



**22<sup>ND</sup> Annual Conference**  
Association of Faculties for Advancement of Community College Teaching

# **PROCEEDINGS**

from the  
**Twenty-Second Annual Conference**

## **Engaging the New Community College Demographic: The Challenges Faculty Face**



**January 5-6, 2012**  
**Montgomery College – Rockville Campus**  
**Rockville, Maryland**

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## ***Ethnic Identity: The Benefits of Code-switching for Students and Faculty***

Dr. Carol Annink, *Montgomery College*  
Session 1.11: January 5, 2012

Participants were introduced to the concepts of double consciousness, code-switching, and biracial identity of (faculty and) students. Through active learning activities participants discovered how this concept was relevant for successful teaching and learning in the multicultural classroom. The concept of "double consciousness" observed with minority and bi/multiracial students was defined, along with the advantages and challenging aspects of "double consciousness" for the learning process. Also introduced were several teaching strategies and activities that tap into these opportunities.

## ***Teaching, Learning and Millennial Students: Changing Attitudes***

Timothy Barr, *Hagerstown Community College*; Jody Cavanaugh, Esq., *Morgan State University*; Dr. Michael Parsons, *Morgan State University*; and Avetta White, *University of District of Columbia-Community College Division*  
Session 5.7: January 6, 2012

Diversity is a significant challenge facing community colleges as the 21<sup>st</sup> century progresses. Barr, Cavanaugh, Parsons and White analyzed an instructional delivery strategy designed to make diversity a positive force for learning. Differentiated instruction focuses on all students achieving their maximum potential while mastering essential course content. Parsons provided the conceptual framework based on the work of John Dewey, Carl Rogers, Marsha Mentkowski, and Tina Stavredes. Cavanaugh, an attorney and adjunct faculty member, used a contemporary legal issues frame to reinforce the rights of students with learning challenges and the importance of learners as clients. Barr, a peer tutor, assessed technical tools, interpersonal dynamics, and personal learning style to explain the process of motivation and engagement. White, a licensed professional counselor, synthesized student support services with instruction to reinforce the affective dimension of learning. The model has been demonstrated as important in fostering student success.

## ***Getting Your Students to Care About Science***

Dr. Jason Barbour, Dr. Kirsten Casey, Dr. Jill Loukides,  
Dr. B.J. Weibell, *Anne Arundel Community College*  
Session 1.12: January 5, 2012

The presentation introduced "Science Night," an event that energizes student, faculty, and community interest in science. Students become engaged in the process and about

lessons learned after five successful programs at AACC. College science students and faculty are presented with interactive demonstrations on various science topics to the community. Given the chance to show and explain science to children, students morph from silent, reluctant learners into outgoing, smiling promoters of key scientific concepts. Faculty members also gain renewed excitement by interacting with the public and from observing their engaged students. The whole college benefits by improving its image and visibility to the public. School age children and parents achieve a level of excitement for science uncommon in today's society. Science Night requires preparation on the part of faculty and particularly the coordinators.

***Killing the Quit Point: Solving the Research Problem in a  
Freshman Composition Course*** Session 7.2: January 6, 2012

David Becker, Jr., Frederick Community College  
Session 7.2: January 6, 2012

There are many things that might stop a freshman student in their academic tracks, but one of the largest is research. In short, this population of students is often weak when it comes to research, and in fact, research is known as a "quit point": something that makes students feel they have no choice but to quit the class, and in some cases, college. Using process-based writing instruction and research-based pedagogy, it's possible to not only help your students research better, but also to permanently learn skills that they will be able to use throughout their college career. The research shows that this happens, and there are numerous process-based approaches that have been effective for the presenter over the years. In addition, the new, nationwide Common Core is going to change what beginning composition students are going to know about research when they walk through an instructor's door, and the same process approach can work there as well.

[\[PowerPoint Slideshow\]](#)

***TED: Super, Engaging, Entertaining, Free Guest Lectures  
for Your Online 101 Courses***

Paul Billeter, *College of Southern Maryland*  
Session 2.9: January 5, 2012

At the request of my college's technology administrators, the presenter was encouraged to add videotaped lectures to his online course. Having made and watched such lectures in his old oceanography tele-course, he was certain his lectures would be boring and chore-like for my class of non-science majors. Then came TED, a nonprofit organization whose motto is: "Ideas Worth Spreading." It began in 1984 as a conference bringing together people from the worlds of **T**echnology, **E**ntertainment and

**Design.** Since then its scope has become much broader. For example, there are 35 excellent lectures on oceanography and about 70 on biology.

The TED conferences, in Long Beach, Palm Springs, and Edinburgh, bring together the world's most fascinating thinkers and doers, who are challenged to give the talk of their lives (in 18 minutes or less). The best talks are made available to the world. More than 900 are now available, with more added weekly.

The presenter has incorporated about 15 TED lectures in his online oceanography course and 15 in on-campus zoology course. No single modification of my non-majors' courses has been more uniformly and enthusiastically received by students over his 38-year career. TED provides a corpus of great, thought-provoking online guest lecturers. And, they are free and not constrained by copyright issues. Exploiting all these brainy-lecturers is a no-brainer.

This presentation showcased one or two TED lectures, discussed how they were used in his classes to succeed in getting even the least-motivated students to enjoy science, or, at least, to hate it less. This presentation was useful to science, history, sociology, psychology, humanities, technology, art, etc. professors, i.e. to almost everyone at AFAACT.

## ***Engaging Community College Students & Faculty: Understanding Students with Learning Disabilities***

*Ivonne Bruneau-Botello*, Montgomery College, Takoma Park/Silver Spring

*Fabián Faccio*, Montgomery College, Rockville

Session 3.14: January 5, 2012

The purpose of this session was to provide an opportunity for language educators to optimize outcomes for individuals with learning disabilities. Through practical activities, this presentation focused on individual needs of students with LD, highlighting techniques for self-monitoring and encouraging autonomy. The presenters used a PowerPoint presentation to make educators aware of the signs of the most common learning disabilities in order to help students in their language learning process. Definitions and common signs are presented to cover topics such as dyslexia, dysgraphia, dyscalculia and auditory processing disorder, among others. Several video clips were used to exemplify such definitions, common signs and topics. Information about teaching strategies, accommodations for students, and interactive hands-on opportunities for all attendees were made available during the session. Techniques were introduced on how LD students could monitor themselves to improve their performance in class. At the end, the presentation offered an open forum for the discussion and exchange of ideas.

## *The Effortless Change in Students and Faculty Within*

Daphnie V. Campbell, *Montgomery College*

Session 2.13: January 5, 2012

The presenter shared some truths about measuring up as educators and leaders that, she claimed, will totally transform the way we understand and approach educational change: internal change (attitude, thoughts, and expectations), reality (truth), attention focus (students need instruction and impartation), transformation (teaching experiences/mind renewal), relationship (student/classes), and get happy ("let your smile be heard through your voice/teachings").

[\[PowerPoint Slide Show\]](#)

## *Teaching Molecular Biology Techniques to Community College Students: Use of the GNB1 gene to Introduce Molecular Biology Techniques to Students*

Samuel Chatmon, Dr. James W. Cosgrove, *Montgomery College*

Poster Session 2.G: January 6-7, 2012

The presenters' interests were focused on teaching the basic techniques of molecular biology to students in their Molecular Cell Biology course (BI230). This poster provides the details of a laboratory exercise that made use of the GNB 1 (guanine nucleotide binding protein 1) gene combined with mammalian tissue culture to teach students about PCR (polymerase chain reaction) and DNA sequencing. The exercise represents an opportunity for students to analyze both the genomic sequence and the protein sequence of the gene using a number of bioinformatics tools from the National Center for Biotechnology Information (<http://www.ncbi.nlm.nih.gov/>); the European Bioinformatics Institute (<http://www.ebi.ac.uk/>); and the UCSC Genome Bioinformatics (<http://genome.ucsc.edu/>) websites. Furthermore, the students are able to analyze the structure of this gene across species, for the cell lines and tissues used are derived from rat, mouse, Chinese hamster, Mongolian gerbil and human (cheek cells).

## *Preserving One's Sanity as an Embedded Librarian*

Vicki Cone, *Anne Arundel Community College*

Session 3.5: January 5, 2012

The goal of the Embedded Librarian Program at Anne Arundel Community College is to provide library services to online students that are equivalent to those available to on ground students. For instruction, both email and discussions are used to suggest resources and recommend search strategies for students to use. Some techniques and



tools that make this easier include saving text for introductions and explanations that are copied and pasted into each course from semester to semester. Directions and videos are posted on the college website. Some invaluable features of the CMS are course calendars, syllabi, and email.

A few other techniques that require extra collaboration with the instructor include posting a resource list for student research, having an extra credit discussion, and developing a module (one week during the semester which serves as a library instruction week and includes "lectures," exercises, and discussions).

Highlights of a survey conducted near the end of the Fall 2011 semester indicate that students found the information the librarian posts helpful or very helpful. The program seems to be working, and all of these techniques enable online students to be assisted promptly and effectively while preserving the librarian's sanity.

### ***Engaging Community College Students in Biological Research: Use of Mammalian Tissue Culture to Teach Research Techniques to Students***

Dr. James W. Cosgrove, Alex Rinaldi , Alfiya Ahkmed, Orion Dye, *Montgomery College*  
Poster Session 2.F: January 5-6, 2012

Students at community colleges are interested in pursuing careers in biological and biomedical research. It is important to engage these students by offering opportunities to learn basic research techniques and to obtain hands on experience while conducting actual research experiments which have the potential to lead to publication in a scientific journal.

One technique appropriate for a community college is mammalian tissue culture. This poster session detailed the use of mammalian tissue culture techniques to provide research opportunities for students at Montgomery College who are interested in biological research. The research experiments must be focused and must be closely supervised by a faculty member to insure that the equipment remains functional and to maintain strict control of the costs.

First, we describe the equipment that we use in our tissue culture laboratory. Second, we discuss the ongoing supplies that are needed to maintain the tissue culture facility and to allow the students to conduct research experiments. Next, we focus on the mammalian cell lines that our students are using and we discuss some of the advantages and disadvantages of these particular cell lines. Finally, we include some data from the students' initial research activities.

## *The Neglected Majority 2011*

Darlene Cross, *Community College of Baltimore County*

Session 4.2: January 5, 2012

This presentation was in answer to some of the challenges faculty face engaging the new community college student demographic. It focused on the “ordinary” student who is so often left out when dealing with the new community college student demographic. The goal was to show the audience statistics that prove more often than not American students would not receive a Baccalaureate degree, and that many start their higher education endeavors in the classrooms of community college. The presentation ended with the mantra of how to make winners out of ordinary students. Teachers must not lose focus of the “middle quartile” of student who deserves our attention, too

[\[PowerPoint Slide Show\]](#)

## *Teaching for Learning: Strategies for Helping Students Become Self-Directed Learners*

Anne Davis, *Carroll Community College*

Session 4.13: January 5, 2012

An effective teacher must first understand how students learn. This session discussed research based principles on how students learn and shared practical strategies to use in the classroom for improved learning. A teaching/learning model of instruction, application, and feedback was explored as a paradigm shift from teacher as expert model.

Of the seven principles shared from the book *How learning works: seven research-based principles for smart teaching* (Ambrose, Bridges, DiPietro, Lovett, & Norman, 2010) the session address ways to improve motivation through classroom culture with an exercise called four-square, discussed increasing opportunity for students to practice skills by assigning iterative assignments, and importance of targeted feedback. Also discussed were ways of developing students’ ability to be self-directed learners.

These seven principles from Ambrose, Bridges, DiPietro, Lovett, & Norman are summarized as:

- 1) Student’s prior knowledge can help or hinder learning.
- 2) How students organize knowledge influences how they learn and apply what they know.
- 3) Students’ motivation generates, directs, and sustains what they do to learn.
  - a. Value, expectancy, and environment
- 4) To develop mastery, students must acquire component skills, practice integrating them, and know when to apply what they have learned.

- 5) Goal-directed practice coupled with targeted feedback is critical to learning.
  - a. Students need sufficient practice that is focused and appropriate level of challenge
  - b. Rubrics, multiple opportunities for practice, scaffolding, provide model of target performance
- 6) Students' current level of development interacts with the social, emotional, and intellectual climate of the course to impact learning.
- 7) To become self-directed learners, students must learn to assess the demands of the task, evaluate their own knowledge and skills, plan their approach, monitor their progress, and adjust their strategies as needed.

### ***The Brain, Your Student, the Big Picture***

Yvette Dodson, *College of Southern Maryland*

Session 3.7: January 5, 2012

Latest brain research and neuroscience have helped educators better understand how information is processed, retained in memory, and then recalled for important tasks. Combined with developmental psychology, this information can help provide research-based strategies for effective teaching and student success. This presentation addressed the diversity of age and developmental levels that a community college serves in light of brain-based theory and various developmental theories to aid instructors in delivering class content that is effective and rewarding for both students and instructors. Brain-based strategies were discussed to engage a student's mind using the developmental psychology of how a 14 year old vs. a 20 year old, 40 year old, or 60 year old learns. The community college setting is unique in that a dual-enrolled 14-year old, an uninterested 20-year old, a bored 30-year old, a struggling 40-year old and a gleaming super star 60-year old may all be in the same class. Each is at a very different stage of development in life with different needs to be filled in one classroom with the same content. Each learns with very different prior knowledge, experiences and expectations for what is being covered in class. Erickson's psychosocial theory, Maslow's Hierarchy of Needs, Blooms Taxonomy, and other learning theory classics were discussed in terms of how the diverse population of a community college can learn and create a community of learners.

[\[PowerPoint Slide Show\]](#)

### ***Podcasts and the "Flipped" Classroom***

Evan Evans and Erum Marfani, *Frederick Community College*

[Session 5.12: January 6, 2012]

[\[PowerPoint Slide Show\]](#)

## ***Strategies to Promote Persistence and Retention in Developmental Reading and English Courses***

Jennifer Gertz, Jennifer Dunn, *Carroll Community College*

Session 2.6: January 5, 2012

The presentation highlighted strategies the Transitional Studies and Academic Services department at Carroll Community College implemented into its developmental reading and English courses to promote student success. For example, learning communities were developed that integrated non-credit developmental reading and English courses with a credit Sociology 101 course. Other communities integrated developmental reading and English courses with developmental math courses and a one credit College Success course. Courses were linked with integrated assignments and campus activities and field trips. Support services also played an important role in the department by offering peer tutoring, professional tutoring, drop-in tutoring for many content areas, and study skills assistance. A supplemental instruction component was added to the lowest level reading course. Peer tutors attended the course once per week and then lead a one hour study group following the class meeting. The department also incorporated service learning into several courses, providing students with opportunities such as assisting with homework at the Boys and Girls Club and serving food at a local homeless shelter. Course structure was revised to provide more quantity and quality of instruction. For example, the two developmental English courses and one developmental reading course eliminated a lab component and met two days a week for two hours each day. This allowed the instructor to spend more time teaching course content and working with students one on one. The presentation also included opportunities to brainstorm and discussed additional ways to utilize research-based strategies into developmental courses.

## ***ALP English at Prince George's Community College: Reflections on the Pilot Semester***

Sarah Gottschall, *Prince George's Community College*

Session 3.10: January 5, 2012

In ALP (Accelerated Learning Program), students in an upper-level developmental English course co-enroll in English Composition. The goal of the Accelerated Learning Program is to increase student success in College English. Prince George's Community College offered an ALP course for the first time during the fall semester of 2011. At PGCC, ALP students co-enroll in EGL 1010 (Expository Writing) and EGL 1001, a course designed to provide extra support and assistance to ALP students. PGCC uses a linked workshop model: Students in the ALP course attend the regular class meetings of EGL 1010 and then stay after class for the EGL 1001 portion. During the EGL 1001 class sessions, ALP students receive additional grammar instruction and assistance with

various stages of the writing process. This presentation discusses why PGCC chose to pilot the ALP program, how we designed the course, and how we selected and recruited students. The presentation also addresses which teaching strategies worked well, the challenges of teaching this course, and how the college will assess ALP's effectiveness.

### *Engaging Students with Clickers*

Dr. Lisa A. Hawkins, *Frederick Community College*

Session 1.5: January 5, 2012

In this presentation, using clickers in the classroom was demonstrated. These small remote controlled devices allow students to respond to questions posed by an instructor during class lectures. Benefits of using clickers were discussed: immediate feedback, engagement, participation during class; increased curriculum retention, improved critical thinking skills, and overall enjoyment gained from using clickers. Additionally, clicker options were discussed, including purchasing individual remote controlled devices by students, and sets of clickers purchased by college departments. Other options, such as using a cell phone or computer to respond to clicker questions, were also mentioned.

### *Languishing Over Language Anguish*

Dr. Katherine James, *Montgomery College*

Session 2.3: January 5, 2012

Sprinkled with bits of humor, particularly several from the book *Anguish Languish* by H. L. Chace, this seminar addressed the disparate levels of proficiency, the diverse learning backgrounds, and the various English language deficiencies with which many students arrive at college. These issues impact both teaching and learning by hampering students in their pursuit of achievement in all classes where writing is required—which is most of them--and presenting multiple challenges for professors as they prepare and deliver instruction. Also addressed was the reality that students with very good language skills are part of the same community and the same classes; and there is question of how to simultaneously serve this classroom mosaic effectively. An interactive, problem-solving approach was taken to do the following: (1) identify the overall discrepancy of what is and what should be, (2) examine research on probable causes, (3) develop and generate possible solutions, and (4) create strategic action plans to benefit both students and professors. Both short-term and long-term solutions were sought. Participants brought ideas and suggestions in establishing best practices for this scenario. All participants contributed to the seminar, resulting in meaningful discussions and implementation of plans for their classes.

## *Add to your Students' Algebraic Wealth using Portfolios*

Chris Jones, Carol Mueller, *Harford Community College*

Session 2.14: January 5, 2012

The Transitional Mathematics program was chronicled, including the development, implementation and learning assessment of a portfolio in its Beginning Algebra and Pre-Algebra classes. These materials were used in the Summer 2010, Spring 2011, Summer 2011 and Fall 2011 semesters. Student data were collected and reported during this session as student success was compared in sections using and not using the portfolio. The presentation demonstrated how the materials were developed and integrated into the course, how students perceived the portfolio, and how it was used to assess the Transitional Mathematics program goals.

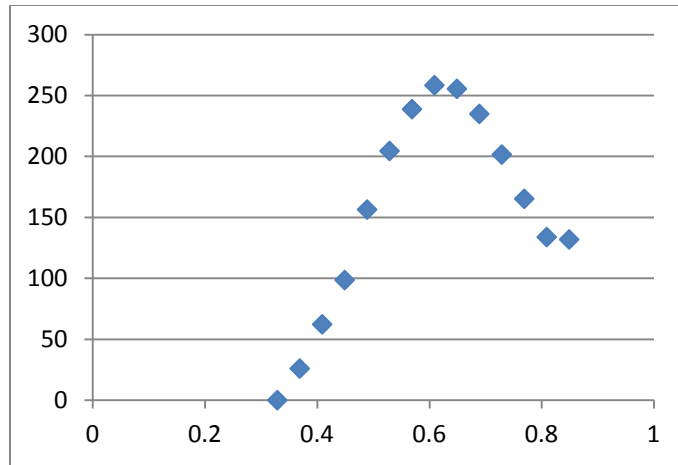
## *Excel Curve Fitting; Power and Pitfalls*

Paul Jozik and Robert Naugle, *Hagerstown Community College*

Session 4.1: January 5, 2012

Even though it is possible to draw a straight line and write its equation using any two points in the Euclidean plane, a linear equation and therefore polynomial degree 1, without being able to predict any other random point not on this line, it is nevertheless tempting to declare a predictive formula for  $n > 2$  points when using curve fitting regressions or software such as Excel to perform these fits when the regression kicks out a nice polynomial fit equation of degree  $(n-1)$  which exactly fits the data.

Interpolating within the interval of even a random number set will smoothly predict each number and any lying between them. The problem is that when an extrapolation is made (predicting outside the interval of the sample data set) the predictive value falls off quite rapidly. This phenomenon is demonstrated using random numbers and a laboratory collected data set of pull forces against length of draw of a compound hunting bow. The Maxima computer algebra system (CAS) was used to graph and display various curve fittings and their intervals of reliability.



**Draw Force of a Compound Bow (Newtons) as a function of Length of the Draw (meters)**  
***Developing a Robotics Technology Curriculum at an Urban  
 Community College***

Michael Kaye, Dr. Yun Liu, *Baltimore City Community College*  
 Poster Session 2.D: January 5-6, 2012

Baltimore City Community College was awarded an Advanced Technology Education grant from the National Science Foundation to develop a Robotics Technology Curriculum. The goals of the grant project are to: (a) develop the curriculum for a unique robotics technology associate degree program that trains students to be super technicians who are qualified to be hired as robotics, automation, manufacturing, and/or electronics technicians; (b) set up a state-of-the-art robotics laboratory to offer students an abundance of hands-on, practical experience that prepares them for immediate entry into the workforce upon completion of the program; (c) increase the success rate of the electronics, computer information system, and computer aided drafting & design technician programs by incorporating robotics-related activities and instruction into their curricula; (d) introduce robotics concepts to 11<sup>th</sup> and 12<sup>th</sup> graders in select high schools in the city's public school system and improve their math problem solving skills through hands-on robotics exercises; (e) develop an articulation agreement with a local four-year university's school of engineering for students who wish to pursue an engineering-related bachelor's degree; (f) provide internship and job opportunities to the robotics program's students and graduates; and (g) improve underrepresented students' awareness of and attitudes towards robotics technologies.

[\[PowerPoint Slide Show\]](#)

***Accelerating the Path to Degree Completion and  
 Increasing Retention through STEM Scholars Step-Up  
 Bridge Program***

Dr. Supawan Lertsakrai King, Chris Jones, *Harford Community College*

## Session 1.7: January 5, 2012

For the past three years, Harford Community College has offered the STEM Scholars Step-Up Bridge Program to incoming freshmen majoring in STEM. The presentation outlined the development of the program, reported on the retention and success of students, and highlighted acceleration through core mathematics courses. The mathematics acceleration component highlighted collaboration between developmental and college level mathematics divisions. Student feedback and future plans for the program were presented. The audience learned about the effectiveness of a targeted summer bridge program in terms of student retention and success.

[\[PowerPoint Slide Show\]](#)

### *Enhance Calculus Concepts with Writing*

Dr. Supawan Lertsakrai King, *Harford Community College*

Session 2.7: January 5, 2012

In this presentation, the speaker shares the incorporation of writing in the Calculus I course using two different approaches, a group project based on a math article and weekly lab reports. The results of both approaches show improvement in both math and writing skills. The presentation content includes the course management, grading criteria, and student feedback.

[\[PowerPoint Slide Show\]](#)

### *Teaching Creative Writing to an Incarcerated Population*

Barbara Link and Wendy Kibler, *College of Southern Maryland*

Session 3.13: January 5, 2012

For their Adjunct Certification Level III, Wendy Kibler and Barbara Link embarked on a quest to extend their love of literature and writing to an often overlooked population: inmates. They first conducted research to find out what methods of teaching creative writing to a population with literary problems worked best. Then, they narrowed their research to the incarcerated population specifically. As a result of their research, Wendy and Barbara created a three-month program teaching creative writing to inmates at St. Mary's County (Maryland) Detention Center. Their students were all taking the GED course offered by the detention center, but they struggled with their writing skills. Using poetry and short stories, they introduced literature and used that as a platform for the participants to write on their own. They invited a guest lecturer to the detention center to further increase the curiosity factor, and this increased the interest factor for their students, as well. The materials used reflected the ethnic diversity of the detention center population. The detention center supervisors and participants were extremely



pleased with the program and with the results. The evidence is in the work the students wrote and in their enthusiasm for the project. And, who knows? Maybe in the process, they recruited a few new students for their college, as well.

[\[PowerPoint Slide Show\]](#)

## *Teaching Tolerance in Wartime and the White House Faith Initiatives for Service Learning in Community Colleges*

Sally McClean, *Montgomery College*

Session 1.8: January 5, 2012

Incorporating international Peace and Justice and Tolerance in the college community is the request of the White House Faith Initiatives, whether in service learning or in the classroom. And of course, the bottom line is Tolerance leading to not only acceptance but *to common ground and friendship*.

### **Session**

Incorporating service learning as an option for a research papers by students doing primary research

Using global examples in class as well as ethical and ethnic concerns which may involve conflict/resolution and ultimately peace and justice.

Devising panel groups based on books such as *Beyond Tolerance* by Niebuhr, *I'd Rather Teach Peace* by Colman McCarthy, *Immigrant Kids* by Freedman and *Breaking Through* by Jimenez in which students summarize their section of the book and relate their own experience with that topic.

Enhancing class themes of Tolerance by using films such as *Invictus* and *Civil Action* as well as the Native American film *Smoke Signals*.

### **Theme**

The main theme of the session was explaining how to get students involved with one another to the point of beyond tolerance, as well as getting them to begin thinking globally.

## *Tour of the Chemistry Facilities in the Rockville Science Center*

Abner Mintz, *Montgomery College*

Session 5.13: January 6, 2012

This session involved a tour of the chemistry department, located on the third floor of the new science center at the Rockville campus of Montgomery College. Some features of the chemistry department that are of interest to chemistry and science teachers are a student/faculty project lab, general chemistry labs bench top available computers, organic labs each with their own GC and ATR-FTIR, separate general chemistry and

organic chemistry prep rooms and stockrooms, and a student study/reference room. In addition, the chemistry department has new instrumentation for student learning and projects. Among the instrumentation available for use is a 90 MHz NMR, bench top micro-esr spectrometer, ATR-FTIR, GC-Mass spectrometer, stopped-flow kinetics spectrometer, x-ray diffraction system, UV-Vis spectrometer, and a laboratory microwave.

## ***Send Without Subject? Revisiting College Composition***

Aubrey Mishou, *Anne Arundel Community College*  
Session 5.15: January 6, 2012

Despite the increased influence of technology in academics, only four Maryland community colleges require a technology credit; schools that once required basic computer classes have dissolved this requisite, citing the understanding that contemporary college students already possess the computer skills they need to successfully complete a degree. However, as demonstrated in basic composition classes, this is not often the case, and according to the 2011 ECAR Technology study, a number of students express a desire to gain greater word processing skills, and even more wish they could better use learning management systems. This academic deficit is one that needs to be addressed for the benefit of the current community college demographic, and it is suggested that these needs can be met as part of the composition courses already required by each college. The successful use of technology, including word processing, file conversion, and distance education modules, are all essential elements of contemporary textual communication, and should be stressed as such in composition classes. By emphasizing the technical elements of composition, students will not only gain the traditional academic skills imparted by such courses, but will gain valuable experience to be used in both academics and the professional world, while providing a logical context for the use of those skills in a traditional college course.

[\[PowerPoint Slide Show\]](#)

## ***Integrating Student-Centered Teaching Modalities Into the Classroom***

Karen Myers, RN, DNP, *Wor-Wic Community College*  
Session 5.14: January 6, 2012

The multiple methods to teach students for learning to occur can be categorized into teacher-centered or student-centered teaching. In addition, student learning can be passive learning or active learning. Another important factor to consider in this process is the nature of the learning environment, and to look for any barriers. One major

barrier is the passive learner, who must be prepared with a good introduction into why active learning is more beneficial to their learning. Planning well takes more time to cover material at first, but with practice the time is the same. Appropriate techniques must be selected to meet the objectives. Auditory learners need to hear correct answer first so monitor group/individual activity to assure correct answers are given in class. Students must be allowed time to answer questions and have them work the question out. Leading questions may be used, but students must be allowed to answer and figure out the problem. Various types of student centered teaching modalities were discussed. These were Advanced Organizers, Socratic Questioning, Case Studies, Concept Maps, Venn Diagrams and Experiential Learning.

## ***Supporting College Students with Aspergers***

Dr. Lori Perez, *Anne Arundel Community College*

Session 4.12: January 5, 2012

Prevalence rates of children diagnosed on the Autism spectrum are increasing 10-17% annually. Although there are no clear data on the prevalence rates of college students with Aspergers, anecdotal evidence suggest that numbers continue to grow. The purpose of this presentation was to educate faculty and staff on what it means to be a college student on the spectrum. In defining the disorder, the differentiation among Pervasive Developmental Disorders was discussed as well as potential changes to the diagnostic criterion as proposed by the American Psychological Association. An overview of the Individuals with Disabilities Education Act as well as the Americans with Disabilities was provided. Attendees learned the differences in levels of services, accommodations, and modifications that are provided to students within the public K-12 educational environment as compared to the college setting. Common behavioral characteristics that present in the classroom were discussed with particular attention being paid to the role and responsibility of the college professor to be aware of, and accommodate for, such characteristics and learning differences. Appropriate accommodations were discussed along with several best practices in teaching that could easily be implemented in the classroom to help students be more successful.

## ***Stone Soup: Ideas for Dealing with Diversity in the Community College Classroom***

Bette Petrides, *Montgomery College*

Session 1.2: January 5, 2012

Demographic diversity has encouraged new solutions to old teaching problems that include leveling the playing field for students in a diverse class room, demonstrating for students that writing compositions has payoffs in the real world and helping students enjoy becoming familiar with the grammar and the structure of academic English.

“Making Stone Soup” offers examples of techniques and assignments for solving these problems and creating a classroom that encourages student responsiveness.

## *Finding (and Avoiding) Our Blind Spots*

Debra Poese, *Montgomery College*

Session 7.12: January 6, 2012

Many people are familiar with the term “blind spot” from a variety of aspects: the classic automobile blind spot, the physical blind spot on the retina where the optic nerve attaches, cultural blind spots, etc. In this session, a connection was drawn to expert blind spots: “An expert blind spot occurs when someone skilled in an area overestimates the ease of learning its formalisms or jargon or underestimates learners’ informal understanding of its key ideas.” [Bransford, Brown and Hocking, *How Students Learn*, p. 355]

Examples of such blind spots in mathematics teaching help to show that a key element of avoiding these blind spots is to continuously assess student learning and adapt to the results, rather than assuming that we know how students are learning. Another part of avoiding our expert blind spots is to have awareness of our teaching styles and inclinations, and compare them to how students might learn best.

For example, though we know that inductive methods of learning are a more natural way to learn, many faculty tend to teach in a deductive fashion. In this session, a specific example of deductive vs. inductive approach was illustrated, and then discussion followed.

[\[PowerPoint Slide Show\]](#)

## *Creating Classroom Communities*

Christine Rai, *Montgomery College*

Session 5.6: January 6, 2012

Successfully engaging an ever-diversifying student demographic requires dynamic and student-centered instructional techniques. Cultivating a sense of community in the classroom is critical for students who cannot avail themselves of the traditional college experience and many resources available on campus. Therefore, experiences at the classroom level potentially have the greatest impact and ultimately serve as the foundation for completion. To be successful, students need to feel empowered, respected, supported, and capable. Instructional and classroom management practices can be implemented to encourage the creation of a learning community. In this collaborative session, the means of creating interactive, student-centered environments to facilitate student success were explored. Six dimensions to promote a sense of

community in the classroom were discussed: Keys to Communication, Creating a Shared Space, Differentiating Assignments, Scaffolding for Success, Collaborative Learning, and Utilizing Technology.

[\[Collaborative notes\]](#) [\[PowerPoint Slide Show\]](#)

## ***From "Letters to Science" and Back Again: Why Humanities and Liberal Arts are Critical to Science and Technology in the Curriculum of STEM-Focused English Composition Courses***

Andrew Rusnak and Greg Campbell, *Community College of Baltimore County*  
Session 5.4: January 6, 2012

In the development of STEM-focused English composition courses, it becomes critical to address the false dichotomy that exists between the humanities/liberal arts and the disciplines of science and technology. In the late 1800s, English biologist Thomas Huxley (also known as Darwin's Bulldog) called for the predominance of education to "pass from letters to science," to transition from "mere literary instruction and education" to "sound, extensive and practical scientific knowledge." Mainstream culture and education in particular has, in many ways, nurtured this either/or proposition and grown to favor pragmatic, specialized, professional pursuits. There are many factors at work, starting with the realization mid-20<sup>th</sup> century that specialization (professional) had taken off in education, and that, as William Barrett points out in *Irrational Man*, "Specialization is the price we pay for the advancement of knowledge. A price, because the path of specialization leads away from the ordinary and concrete acts of understanding the terms of which man actually lives his day-to-day life."

English composition courses may be among the last bastions that celebrate the very quintessential human goal that Emerson alluded to in *The American Scholar*: "... the scholar is the delegated intellect. In the right state, he is, *Man Thinking*. In the degenerate state, when the victim of society, he tends to become a mere thinker, or, still worse, the parrot of other men's thinking." Can both worlds be synthesized? Have the great technological mistakes of the past half-century been mistakes of irrational man? Do we, as the esteemed postmodern critic and philosopher Ihab Hassan has claimed, "need to understand that five hundred years of humanism may be coming to an end as humanism transforms itself into something we must helplessly call post-humanism?" Or is there still a need to recognize, no matter how conventional, what in 1882 poet Mathew Arnold did when he responded to Huxley in *Literature and Science*, those "powers which go to the building up of human life ... the power of conduct, intellect and knowledge, beauty, and social life and manners," those powers we learn from, specifically, literature, and more generally, liberal arts and humanities?

It is imperative in the development and delivery of STEM-focused English composition courses that we not just train but educate our scientists, technologists, mathematicians, physicians, nurses, dental hygienists, pharmaceutical researchers, respiratory therapists, mechanical,

electrical, chemical, civil, and biomedical engineers to embrace the powers of human life, those emphasized in liberal arts and humanities.

## *Need for a Course on International Development in Community Colleges*

Sithamparam Sengamalay, *Montgomery College*

Session 6.8: January 6, 2012

This presentation laid out a proposal to introduce a course on International Development in community colleges because of its critical importance and the benefits to our diverse student population as they navigate their career path either in the globally inter-connected and competitive 21<sup>st</sup> century work place or aspire to continue their higher education in four-year colleges. The course is expected to fill a void in the existing curriculum.

**What is International Development?** It refers to the assistance provided by rich nations to poor countries based on the principle of inter-dependency among nations. Its objective is to improve the quality of life in developing countries, which would over time benefit people everywhere. Bill Gates famously emphasized its need in his message to US Congress in November 2011 thus: *“Development assistance isn’t just good for people in poor countries; it’s good for all of us.”*

**Origins** - International Development, as a separate body of ideas, originated during WW II, with the initiative of the US and UK. The Atlantic Charter signed by President Roosevelt and Prime Minister Winston Churchill in August 1941 planted the seeds of international development and the [United Nations Monetary and Financial Conference](#), held in Bretton Woods, New Hampshire in July 1944, formalized the initiative with the agreement signed by 44 nations. Then Secretary of State, George Marshall and President Truman added further impetus by successfully implementing the reconstruction of war-torn Western Europe at a cost of \$850 Billion.

**Growth** - The continuation of development assistance beyond the early fifties was necessitated by the economic needs of people in newly independent countries emerging from colonial rule. International Development has grown since then into a multi-Billion Dollar endeavor encompassing the entire globe and affecting the livelihood of millions of people. Official development assistance provided by the G-7 countries alone in 2010 amounted to \$89 Billion, of which the US share was \$30 Billion (34% or 0.2% of GDP).

**Key Institutions** - The International Monetary Fund and the World Bank pioneered international development. Since then, four major regional development banks and at least seventeen UN specialized agencies have been established to provide development assistance. In addition, the OECD countries operate their own Bi-lateral development

agencies. A number of private charitable foundations have also joined the field in a big way over the years.

[\[PowerPoint Slide Show\]](#)

### *Three Demos for Chemistry Class*

Dr. James T. Stemmler, *Hagerstown Community College*

Session 6.13: January 6, 2012

Three examples of common household items that can be used to show chemical phenomenon are: 1) zip lock baggies, ice, salt, milk, sugar and vanilla are used in this demo to make ice cream. With a common weather thermometer, we measured a temperature of -10 degrees centigrade. 2) An espresso machine exhibits phenomena also seen in laboratory experiments involving distillation, or preparing hydrogen and or oxygen. 3) A candle flame is an example of a common chemical reaction. The demo shows how a candle works and pulls in historical insight and an amusing parlor trick: relighting a candle without touching the wick. Furthermore, with a NIST value of heat of combustion, one can determine efficiency of heating and the influence of wire gauze and other materials that come between the candle and the matter being heated.

[\[PowerPoint Slide Show\]](#)

### *Student-Centered Teaching Tools*

Diane Switlick, *Montgomery College*

Session 3.15: January 5, 2012

This session reviewed the research that supports active and engaging instruction in the college classroom. Participants experienced instructional techniques that kept them and will keep their students actively involved during classroom-based instruction and decide which strategies are most compatible with their content area, and discuss ideas for planning for their classes that get students moving and collaborating in meaningful ways. Some of the specific tools used were Think-Pair-Share in pairs and in speed changing lines, Four Corners which is voting with the body by moving around the room, Give One: Get One, which is an sharing ideas strategy, Visualizing and Collaborative Planning. Everyone was reminded about the brain-friendly instructional research and the fluid nature of intelligence, which we develop through creating meaning in our own brains, and thus, we have to set up a classroom where our students can accomplish this. These are the foundation of student centered teaching which is largely activity based and heavy in problem solving, role playing and cooperative learning.

### *Using Writing in Math*

Greg Stiffler, *Community College of Baltimore County*  
Session 6.3: January 6, 2012

The presentation focused on how writing could be used in the classroom to help with math comprehension, using class assignments as examples. Research supports the claim that writing improves comprehension and cognition in math classes. Many studies revealed that regular writing forces students to be reflective on their experiences, and also gives students a voice in their education. The research showed that students would be very honest with why they had issues with certain concepts. The assignments used in math classes differed based on the class they were used in. The College Algebra classes that I had kept regular journals online that were updated after exams. Intermediate Algebra classes created a portfolio where they made corrections to their quizzes and tests and made comments as to why they had trouble and what they would do to improve.

[\[PowerPoint Slide Show\]](#)

### *Taking Mathematics Global*

Donna Tupper and Barbara Leitherer, *Community College of Baltimore County – Essex*  
Session 5.11: January 6, 2012

Community Colleges are increasingly requiring faculty to implement a global perspective into their courses. Math is universal, but as faculty we are hesitant to include a global perspective into our work. For CCBC's Applied Algebra and Trigonometry course, the committee decided to apply concepts in the course to various countries. This led to a cumulative final exam. Some of the course objectives naturally lend themselves to global situations. Since conversions are one of the topics in the course, including currency conversion and Fahrenheit to Celsius conversion was a natural fit. Exponential functions are also a course objective, so asking questions about how to pay for an international vacation led to another question. However any topic that is covered in the class can be applied in an international setting. A list of resources used for the creation of the exam is listed below. For the statistics course, students worked on a three part semester-long project based on data of the 2010 Vancouver Winter Olympic Games. Two sections made use of descriptive statistics and probability, while in the third part students creatively designed a brochure to convince a peer to visit one of the medal-winning Olympic countries. Responses to project surveys suggested that students felt secure with the "tried and true" statistical computations, while the work on the brochure was met with some hesitation at first. However, during the process, students turned around, their motivation increased, and so did their communication with the instructor. At the end, the majority of students indicated that they were proud of their work on the brochure and that they had learned statistical concepts better.

[\[PowerPoint Slide Show\]](#)



Websites used for the project / final exam include:

1. Information on exits for the Baltimore Beltway (confirmed by driving the Beltway) [http://en.wikipedia.org/wiki/Interstate\\_695\\_\(Maryland\)](http://en.wikipedia.org/wiki/Interstate_695_(Maryland))
2. Information on the definition of the BeNeLux region  
[http://www.benelux-parlement.eu/en/benelux/benelux\\_intro.asp](http://www.benelux-parlement.eu/en/benelux/benelux_intro.asp)
3. Information on the cost of a world tour  
[http://www.eduplace.com/ss/maps/pdf/world\\_country.pdf](http://www.eduplace.com/ss/maps/pdf/world_country.pdf)
4. Information on the population of European countries  
[http://www.wordiq.com/definition/Area\\_and\\_population\\_of\\_European\\_countries](http://www.wordiq.com/definition/Area_and_population_of_European_countries)
5. Origin of the quadratic formula  
<http://www.bbc.co.uk/dna/h2g2/A2982567>
6. Information on the height of the Burj Khalifa tower  
<http://www.burjkhalifa.ae/>
7. Information on the Aids epidemic in Africa  
[http://gbgm-umc.org/global\\_news/full\\_article.cfm?articleid=4703](http://gbgm-umc.org/global_news/full_article.cfm?articleid=4703)
8. Information on Chernobyl accident  
<http://www.world-nuclear.org/info/chernobyl/inf07.html>
9. Maps and geography of India  
<http://www.mapsofindia.com> (for the map)  
<http://www.mapcrow.info/> (for the distances)
10. Information on Japan earthquake 2011 from USGS  
<http://earthquake.usgs.gov/earthquakes/eqinthenews/>
11. Information on South American rainforest  
[www.rain-tree.com/facts.htm](http://www.rain-tree.com/facts.htm)
12. Interest rates on CD's  
<http://www.bankrate.com/>
13. Credit Card Rates  
<http://www.creditcardguide.com/>
14. Currency conversions  
<http://finance.yahoo.com/currency-converter/>
15. Distances traveled between countries  
[http://www.webflyer.com/travel/mileage\\_calculator](http://www.webflyer.com/travel/mileage_calculator)  
[http://www.eduplace.com/ss/maps/pdf/world\\_country.pdf](http://www.eduplace.com/ss/maps/pdf/world_country.pdf)

## *Museums for the Marginalized*

Daniel Venne, *Montgomery College*

Session 6.12: January 6, 2012

New *inclusive* art museums exclusively feature the works of cultural groups historically ignored by traditional institutions. In recent decades, the Washington, DC region has become home to the National Museum for Women in the Arts, the Museum of the American Indian, and the Museum of African-American History all of use to the educator wishing to teach art with an eye toward cultural diversity. Museums for “visionaries” focus on the creative output of folk artists, with a similar goal of promoting outsiders. Neighboring these museums are other established vanguard museums of the Smithsonian, as well as the National Gallery of Art, where efforts to be more inclusive are resulting in new approaches to exhibitions. The focus on inclusion has resulted in the blurring of traditional categories of art and culture, which naturally impacts the way that art is taught and discussed. This presentation compares the reach of the “museums for the marginalized” with the broader appeal of the traditional art museums, with a focus on the use of the museum as a tool for art educators working with minority students.

### ***Expectations and Fears: Building Bridges to Success***

Deborah S. Wilson, MSN/Ed, RN, Wor-Wic Community College

Session 7.7: January 6, 2012

This session discussed the fears that community college students face and the expectations that instructors have for their students. The participants were encouraged to consider their own educational experiences, both as students and as faculty members, with an emphasis on understanding how faculty can misunderstand the coping mechanisms students use to deal with their fears. Suggestions were provided on ways to bridge the gap between the students’ fears and our expectations. This session provided an interactive and reflective experience based on *The College Fear Factor* by Rebecca Cox, the AFACCT keynote speaker on Friday, January 6, 2012.

### ***Social Media and the New Generation***

Laura Wilson, Anne Arundel Community College, and Laura Cordova, *Frederick Community College*

Session 7.8: January 6, 2012

In the 21<sup>st</sup> century, teachers need to look beyond the traditional textbook and lectures to inspire their students. They need to look to see if their courses are engaging and interactive. Social media tools, such as Twitter, Wiki, and the iPad, can increase students’ understanding of material through 3D interpersonal communication. This presentation covered the value of technology to clarify ideas, ignite inspiration and ambidextrous thinking to tell stories, and capture attention and emotion for enhanced learning.

[\[PowerPoint Slide Show\]](#)

## *Honest Work: Can We Really Expect It?*

Laura Yoo, *Howard Community College*

Session 5.3: January 6, 2012

There are many reasons why college students do “less than honest” work in and out of the classroom. Some lack confidence in their own abilities, some lack time management skills, and some just want to get the grade and does not care about learning. This presentation proposes that, in addition to these more individual factors, cheating is often motivated by “contextual factors” and argues that the faculty and the institution can take actions to curb cheating. Assumed perception and behavior of peers (as well as faculty) can make or break a student’s decision to cheat or not cheat. The presentation also looks to information literacy education as a crucial part of teaching students the value of and how to do “honest work”.

[\[PowerPoint Slide Show\]](#)

Updated: April 24, 2012