

THURSDAY, MAY 21

SESSION 4

Multiple Learning Styles, Single Learning System

Presenter: Sara Marcus, Queensborough Community College / CUNY

Co-Presenter(s): Maria Zarycky

8:30 - 9:00 am Lanigan 104

Paper (Introductory); Active/Student Centered Learning - Engaging Students in the Classroom

This session will explore Gardner's Multiple Intelligences, and how the use of an online learning system, such as Sakai, can help to meet these varied learning styles in a single class. Reaching out to students and others, whether in a face-to-face class or a totally online class, or anywhere in-between, this session will have attendees leaving with ideas for integrating new methods of presenting materials and assessing understanding of these materials in ways that reach out to students who learn in different ways. Student engagement, new pedagogies and new ways of approaching old pedagogies and assessments will all be explored as benefiting from the use of Sakai. Addressing the interests of the techno-savvy and also the concerns of the newcomer, the presenter will show how to jump in with both feet and start testing the waters before going full-blast.

A Visual CS Programming Environment in the Making

Presenter: Aleksandar Pantaleev, SUNY Oswego

8:30 - 9:00 am Lanigan 102

Paper (Advanced); Discipline-specific Technologies

Over the past eight years or so the emphasis in computer science education has been on object-oriented programming (OOP). While preparing students for industry, where OOP use is widespread, this approach has a severe limitation: students who master only OOP do not understand the inner workings of the digital computer. In short, they may build good OO designs, but only some of them will devise working programs that follow those designs.

All engineering is synthesis: engineers construct useful combinations of the elementary particles of their trade. For software engineering those particles are the operations that the digital computer provides. Having realized that, I re-introduced imperative programming in the introductory CS courses I teach. The response from students has been overwhelmingly positive: suddenly they know what the computer actually does. They feel confident and empowered, they produce better programs, and the transition to OOP is smooth. In my experience, a student who takes an introductory course in imperative programming, and then a natural successor course in OOP, is a much better software engineer than one who takes a two-course introductory sequence in OOP.

I am currently building a simulated environment to teach students imperative programming. A question that naturally arises is why build a simulated one, when a real one (the digital computer) already exists? The answer is that humans are visual creatures, and most of them do not handle abstractions well. It is much more difficult to imagine three operations in a sequence than to see an avatar making a step forward, reading the note on the floor, and doing what the note says. With the current advances in computer graphics, students will potentially be able to see through the eyes of such an avatar, thus understanding the process of computing better.

As students understand computing through visualizing example programs increasing in complexity, they will begin to realize that the execution of a computer program is nothing but emergent behavior on the part of the computer. The natural next step is to try manipulating that emergent behavior through the elementary steps their avatar takes.

I propose to present the first version of this simulated environment at CIT09 with the hope to receive feedback and help from members of CS departments in the SUNY community. The vision is that, once complete, this environment will constitute an instructional tool to use in introductory CS courses in the SUNY system.

Using Syndication to Streamline the Research Process

Presenter: Shannon Pritting, SUNY Oswego,

8:30 - 9:00 am Campus Ctr 202

Hands-On Demo (Introductory); Personal Knowledge Management & User Created Content

Sick of searching again and again to remain current on research and other topics? As the dissemination of information continues to grow exponentially, we need to employ tools that help us to gather information in a structured and efficient manner. Syndication technology such as RSS is useful to remain current on topics that are endlessly changing and evolving. Although syndication technology has existed for several years, syndication has now become common on web sites and in electronic databases, including most subscription databases and services purchased by academic libraries. Faculty can now subscribe to academic journals in their discipline along with newsPaper from around the world, blogs, and other content all in one convenient interface that makes gathering, collecting, commenting, and sharing easy.

To subscribe to RSS feeds and other syndicated content you will need an aggregator. Google's two aggregators remain the industry standards. In this workshop, we will cover how to set up an aggregator and how to find syndicated feeds from several different sources, including library databases common to all SUNY Institutions, news sites, and other web resources. We will create a Google account and set up an aggregator. Also covered will be how to share content from feeds, and how to manage feeds once they are set up. Faculty will be prepared to capitalize on the many electronic resources available within SUNY, and to create dynamic, syndicated feeds to gather content, making research more efficient and comprehensive.

Quality Really Really Matters: A Summary of eLearning Program Evaluation Tools

Presenter: Clark Shah-Nelson, SUNY College of Technology at Delhi

8:30 - 9:00 am Lanigan 107

Paper (Introductory); Translating Teaching, Learning and Assessment Research into Practice

Many are familiar with evaluating newly developed online courses with the QualityMatters rubric, but what about evaluating and benchmarking entire degree programs? This session will provide an overview of some of the key tools for strategic planning and evaluation at the program/system/institutional level. Anecdotal experiences of introducing these to faculty and administration on campus will be shared. Participants will leave with knowledge of and links to useful tools they can take back to their institution to conduct evaluations of their online programs and eLearning activities.

The resources discussed will include:

EXECUTIVE LEVEL STRATEGIC PLANNING

*NASULGC-Sloan National Commission on Online Learning: Online Learning as a Strategic Asset: A Survey of Presidents and Chancellors

INSTITUTIONAL/PROGRAM EVALUATION

*eLearning Maturity Model - (eMM) provides a means by which institutions can assess and compare their capability to sustainably develop, deploy and support e-learning.

*NEASC Best Practices for Electronically Offered Degree and Certificate Programs - developed by the eight regional accrediting commissions in response to the emergence of technologically mediated instruction offered at a distance as an important component of higher education

*IQAT - Interactive Quality Assessment Tool (benchmarking for distance learning leaders)

RESOURCES SPECIFIC TO NEW STUDENTS, ORIENTATION, etc.

*IMS GLC Adoption Standard: Best Practices for Prospective and New Student Introduction to e-Learning

Efficiently Find the Information and Documents You Need: Strategies and Software for Managing Information Overload and Building a Personal Knowledge Base

Presenter: Graham Glynn, Stony Brook University

8:30 - 9:45 am Campus Ctr 206

Hands-On Demo (Intermediate); Personal Knowledge Management & User Created Content

Information overload is a significant problem for today's knowledge worker. Even highly specialized individuals find it difficult to know everything about their chosen field. Successful knowledge workers know the essential core content of their field and have developed strategies to rapidly find and apply new information as needed.

We will discuss and demonstrate mechanisms to structure and categorize information based on each individual's existing knowledge and to distinguish easily new and important information from the background clutter. Since the classification and structuring mechanisms are individually designed, information retrieval is fast and intuitive.

DON'T SIT

Presenter: Karen Messina, Orange County Community College
Co-Presenter(s): Brenda Capuano, Orange County Community College; Barbara Fiorello, Orange County Community College; Robert Mullin, Orange County Community College; Thomas Stack, Orange County Community College

8:30 - 9:45 am Lanigan 106

Birds of a Feather (Intermediate); Active/Student Centered Learning - Engaging Students in the Classroom

In brief discussions, colleagues noticed that we were sharing ideas but in a hit or miss fashion, with no idea of what may or may not be successful. There are a myriad of resources, technological aids and approaches to learning available, but keeping track of them or implementing new ideas is time-consuming and a bit intimidating. A small group of instructors with similar teaching styles decided to form an ad hoc clearing house or committee to organize and track these innovations informally.

The title DON'T SIT (Deciding on New Techniques; Sharing Innovative Technology) was based on a student pet peeve: the professor who sits at a desk and reads the textbook aloud.

This informal group will share successes, failures, and some student feedback from face-to-face, web-enhanced and distance learning classes.

Designing an Active Learning Environment:: Lessons Learned

Presenter: Phil Oettinger, Monroe Community College
Co-Presenter(s): Terry Keys, Monroe Community College

8:30 - 9:45 am Lanigan 105

Birds of a Feather (Introductory); Teaching and Learning in Innovative Spaces (Real & Virtual)

Monroe Community College has created a new center for active learning designed to be an incubator for classroom innovation. Through the creative integration of technology and room design, this space offers classes a unique environment for collaborative learning.

Once a typical classroom filled with desks and chairs, the newly renovated room now functions as "a center for active learning" designed to support the many ways students learn today as well as a variety of ways faculty may want to teach. The space supports discussion, lecture or group work and offers multiple ways to display and share content.

The center – with strategically placed, mobile furniture – features a SMART Symposium; two SMART interactive whiteboards; 10 Huddleboards; three video data projectors, including a wireless, wide-format projector; and two document cameras. It also houses four long tables and enough swivel chairs to seat 32 students.

The presenters will cover all aspects of planning, design, construction and implementation of this space. As the session is designed as a Birds of a Feather, we anticipate a highly interactive discussion sharing the knowledge and expertise of all participants. We will also be able to demonstrate some of the interactive technology included in this space.

Blending High Tech and Low Tech, A Security Blanket for All

Presenter: Joyce Chizick, Genesee Community College,

9:15 - 9:45 am Lanigan 104

Paper (Introductory); Active/Student Centered Learning - Engaging Students in the Classroom

Working in the fields of art history and textiles has become an increasing challenge. Students seem to have less exposure to their rich cultural backgrounds as well as to fibers, fabrics and fabrication than students ten years ago. In art history the student entries have made them more aware of their surroundings and they begin to incorporate this learning into other class work. For the textile students the concept of ‘mending’, ‘doing the laundry’ and ‘ironing’ are unknown and they have no context which relates to the course material.

Traditional PowerPoint presentations, CD’s, index cards, and hands-on activities enable these concepts to be embedded and useful for today’s students. By incorporating video clips, YouTube excerpts, and magazine and newspaper clippings into the PowerPoint presentations students become engaged and interested and have a comfort level that increases retention of important information. The index cards are used as a classroom CHAT for the instructor and fellow classmates. They enable communication of classroom material, student needs, group work and attendance. (They also facilitate learning the names of the students.) PowerPoints have helped incorporate Internet information, YouTube spots, industry experts and clips from various advertisements. Movies, including classics such as 'Roman Holiday,' and 'Easy Rider' as well as more recent attractions such as 'Legally Blond,' (both 1 and 2), 'Two Weeks Notice,' 'The Devil Wears Prada' and 'Because I said So' help students understand the visual cues we attach to specific attire. TV spots are also available for additional engagement. Magazines are still a major form of communication in the fashion industry and the art world. Students use print for expanding the textbook information by adding articles to their class workbooks.

These are shared in groups and then specific entries are selected for sharing with the entire class. I often add student entries to future PowerPoint presentations to enhance and update the course material. I encourage students to explore media outside of the usual fashion print media. 'National Geographic' has excellent references to historical and cultural uses of textiles. Using images from these sources combined with questions from the course text expands the students' base of information and reference materials. Combining newer technology with older approaches

has the feel of a security blanket for many who fear the newer approaches and enables those advanced in the use of technology to expand and develop their skills. To quote 'Candide,' "Surely this is the best of all possible worlds."

Engaging Students: Strategies for Implementation and Use of Clickers for Formative Feedback

Presenter: Elizabeth (Dobbertin) Larzelere, New York Chiropractic College

9:15 - 9:45 am Campus Ctr 202

Paper (Intermediate); Active/Student Centered Learning - Engaging Students in the Classroom

Millennial students are accustomed to constant engagement with technology and expect instant feedback as they expand their knowledge in an educational setting. The use of clickers (student response systems) is a way to increase student engagement in the classroom with the result being the use of powerful formative feedback. How does an institution of higher education get started with using such a technology? How might the clickers be used to maximize the student involvement in the learning process? Is there a steep learning curve for the faculty member? Who will be responsible for training the faculty? What software might be required by faculty and for the classroom where the course is being taught? Does every student have to purchase a clicker? How might a pilot program be funded? These are some of the questions that need to be considered by educators as they develop an implementation plan for use of clickers in the classroom.

Research data will be presented on the overall experience of implementing clickers at New York Chiropractic College. The clickers were used both in classroom and clinical settings as a way to help students work through progressive disclosure case studies, to prepare students for tests and board exams, to evaluate students' grasp of homework assignments, and to provide a springboard for class discussions. This data speaks of the ease and challenges of use, increased student engagement and learning, and general comments shared by students and faculty in surveys and focus groups.

Through hands-on experience, the attendees will learn some strategies for implementing and using this powerful formative feedback tool.

Using the Creation of Video Games to Reinforce Object-Oriented Programming (OOP) Principles...while simultaneously increasing the "fun" factor for students

Presenter: Richard Marcoux, SUNY College of Agriculture and Technology at Morrisville

9:15 - 9:45 am Lanigan 102

Paper (Advanced); Discipline-specific Technologies

There has been an explosion in the number of game design programs being introduced throughout the world. These programs have ranged from individual, non-credit courses offered in an ad-hoc manner through full programs at the Associate's, Bachelor's, and Master's degree

levels. There are even Ph.D. programs being added to meet the growing research interests in this area.

Game design can focus on a number of different areas. It might involve the design of 3D models or the writing of the software for the game. In the game design courses offered by the Computer and Information Technologies Department at Morrisville State College, our emphasis is on the development of software to create games.

Although there is a great deal of interest in the area of developing game software, it is still a relatively young area, and so the quality of texts available for use in teaching game programming varies widely. Although some game programming texts use classes and other aspects of object-oriented programming (OOP), not all do so.

This presentation will discuss the author's experience teaching game design programming using texts that both include and don't include OOP. Additionally, participants will be encouraged to discuss their experiences using OOP.

Technoheutagogy: Empowering Learner-Directed Learning with ANGEL and Web 2.0 Tools

Presenter: Bill Pelz, Herkimer County Community College
Co-Presenter(s): Alexandra Pickett, SUNY System Administration

9:15 - 9:45 am Lanigan 103

Paper (Intermediate); Active/Student Centered Learning - Engaging Students in the Classroom

The Internet has the potential to change the educational paradigm for adult learners in fundamental ways. Adult learners are drawn to online classes for a variety of reasons, but all too often they get turned off because of course design decisions that ignore their unique motives and needs. The presenter will explore some of the motivational and cognitive needs unique to adults, and suggest course design strategies, including a technology-enhanced learner-directed online learning environment and Web 2.0 tools, to facilitate their engagement.

Using the Improvement-Focused Model as a guide for Evaluating an Online Teacher Training Program

Presenter: Lisa Snyder, SUNY Empire State College

9:15 - 9:45 am Lanigan 107

Paper (Introductory); Translating Teaching, Learning and Assessment Research into Practice

A recent research study investigating the effectiveness of an online teacher training program will be presented. This study focuses on the use of the Improvement-Focused Model along with a mixed-method research design to identify discrepancies between the needs of the target population, the program objectives, and the online courses.

The purpose of this study was to determine the effectiveness of the program in preparing teachers based on the program's learning objectives and to determine whether the program adequately prepared teachers for their current positions. The researcher will show how she used the eight steps of the Improvement-Focused model in combination with a teacher survey and teacher interviews to identify recommendations for the program and areas for future research.

Along with identifying changes for program content, a key finding in the data pertains to the needs of learners in the online environment. Data showed that online courses were more effective when instructors maintained a consistent presence and provided timely feedback, offered specific criteria for online writing assignments, and required a high level of thinking and writing on the discussion board posts. How this model can be used across disciplines will be discussed.

Audience members will understand how the Improvement-Focused Model can be used across disciplines for evaluating the effectiveness of online programs.

SESSION 5

The Role of Commitment to Pedagogical Quality: The Adoption of Instructional Technology in Higher Education

Presenter: Patricia Baia, University at Albany, Albany College of Pharmacy

2:15 - 2:45 pm Lanigan 107

Paper (Introductory); Translating Teaching, Learning and Assessment Research into Practice

This study examined the importance of faculty's commitment to pedagogical quality (CPQ) in predicting instructional technology adoption. Pedagogy refers to deep knowledge of the processes and practices of teaching and learning. Current Instructional Technology Adoption Models (ITAMs) ignore issues of pedagogy and are mostly developed for an alternative audience and environment, outside the realities and characteristics of higher education. This study identifies some factors that motivate full-time college and university faculty to incorporate instructional technology in or outside the classroom. During the spring 2008, a customized electronic survey of 27 questions was developed and implemented to four higher educational institutions, yielding 104 usable surveys. Data was analyzed with SPSS using correlation and backward stepwise regression methods. Results indicated CPQ is related to instructional technology adoption. Beliefs about instructional technology and certain categorical variables (academic title, years taught in higher education, and tenure status) affect both CPQ (independent variable) and faculty adoption of instructional technology (dependent variable) independently. Intrinsic and extrinsic motives and teaching in health-related courses also predict adoption of instructional technology.

Using The LinkedIn Social Networking Application To Help Build The Student-Profession Link

Presenter: Joseph Gerard, SUNY Institute of Technology at Utica/Rome

2:15 - 2:45 pm Lanigan 106

Paper (Introductory); Active/Student Centered Learning - Engaging Students in the Classroom

The difficult chore of introspection is especially taxing to undergraduate students, many of whom lack experience both in the professional workforce and in managing their own day-to-day needs. Students lacking introspection experience have trouble putting personal reflections concerning their desires and goals into coherent words and then forming plans in a professional manner. Add to that mix the impediment created by static or non-active learning course structures where students absorb disseminated factoids and you have a recipe for the perfect disaster.

Linkedin is an increasingly popular professional social network. This presentation covers some of the potential/perceived pros and cons of this Web 2.0 social network application based upon active learning theory and then walks attendees through student reactions to LinkedIn based upon their experiences moving through one semester of often first-time LinkedIn use. The presenter relies upon professor narrative, a visual demonstration of LinkedIn's particular network structure, and the process used to take students from no use to competent use in a semester's time. All sections of the presentation are supported by student narrative and insight taken from surveys, interviews, and discussions. Rich handouts in worksheet format will be provided along with a learning objective-based lesson plan so attendees can leave with something in-hand.

Going Digital in the Classroom with a Graphics Tablet and Graphics Editing Software

Presenter: Andréa Marchese, SUNY Maritime College

2:15 - 2:45 pm Lanigan 102

Paper (Introductory); Discipline-specific Technologies

For classes requiring an interactive and dynamic presentation of material, standard presentation software is often limiting. The use of a graphics tablet and graphics editing software offers the ability to combine handwritten notes with graphic images (including handwritten notes on graphic images) with a simple set up and the use of a standard projector and screen. Using the graphics tablet allows the instructor to write freely as he/she would do with chalk or marker. The use of graphics editing software (such as Adobe Photoshop) allows for the incorporation of other graphics content into the body of the class notes. Scanned pages from textbooks, selections from PDF handouts, and graphics developed in outside software packages can easily be pasted into the scroll of class notes. Notes can be written in a multitude of colors, and erasing mistakes is easy. The scroll of notes can be saved as a single jpeg file for easy online posting and viewing. Mathematics examples are presented.

Integrating Emerging Technologies into your Online Program

Presenter: Larry Dugan, Finger Lakes Community College

Co-Presenter(s): Terry Keys, Monroe Community College

2:15 - 3:30 pm Lanigan 103

Birds of a Feather (Introductory); Active/Student Centered Learning - Engaging Students in the Classroom

This birds of feather will discuss participants' experiences and strategies with the integration of emerging technologies into their online environments. Integrating new technologies always presents challenges and this highly interactive session will focus on successful strategies to overcome them and also address the question of why we should bother.

Wiki vs. LMS: One Professor's Decision Process

Presenter: Sara Marcus, Queensborough Community College / CUNY

2:15 - 3:30 pm Campus Ctr 202

Hands-On Demo (Intermediate); Personal Knowledge Management & User Created Content

Rather than using an LMS to engage students, the instructor determined to experiment using a wiki for student engagement and collaboration on projects and assignments. This session shows how she used a wiki to create a visual, collaborative, online album. Wikis are highly collaborative by nature. Participants will brainstorm, gather subject expertise and work together to present a single project. Experiences, successes, and failures will be explored; and participants will be encouraged to brainstorm ways in which they can use a wiki in their own courses, practicing in a live wiki on their own.

Online Tutoring - Lessons Learned

Presenter: Pam Youngs-Maher, Onondaga Community College

Co-Presenter(s): Karen Hale, Onondaga Community College; Ted Mathews, Onondaga Community College; Malkiel Choseed, Onondaga Community College; Steve Pierson, Onondaga Community College; Deb Irwin, Onondaga Community College

2:15 - 3:30 pm Lanigan 105

Panel (Introductory); Teaching and Learning in Innovative Spaces (Real & Virtual)

Online students who need tutoring to complete a course successfully may face obstacles with traditional tutoring such as distance from campus or time constraints with "normal" business hours. Onondaga Community College created Night Writer to tutor students virtually with writing assignments from 9 p.m. to midnight on week nights and on weekends. In fall 2008, we also implemented online tutoring spaces (groups) in ANGEL for several courses in disciplines such as accounting, computer studies, economics and remedial reading. In spring 2009 we added tutoring for four math courses and an introductory psychology course.

This panel is designed to share some of our more significant learnings. Training the tutors in ANGEL was easy. Creating the content took time, and setting up the "structure" for welcoming students, signing them in, asking questions, and exchanging homework all presented difficulties.

Our Uber-Tutors added students to the tutor groups and managed the groups, yet students had trouble with access in the first go around.

Come find out about the tutor training, supervision and accountability issues we worked through. Look at how privacy concerns were addressed, while still making sure tutors had access to both course content and publisher website materials. Find out what faculty and tutors have done successfully to link students with tutoring, and what we know we won't do again! Examine how the whole process fits in with the mission of the college and our vision for increased access.

Make Universal Design for Learning (UDL) Part of Your Agenda – Part I

Presenter: Kathleen Gradel, Fredonia State,

Co-Presenter(s): Alden J. Edson, Western Michigan University

2:15 - 3:30 pm Mahar 211

Hands-On Demo (Introductory); Active/Student Centered Learning - Engaging Students in the Classroom

On today's higher education campuses, the mix of students is increasingly diverse. Classroom seats are likely to be filled by students who face any one of many possible learning challenges, including learning disabilities, English language barriers, emotional challenges, low motivation/engagement, physical disabilities, and sensory disabilities. Students range from adolescents to second-career professionals. Further, post-secondary students arrive on campus with a broad range of skills (and shortcomings) in managing their own learning and study. Higher education faculty and staff who want their students to succeed know that a singular approach to teaching does not work.

Universal Design for Learning (UDL) helps educators respond to student learning challenges. UDL is based on a framework of three approaches (CAST, 2004)

- a) Multiple representation alternatives or recognition networks, to give learners multiple ways to acquire information and knowledge;
- (b) Multiple expression alternatives or strategic networks, to give learners alternatives for showing what they know; and
- (c) Multiple engagement alternatives or affective networks, to maximize learner motivation/interests and target challenges.

UDL involves a purposeful approach to building flexible goals, methods, materials, and assessments that accommodate student differences. UDL features embedded in learning tasks, materials, and targeted outcomes can help students with disabilities, and can benefit those without disabilities. UDL uses technology as the basis of many of these potential strategies to make education more inclusive. According to CAST (2005), "Flexible digital media makes it easier than ever to provide these multiple alternatives and therefore customize teaching and learning."

This workshop will use case-based IHE examples to highlight UDL alternatives used in a variety of courses (e.g., methods, field-based, and traditional lecture). The workshop will give participants practice in UDL applications via: (a) Digital media available to IHE faculty; and (b) Off-the-shelf and web-accessible applications. Further, presenters will highlight feasibility concerns, including (a) accessing materials and software; (b) upgrading faculty comfort and skills in UDL; and (c) organizational variables and supports.

Sustaining Learning Communities with Social Networking

Presenter: Diane Gal, SUNY Empire State College

3:00 - 3:30 pm Lanigan 106

Paper (Intermediate); Active/Student Centered Learning - Engaging Students in the Classroom

Examples of how a social networking site can be used to enhance student learning while providing them with a space to engage with peers will be presented. The Master of Arts in Liberal Studies program at Empire State College serves diverse students from across the state. Each student crafts an unique degree plan which includes a variety of self-created electives, and then completes a final project that represents the culmination of the program of study. The MALS program launched a social networking site in January 2009 in order to give students a place to learn about each other's academic interests, ongoing research, and final projects, despite their geographic separation. The networking site also includes a variety of materials in different media formats meant to support student learning of core course objectives and overall program navigation. Following an early focus group session, students were surveyed on their use patterns, attitudes towards sharing with peers on the site, and understanding of core course objectives. These findings will be presented and discussed.

Giving Mathematics A Second Life

Presenter: Richard Glass, Nassau Community College

3:00 - 3:30 pm Lanigan 102

Paper (Intermediate); Discipline-specific Technologies

Second Life and the associated scripting language provide a simulation platform for mathematical topics that can be used by students with little or no programming experience. Major and non-major topics only available on paper and 'small screen' (calculator) can be made to come alive in this videogame environment. Students with some programming experience can be taught to modify and extend these simple scripts to create different, more complex animations. Students without programming experience learn that mathematics is a vital tool in the creation of videogames. DarkGDK, a free C++ add-on, provides mathematics/computer science majors with a library that allows them to hone their programming skills as they implement mathematical formulas in game authoring.

Presenter-authored software programs that make use of three-dimensional coordinate geometry, vectors and parametric motion will be demonstrated and distributed. Best practices, and pros and cons of the software environments, with examples that can be adapted to individual courses, will be discussed. Similarities and difference between the programming style and video game terminology and constructs will be covered. Participants will be encouraged to formulate additional simulations applicable to both mathematics majors and general liberal arts students. This session is appropriate for instructors at all levels of mathematical, computer science and physics/engineering.

The Second Life scripts can be used as is or easily adapted to other disciplines to create videogame-like environments.

Web Research Data as an Interactive Teaching Tool for Educators

Presenter: Pam Weidel, University at Buffalo,

3:00 - 3:30 pm Lanigan 107

Paper (Advanced); Translating Teaching, Learning and Assessment Research into Practice

Translating assessment knowledge into teaching complex analytical and conceptual research models requires new ways of utilizing technology and resources. Large scale secondary data enable researchers to generalize findings to entire populations. The presenter will highlight the US Government's National Center for Educational Statistics, and demonstrate the capability of interactive web-based tools utilized for secondary analysis of national and international longitudinal data. Governmental longitudinal research surveys subjects over multiple years with multiple formats. The government collects and synthesizes this data into interactive web-based formats available for educators and others to use for secondary analysis in multiple disciplines.

For educators working and teaching in research and higher education, the analysis offers quantitative data that has already employed required statistical techniques into the research design to assure validity and reliability. This type of research is now often being required for funding requests and program assessment purposes within teaching and administrative systems. It is a way for educators to utilize pre-existing data accessible via government web sites for use in assessment and teaching purposes. The National Center for Educational Statistics is also a great tool for educators to engage students in the research process through hands-on web technology, and enables educators to teach valuable skill sets that a student will be able to use in their present education and beyond.

These research tools are also historical time capsules for educators interested in having students look at data over time to see how trends in research and large scale survey data have evolved. They can add a quantitative approach to their curriculum even if they teach qualitative-focused research processes in their field of study. Since this is a governmental resource it also employs many people and gives educators built-in support for their students outside a traditional campus environment. This research tool provides email and phone support from national researchers who work directly with the data sets and have complex knowledge of data collection and analysis. It can also offer opportunities and alternatives for interested students to attend training

and conferences in this type of data analysis.

SESSION 6

Challenges of Implementing SimMan Simulator in a Nursing Skills Lab

Presenter: David Curry, SUNY Plattsburgh

4:00 - 4:30 pm Lanigan 102

Paper (Intermediate); Discipline-specific Technologies

Nursing is an applied science associated with a practice profession. Education in nursing has always included a skills laboratory component for such tasks as bed-making and bathing, and a hospital component for more complex patient-care skills. As the hospital environment becomes more complex, and patients become sicker, it is essential to maximize the skills that can be taught before students encounter real patients.

SimMan is a computer-controlled mannequin that breathes, has a heartbeat and pulses, and can speak. In an appropriate nursing skills laboratory setting, students can practice higher level skills more independently than is possible, or even safe, with real patients in the hospital. They have the freedom to make errors that would have serious consequences in real life and learn from those errors in real time. A suspension of disbelief by the students is required and here is where the challenges begin.

First, the environment must allow the students to feel responsible for the care of the Simulator. To that end, the simulator must be in a location separate from the main skills lab (and its attendant noises) and the students should be in uniform. The faculty member overseeing the scenario should also be dressed appropriately. The simulator should also be given a name and always addressed by name. The simulator space needs a telephone as well, so students can call for new orders, Xray, etc.

Scenarios must either be developed by faculty or purchased and should coincide with course content when appropriate. Either purchase or creation has its own set of additional challenges. Scenarios should last from five to 20 minutes for groups of approximately four students. With four students, all can be participants (charge nurses, primary RN, LPN, nursing student, nurses aide, family member, etc). The faculty member will function as physician or other resource person to be summoned as needed.

Scenarios must be immediately followed by debriefing. This is the most valuable element of the student learning and must include student self-evaluation as well as faculty input. Audio and video recording of the session can also be included.

This is just an overview of the challenges to a successful human (SimMan) simulator implementation. Different options to meeting these challenges will be presented and discussion of these and other issues will be encouraged.

ANGEL Tips & Tricks: Student Engagement – Macros, Automates and Reports Make for More Effective Management

Presenter: Loretta Driskel, Niagara County Community College

4:00 - 4:30 pm Lanigan 103

Paper (Intermediate); Active/Student Centered Learning - Engaging Students in the Classroom

Research has shown that engaging students with a variety of learning objects and giving them frequent feedback can help them to be successful in their online classes. Instructors who follow best practices for teaching online enhance their course content with new media and give their students frequent feedback, through announcements, course mail messages, discussion rating and comments, and grades and feedback on assignments.

See how faculty on our campus use the macro tool and ANGEL features to encourage active engagement within their course while considerably shortening the time they spend giving repetitive individual feedback. Access to “How to” instructions for several tips & tricks will be provided.

Orientation to Online Learning - Online

Presenter: Mike Kaminski, Onondaga Community College

Co-Presenter(s): Pam Youngs-Maher, Onondaga Community College; Scott Titus

4:00 - 4:30 pm Lanigan 105

Paper (Introductory); Teaching and Learning in Innovative Spaces (Real & Virtual)

While online learning offers convenience and flexibility for students, there are still “rules of the road” and “tips for success” that can help learners increase their confidence and competence in the online environment. Distance and time constraints often prevent online learners from traveling to campus for a college sponsored orientation, even if they value the content in helping improve their success.

Some Online Learning programs have opted for packaging orientation information in a CD, some have chosen print materials, and others have utilized the online medium. Onondaga Community College designed an “Orientation to Online Learning,” available on its website 24/7. Set up as a gallery of 9 albums, most albums run 2 minutes in length, offer narratives along with the video segment, and cover such topics as Tips from Online Faculty, Tips from Online Students, Technology Tips, Academic Services, Student Services, and short videos on How to Register Online and a Tour of the Online Learning website. The orientation basically introduces Virtual OCC.

Come find out how the orientation was planned, what software was used, and how it was all woven together. The beauty of this model is that as things change, an album can be updated, rather than having to remake an entire CD or movie. Students don’t need special software to view it, either!

Learning Styles and Online and Computer-Mediated Learning

Presenter: Kristin Lovelace-Ross, Tompkins Cortland Community College

4:00 - 4:30 pm Lanigan 104

Paper (Introductory); Teaching and Learning in Innovative Spaces (Real & Virtual)

Learning style (or cognitive style) affects what type of instructional methods provide maximum benefits for students. Online courses and computer-mediated learning experiences (such as chat rooms or online homework programs) tend to cater to a small range of existing learning styles, forcing some students to rely on non-preferred learning styles and hindering optimum learning. However, computers and other technologies (such as MP3s and podcasts) can utilize a wider range of teaching and learning modalities, and therefore can improve the learning experiences of students with a wider range of innate learning styles. Since online and computer-mediated learning are becoming an increasingly large percentage of all educational experiences, it is in the best interest of all educators to

- 1) explore methods for determining the learning styles of our students, and
- 2) to understand the methods and available technologies that can help us to provide the best learning experience for the widest range of students.

The presenter will introduce a variety of learning styles inventories and the basics of understanding the underlying styles, as well as some ideas for how to expand traditional online and computer-mediated educational experiences to serve students with differing preferred learning styles.

Skill Building: Building in Second Life

Presenter: Judie Littlejohn, Genesee Community College,

4:00 - 5:15 pm Campus Ctr 202

Hands-On Demo (Advanced); Teaching and Learning in Innovative Spaces (Real & Virtual)

Build with prims in Second Life: create 'classroom space' prim furniture, learn how to link the prims, texture, copy, edit linked parts, set permissions, and modify. Attendees must already have an avatar in Second Life and be adept at navigation and communication skills.

This demo will familiarize participants with the Second Life Create and Edit menus. Participants will build a functional multi-prim piece of furniture, link the prims together, and texture the object. Participants will also copy the object, set permissions, edit/modify/transmogrify the object into another item and incorporate different prim types into the newly created piece.

Active Learning in an Instructional Technology Faculty Learning Community: the Program, the Products, and Members' Perspectives

Presenter: Carmen Montgomery, Niagara University

Co-Presenter(s): Mary Ellen Bardsley, Sherriann Cianca, Richard Cramer-Benjamin,
Frances Crosby

4:00 - 5:15 pm Lanigan 106

Birds of a Feather (Introductory); Active/Student Centered Learning - Engaging Students in the Classroom

In January 2008, Niagara University hosted its 7th Annual International Conference on Active and Integrative Learning. Dr. Milton Cox of Miami University in Ohio presented his work on Faculty Learning Communities (2004). Following the conference, the University decided to pilot a faculty learning community (FLC) program and chose instructional technology as its focus. Jennifer Herman, Director of Instructional Support at N.U., became the FLC Program Director. Jennifer obtained a modest budget, reallocated some instructional resources, and recruited members and a facilitator for the FLC. Members joined because they were dedicated to creating more opportunities for active learning and innovative teaching in their courses, and because they wanted the opportunity to collaborate regularly with colleagues outside their own departments.

In August 2008, nine faculty members from the diverse departments of Business, Mathematics, Nursing, English, and Education, met on a sunny day in August by Lake Ontario at Ft. Niagara for a picnic and planning session. At the inaugural session, the new learning community inventoried their collective IT skills and resources, listed their IT learning goals, and identified the barriers they felt had prevented them from making progress on those goals. They realized that they could not teach students to use Web 2.0 tools or sophisticated mind mapping software unless they learned them first, but many had experienced difficulty acquiring this type of training on their own or through traditional IT training. To acquire this training, they identified internal resources, such as members with advanced IT skills who could provide training to the group, and they proposed types of training that required outside resources.

The ITFLC meets bi-monthly and is not a committee in the traditional sense. There is no imposed structure or agenda from administration; the members choose the direction in which their training needs to go, both as a group and individually, and the director and facilitator work together to locate and allocate resources to provide the desired training and scholarship opportunities.

While our IT goals are similar to those at most institutions of higher education, we believe that the FLC venue is a unique and potent tool for achieving those goals. We look forward to sharing finished products and training outcomes with our colleagues at CIT, and because our experience has been overwhelmingly positive and productive, we want to encourage colleagues at other institutions to consider implementation of the FLC model for instructional technology training and education.

Student Response System Adoption: A Case Study

Presenter: Joseph Zawicki, SUNY College at Buffalo
Co-Presenter(s): Richard Engelhardt, SUNY College at Buffalo; Melissa Miskiewicz, SUNY College at Buffalo; Elisa Bergslien, SUNY College at Buffalo; Timothy Sager, SUNY College at Buffalo

4:00 - 5:15 pm Lanigan 107

Panel (Introductory); Translating Teaching, Learning and Assessment Research into Practice

Like many other colleges and universities, Buffalo State College has seen a surge in the number of faculty members who have recognized the value of student response systems (“clickers”) in the classroom. We have also come across many of the same issues and problems that others have faced, including the choice between standardization on one manufacturer vs. allowing faculty to choose which they prefer, and the effects this decision has on faculty, students, and support staff. We weighed the costs of the extremes of dictatorial standardization and of organic chaotic technology adoption, and we found that our needs were best met by having the schools within our college choose a standard product for themselves, allowing for choices which best fit the pedagogical need of faculty and the economic realities students while maintaining a feasible support burden for IT and instructional resources staff.

Faculty and support staff will bring their perspectives on the adoption of student response systems at Buffalo State College. We will describe the different needs of two of our Schools and the processes each went through in choosing their preferred technology, as well as other details of where we started, how we’ve arrived at where we are today, and where we plan to go from here.

Enhancing Audio Podcasts for Online and Mobile Learning

Presenter: Joe Fahs, Elmira College

4:45 - 5:15 pm Lanigan 103

Paper (Intermediate); Active/Student Centered Learning - Engaging Students in the Classroom

Course management tools such as ANGEL's Course Syndication or Blackboard's Manage Podcast allow instructors to deliver audio-formatted course materials to their students. Although creating, optimizing, and tagging these audio recordings require planning and preparation, the actual process of creating a course podcast requires just a few basic steps. Students subscribe to the podcasts, typically with iTunes, and organize them in their personal music library for listening on their PC or Mac. Subsequently uploaded episodes (recordings) are automatically delivered to iTunes, even if students are not logged into your course.

Audio podcasts are familiar to most everyone; however, enhancing podcasts with timed images, chapter markers, web site links, and text over audio is less well known. Yet these enhanced podcasts offer promising online, assisted, and mobile learning alternatives that traditional audio

podcasts do not easily provide. When formatted for mobile learning on devices such as iPods and iPhones, enhanced podcasts and audiobooks engage students in new, unique, and exciting ways.

Join me in this session as we look at and listen to enhanced podcasts and custom audiobooks, including text-to-speech for assisted learning. Software solutions that create these special materials will be demonstrated, including converting PowerPoint presentations into audio-enhanced lectures.

Make Universal Design for Learning (UDL) Part of Your Agenda – Part II

Presenter: Kathleen Gradel, Fredonia State,
Co-Presenter(s): Alden J. Edson, Western Michigan University

4:00 - 5:15 pm Mahar 211

Hands-On Demo (Introductory); Active/Student Centered Learning - Engaging Students in the Classroom

On today's higher education campuses, the mix of students is increasingly diverse. Classroom seats are likely to be filled by students who face any one of many possible learning challenges, including learning disabilities, English language barriers, emotional challenges, low motivation/engagement, physical disabilities, and sensory disabilities. Students range from adolescents to second-career professionals. Further, post-secondary students arrive on campus with a broad range of skills (and shortcomings) in managing their own learning and study. Higher education faculty and staff who want their students to succeed know that a singular approach to teaching does not work.

Universal Design for Learning (UDL) helps educators respond to student learning challenges. UDL is based on a framework of three approaches (CAST, 2004)

- a) Multiple representation alternatives or recognition networks, to give learners multiple ways to acquire information and knowledge;
- (b) Multiple expression alternatives or strategic networks, to give learners alternatives for showing what they know; and
- (c) Multiple engagement alternatives or affective networks, to maximize learner motivation/interests and target challenges.

UDL involves a purposeful approach to building flexible goals, methods, materials, and assessments that accommodate student differences. UDL features embedded in learning tasks, materials, and targeted outcomes can help students with disabilities, and can benefit those without disabilities. UDL uses technology as the basis of many of these potential strategies to make education more inclusive. According to CAST (2005), "Flexible digital media makes it easier than ever to provide these multiple alternatives and therefore customize teaching and learning."

This workshop will use case-based IHE examples to highlight UDL alternatives used in a variety of courses (e.g., methods, field-based, and traditional lecture). The workshop will give participants practice in UDL applications via: (a) Digital media available to IHE faculty; and (b) Off-the-shelf and web-accessible applications. Further, presenters will highlight feasibility concerns, including (a) accessing materials and software; (b) upgrading faculty comfort and skills in UDL; and (c) organizational variables and supports.

Teaching in the 21st Century

Presenter: Harry E. Pence, SUNY Oneonta,

4:45 - 5:15 pm Lanigan 104

Paper (Introductory); Active/Student Centered Learning - Engaging Students in the Classroom

The past decade has probably seen the introduction of more innovative learning tools into the college classroom than was the case in the past 50 years, and the coming decade will surely see an increasing rate of change. New information technologies are already arriving faster than they can be effectively integrated into the educational process. We are just beginning to understand the new capabilities available to students in our classrooms. It is silly to think that the coming generation of students will be satisfied to sit passively for lectures that merely present information easily obtained on their own with a WiFi connected iPhone. Social tagging, blogging, and wikis are being integrated into the learning experience, even though more slowly than they are accepted by society in general. Perhaps the most overlooked learning application is video sites, like YouTube. Are we ready to accept images competing with, and possibly replacing, the traditional dominance of text? Mash-ups are becoming common in our students' lives; how many teachers are ready to create class lessons based on the Rip-Mix-Burn strategy? This talk will attempt to examine these trends to see how they will affect teaching and learning methods in the coming decade.

Online Support Services for Millennial Undergraduates

Presenter: Marie Pullan, Farmingdale State

4:45 - 5:15 pm Lanigan 105

Paper (Introductory); Active/Student Centered Learning - Engaging Students in the Classroom

Education has changed as a result of technological advances. Distance learning, particularly online learning has rapidly increased its presence in higher education. At the same time, a new generation of students, characterized as being the first generation to grow up with the Internet, are entering college. This generation, commonly called Millennials, expects access to the Internet to manage their daily lives. However, as they enter college, many discover that support services readily available on campus are not available online. Online learners are left to fend for themselves. Additionally, it is likely that other services, yet to be identified, might be required by Millennial students.

As increasing numbers of undergraduates take online courses, a full set of student services should be readily available through the Internet. Students require online support services to succeed in their educational endeavors. Ideally, support services should be pervasive and available without time and place restrictions.

A comprehensive list of the non-academic support services universities provide to their undergraduates would provide a baseline for the development of online support services.

The list of universities to be examined will be developed using an accreditation body such as Middle States. Available services are listed on the websites of various colleges. The qualitative data collection in this case will be through an examination of documents. The comprehensive list will prove to be a valuable resource to administrators considering the development of online student support services. The practical implication is to outline a planning protocol that may be used for establishing successful online support services for all students.

Modeling Mendel's Laws on Inheritance in Computational Biology and Medical Sciences

Presenter: Gurmukh Singh, Fredonia State

4:45 - 5:15 pm Lanigan 102

Paper (Advanced); Discipline-specific Technologies

The simplest and most practical way of employing the tremendous computational power of widely available, versatile software Microsoft Excel 2007 to perform interactive computer simulations for junior and senior undergraduate students in biology, biochemistry, biophysics, microbiology, and medicine in the college or university classroom will be demonstrated. We developed the required computer algorithm, which used a built-in pseudo-random number generating function in Excel 2007, to model two of Mendel's basic laws of heredity in evolution for plant and animal species. We performed more than 16,000 computer simulations to investigate the behavior of dominant and recessive genes to verify Mendel's laws of heredity. Our simulation work corroborates the experimental observations of Mendel's research on inheritance in the *Pisum* hybrid species. In the future, we plan to compare our simulated data with that of experiments done on *Drosophila melanogaster*, a kind of fruit fly extensively being used as a model organism to study genetics and development.