculty and the librarian viewpoints. We detail our planning and practice and explain the applicability of this process to other community college classrooms. We display our procedure for assessing outcomes and reveal both actual surveyed student responses and class assignment scores.

The College of Southern Maryland (CSM) offers a program of embedded librarianship. The program includes two, three, or more library staff visits to the classroom to help students focus their research questions, develop keywords, and use the book catalog and online subscription databases more successfully. It also includes a graded library research assignment.

This presentation details the service and reveals that classes at the CSM Leonardtown campus have already benefited from the new approach. Handouts provide a comprehensive works-consulted and samples of an assignment instructors may give (two part self-guided library exercises assignment) to help foster students' knowledge of library research strategies.

**Librarians in the Classroom:  
Instructor/Librarian Perspective**

**Presentation:**  
**Barbara Johnson**      **Mary Johnson**  
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AFACCT 2014 Conference, hosted by  
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Session 4.9 3:10-4:20 p.m.  
Thursday, January 9, 2014

**CSM** college of southern maryland

let's get creative.

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**Gary E. Kaiser.** *The Community College of Baltimore County, Catonsville,*  
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## Online and Face-to-Face Tools to Promote Student Retention & Success

*Session 4.1: January 9, 2014*

This workshop described and demonstrated how a combination of learning objects, reusable learning objects, learning objectives, self-tests, crossword puzzles, original Flash animations and illustrations, concept maps, audience response system questions, think-pair-share questions, and creative projects are used in both traditional and blended microbiology classes to promote student retention and success.

[http://faculty.cbcmd.edu/~gkaiser/AFACCT/AFACCT\\_2014.pdf](http://faculty.cbcmd.edu/~gkaiser/AFACCT/AFACCT_2014.pdf)

*The Grapes of Staph: Gary Kaiser's Microbiology website:* <http://faculty.cbcmd.edu/~gkaiser/>

**Barbara Link.** *College of Southern Maryland.* [BALink@csmd.edu](mailto:BALink@csmd.edu)

# Understanding Issues Confronting Our Veteran Students

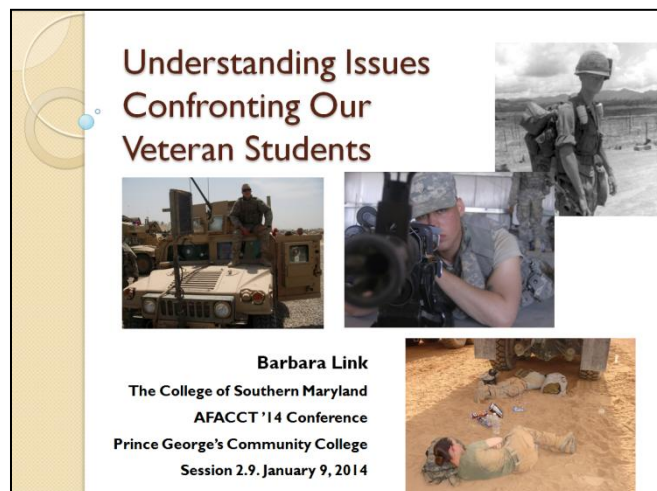
*Session 2.9. January 9, 2014*

Increasing numbers of veterans are enrolling in community colleges across America. As the veteran population on these campuses increases, so does the need for faculty and staff to understand the challenges facing these students. Post-Traumatic Stress Disorder (PTSD), Traumatic Brain Injuries (TBI), and physical challenges are just some of the issues confronting veteran students; these challenges can often stand in the way of their successful completion of degree programs. The Veterans Administration (VA) reports that only 6% of veterans use all of their VA educational benefits.

How can we help these students succeed in the classroom?

The presenter shared her experiences as the wife and mother of Iraqi war veterans and as an instructor at a community college with the third highest percent of veteran students in the state of Maryland.

The presenter also brought guest speakers to help with the presentation: a veteran student, a veterans' counselor, and the Regional Resource Coordinator for Maryland's Commitment to Veterans. At the close of the presentation, attendees participated in a sharing activity that helped them understand the emotional turmoil some veteran students face when they return home and try to reintegrate into society.



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**Jaelyn Madden.** Harford Community College, [jmadden@harford.edu](mailto:jmadden@harford.edu)

**Wendy Rappazzo.** Harford Community College, [wrappazzo@harford.edu](mailto:wrappazzo@harford.edu)

## Using Scientific Journals to Teach the Scientific Method

*Poster Sessions 2A and 6A, January 9-10, 2014*

The abilities to analyze and understand primary scientific literature and apply the scientific method are critical to the fields of healthcare and science. We describe a scientific journal assignment for introductory level biology students. The primary objective of the assignment is to develop students' abilities to evaluate scientific literature and to critically analyze the results of a peer-reviewed, scientific journal article. The secondary objective is to apply the scientific method to research presented in the article. To meet these objectives, students complete the assignment in four draft sections, receive feedback from the instructors critiquing their writing and providing guidance on analysis of the journal article, and then submit a revised final version of the journal. Analysis of data showed statistically significant improvement in student performance when drafts were used compared to when the assignment is completed without drafts. In addition, evaluation of students' abilities to identify and analyze the components of the scientific method in the drafts compared to the final version of the assignment indicated a statistically significant improvement in the final version. This draft approach can be utilized in science and non-science courses to improve students' abilities to critically analyze primary literature.

### **Using Scientific Journals to Teach the Scientific Method**

Jaelyn Madden & Wendy Rappazzo  
Harford Community College

AFACCT '14 Conference, Prince George's Community College  
Sessions 2A and 6A Poster Sessions  
January 9-10, 2014

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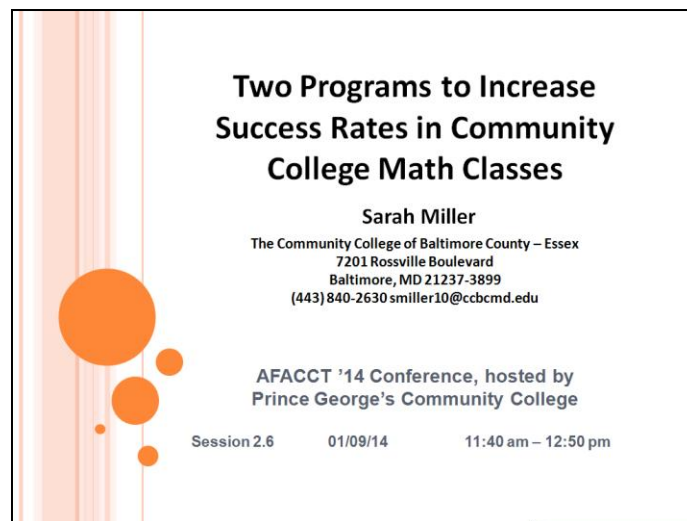
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## Two Programs to Increase Success Rates in Mathematics Classes

*Session 2.6, January 9, 2014*

“Ten Tests to Success”, a program which I developed through my participation in AMATYC’s PROJECT ACCCESS was so successful in increasing success rates in my developmental classes that I have now implemented this program in my statistics class as well.

“Five Commercial Breaks” is a program which I developed through my participation in NAPE’s EESTEM Academy. This program encourages students to consider careers in STEM and ties course content to various STEM fields. Anecdotal evidence from students indicates that the program helped them to remain engaged in the course and to better see the value of what they were learning. Statistical increases in the numbers of students who declared majors in STEM fields were recorded each semester this program was implemented.



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# Developing Critical Thinking in Your Learners

Session 3.1 - January 10, 2014

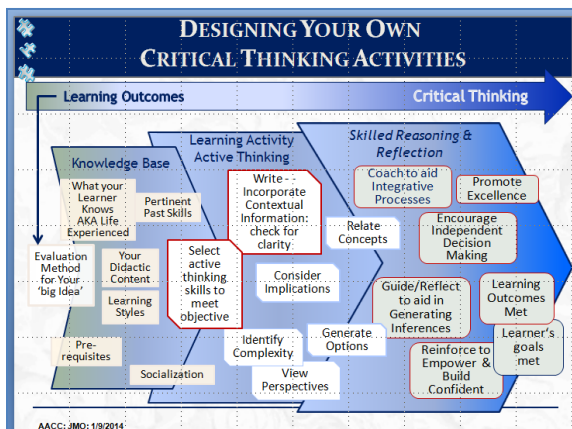
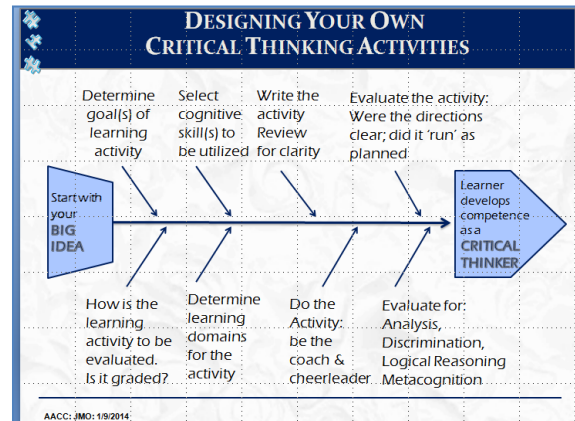
This presentation focused on synthesizing multiple theory, constructs, and strategies into a unified process to promote critical thinking strategies in the learner. Emphasis was placed on the development of learning activities as an outcome driven process with many examples that incorporate multiple learning domains and learning styles provided to the session participants to aid them in developing their own outcome based learning activities. A framework to aid in designing learning activities that promote higher level and critical thinking in the learner was discussed along with strategies for building evaluative criteria into learning activities.

An author developed model which maps strategies that facilitate the progression of student learning from prerequisite knowledge through active thinking and skilled reasoning and reflection to critical thinking was shared and discussed. Although the model was originally developed for nursing students it has applicability to general higher education classes and programs as well.

By consistent structuring learning activities to incorporate progressively higher level thinking strategies as the learner progresses through a curriculum, the learner is provided with the opportunity to develop a systematic and holistic approach to analysis of curricular content resulting in disciplined critical thinking.

OUTCOME EVALUATION			
Fundamental Level of Functioning 1 point	Intermediate Level of Functioning Incorporates Active Thinking Strategies		Pre-professional and Entry Level Professional Behaviors 4 points
Knowledge	Comprehension	Application	Analysis
<ul style="list-style-type: none"> <li>Repeats content</li> <li>Consistent and 'repeatable'</li> </ul>	<ul style="list-style-type: none"> <li>Recognizes content when it is present</li> <li>Acknowledges 'contribution' or understanding of content in health care and health maintenance</li> </ul>	<ul style="list-style-type: none"> <li>Applies content correctly in novel situations</li> <li>Consistent and 'repeatable'</li> <li>Relates Concept</li> <li>Considers Implications and Contextual Information</li> <li>Generates options</li> <li>Views perspectives</li> </ul>	<ul style="list-style-type: none"> <li>Manipulates content within meaningful whole</li> <li>Integrative processes</li> <li>Manages content in novel ways</li> <li>Generates confidence and skills</li> <li>Promotes independent practice</li> <li>Formulates judgments about appropriateness of content usage</li> <li>Inferences</li> <li>Modification and manipulation of content to enhance outcomes</li> <li>Incorporate Contextual Information</li> </ul>

AACC: JMO: 1/9/2014





**Matthew Ratz.** *Montgomery College,* [matthew.ratz@montgomerycollege.edu](mailto:matthew.ratz@montgomerycollege.edu)

## Differentiating Instruction to Maximize Student Engagement and Achievement

*Session 3.3, January 9, 2014*

Community college classrooms—unlike any other environments—accurately reflect the striking diversity of our Nation. In our classrooms, be they English Composition, Developmental Math, or Advanced Organic Chemistry, we encounter students from all walks of life, all socio-economic statuses, and all levels of readiness for learning. A traditional, teacher-centered approach, one that says, “All that matters is *my* knowledge of the content” is both insufficient and unsustainable; instead, a student-centered approach that says, “How can I get my students excited about this content?” is more flexible and often more successful with our students. A student-centered approach is the crux of differentiated instruction.

Beginning with the concepts of “Growth Mindset” (Dweck) and “Triarchic Minds” (Sternberg), educators can embark on a strategy of shaking up their classrooms through differentiation. By providing multiple avenues and a menu of options for students’ taking-in and demonstrating mastery of our contents, we can enable students to chart their own paths in learning thereby empowering them to be more active participants in their educations. The beginnings of this effective instructional approach start in our own minds, though; how *we* view our students and how we *value* their experiences will shape our abilities to differentiate.

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# **College Students' Nightmare – “Fear of Numbers”: How Community College Educators Could Help Overcome the Fear**

*Session 5.4, January 10, 2014*

Some recent worrisome headlines from the U.S. Press: (i) “US Students Still Lag Globally in Math and Science, Tests Show” – NY Times, 12/12/2012, (ii) “US Teens Lag as China Soars on International Test” – Bloomberg.com, 12/07/2010, (iii) “US Students Still Lag Behind Foreign Peers, Schools Make Little Progress in Improving Achievement” – Huffington Post, 07/23/2012.

As stewards of the student population mentioned in such headlines, how can we help overcome this disparity and get our students to graduate and become suitable for employment in the demanding global work place? This difficult task has been aggravated by the relatively high drop-out rates among students taking subjects that involve numbers. Based on the presenter’s teaching and work experience in the U.S. and abroad, “Fear of Numbers” that is deeply embedded in the minds of many American Millennials is one of the key culprits causing the dilemma. Helping our students to deal with this culprit is a heavy burden, yet a critical task, that has been placed on our shoulders as educators.

The Presenter shared his experience with students in the Financial and Managerial Accounting courses at Montgomery College Rockville, and in the Montgomery County Public Schools: The presenter highlighted the areas of weakness in terms of numerical literacy in community college entrants and shared the possible remedial actions to identify to overcome such weaknesses and prepare the students to succeed in accounting courses.

**College Students' Nightmare  
“Fear of Numbers”  
How Can Educators  
Help Overcome the Fear?**

Session 5.4 January 10, 2014  
Presentation at the AFACCT  
24<sup>th</sup> Annual Conference  
Prince George's Community College – Largo, MD

By  
Prof. S. Sengamalay  
MPA (Harvard), CPA (USA), FCMA (UK),  
FCIS (UK & Canada), FCA (Sri Lanka)

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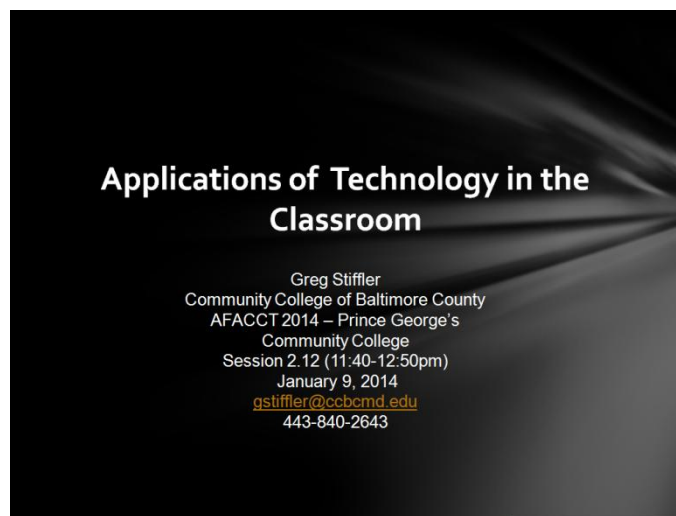
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## Applications of Technology in the Classroom

*Session 2.12: January 9, 2014*

With a focus on how various technologies could be applied to the classroom in a meaningful way, this presentation discussed how there has been much research into how technology can benefit students and make subjects more engaging for them, especially when many are familiar with technology on their own. When technology was selected, the emphasis was on practicality and cost effectiveness. It is important to learn to distinguish between the truly useful material, and the material that will come and go and can lead to oversaturation. The technologies focused on were Jing, Camtasia, Tegrity, Bitstrips, Weebly, Google Hangouts, Doceri, and TeacherKit - all either free or of a minimal cost, and performed several significant functions in the class. For example, Jing, Camtasia, and Tegrity allowed for simple and quick forms of communication with students that increased the clarity of information communicated with students, using videos with narration, at no cost to them. With Weebly and Doceri, a strong online presence was built through a website and a collection of short videos to answer common and repeated student questions. The presentation covered these points and also became a discussion with the participants of technologies they used and their personal thoughts. Participants also had a chance to discuss experiences and concerns with technology.



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# An Active Learning Pedagogy for Teaching the Programming Courses in a Community College Setting

Session 2.3 – January 09, 2014

Learning a computer programming language, which involves disparate logical computational steps, is hard for the beginners. Especially, in a community college setting, there are students from diverse academic backgrounds. This presentation discussed an innovative active learning approach to teach programming logic and syntax to the community college learners. The discussions during the presentation also elaborated on the learning outcomes. The active learning pedagogy presented involves a lot of hands-on activities in contrast to the traditional passive and lecture only style of teaching programming. Though discoursed in the context to computer programming courses, the hands-on active learning pedagogy presented may be adopted to other disciplines as well. Such instances involve teaching mathematics or using computers in solving computational problems from other avenues of academics. The presenter deliberated on how to teach a computer programming course efficiently and effectively in a community college setting. The participants discoursed about an efficient active learning pedagogy to teach computer programming at different institutions within the State of Maryland. The advantages of adopting an active learning approach over the traditional passive learning style in teaching computing in a community college environment were also explored.

**An Active Learning Pedagogy for Teaching the Programming Courses in a Community College Setting**

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**Active Engagement Strategies for Teaching and Learning**

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**ACTIVE LEARNING**

**Active Learning**

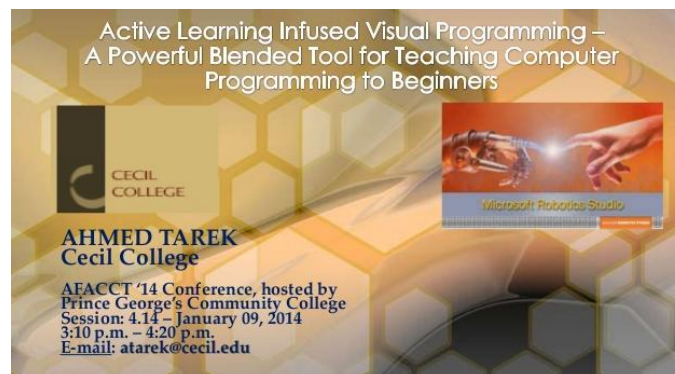
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# Active Learning Infused Visual Programming – A Powerful Blended Tool for Teaching Computer Programming to Beginners

*Session 4.14 – January 09, 2014*

Community college learners come from diverse academic backgrounds. Bringing real interest to the beginners in a computer programming class remains as a hurdle for the college educator. Therefore, an active learning imbued visual programming is demonstrated as a powerful motivational tool for the beginner level community college learners. The state-of-the-art programming languages yielding powerful Visual Tools that help in creating easy to use Graphical User Interfaces (GUIs) are explored in details to discuss the effectiveness of the teaching strategy. The participants have explored active learning infused visual programming as a powerful blended tool for teaching introductory programming classes. Additionally, the motivational effects of the active learning suffused visual programming on student learning are elaborated in details. Several prevailing visual programming languages, such as ALICE, Visual Basic, Java, etc., and their suitable adoption to an introductory level programming language course are contemplated. A number of the pertinent active teaching strategies for an introductory level programming language class are also explored.



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