



Health Professions Educational Research Symposium 2010: January 16, 2010
Enhancing Learning with Educational Technology

Platform Presentations

Terry Auditorium: 9:45 am

Huhn K, Deutsch JE. Web-based patient simulation to teach clinical reasoning. University of Medicine and Dentistry of New Jersey.

INTRODUCTION: The literature suggests frequent exposure to realistic patient scenarios is a key component in the development of clinical reasoning skills. Exposure to real patients may be impractical and unsafe. Computerized patient simulations may be an alternative educational tool to frequently expose students to realistic cases and without harm to patients.

PURPOSE: DESCRIPTION OF INNOVATION We have designed a web-based patient simulation program for physical therapists that allows users to complete a history, examine, diagnose and manage a patient case. The program has limited prompting, provides immediate feedback, and is capable of incorporating images as well as audio and video files. METHODOLOGY & OUTCOMES A two-group pre/post-test pilot study was completed comparing outcomes on the Health Science Reasoning Test (HSRT). Instruction for one group was three text cases and the other received the same cases in the simulation program.. Analysis of variance revealed no significant differences for group or instructional method. However, subscale scores of the HSRT were significantly higher for the simulation group on the evaluation sub scale.

RESULTS & DISCUSSION Preliminary data suggest that further study of web-based simulation to teach clinical reasoning is merited. It is likely the three case dose, was not sufficient to effect a change in clinical reasoning skill. We have designed a follow up study comparing a larger groups of students that will complete six cases in either text or simulation format.

Terry Auditorium: 10:20

Echols M, Pandya N. Enhancing geriatrics rotation training through the use of WebCT. Nova Southeastern University College of Osteopathic Medicine.

INTRODUCTION: At NSU-COM monthly clinical rotations end with students returning to campus for an end-of-rotation exam on content learned during the month. Students performed well and faculty felt the exam allowed students to demonstrate competency skills. The challenge of cost and inconvenience had been raised in student evaluations. With the shift toward ACCOM competency based assessment, we used this opportunity to explore alternative learning methods and accommodate learning styles of students.

PURPOSE: Our purpose was to enhance the Geriatrics rotation using a different paradigm.

We decided to utilize design teams, adult learning theory, core competency skills and maximize the use of interactive technology.

METHODOLOGY: We created eight online learning modules to be completed by students during the month rotation. Content of the modules focused on clinical case problems frequently encountered in Geriatrics and online journal articles which highlighted standards of treatment. We eliminated the exam and allowed students to complete the modules at any time accessing it through WebCT. At the end of the rotation students completed an online survey regarding the experience.

RESULTS: The online survey completed by the students focused on questions on the module structure, time needed to complete the module, content, and core competency outcomes. Results indicated student enjoyed the learning experience and felt more prepared to care for elderly patients. Students accessed reading material more frequently and recommended the continued use of modules during the clinical training years.

CONCLUSIONS: Based upon our results, we advocated expanding the use of interactive, case based modules in our 3rd and 4th year curriculum. Guidelines for module development should include using interactive online content, based in adult learning theory and using faculty collaboration on the design team.

Terry Auditorium: 11:00

Ransdell S, Kent B, Gaillard-Kenney S, Long J. The externalization of adult learning in online environments. Department of Health Sciences, Nova Southeastern University.

INTRODUCTION: There is increasing evidence that older and more successful learners may self-report relatively external locus of control compared to younger learners. All students were equated for rote memory performance, pretest knowledge about multimedia pedagogy, and content knowledge in statistics and conflict resolution.

PURPOSE: The purpose of this research is to develop a structural model of the strongest possible online learning among health science college students across the 20 to 60 year old range.

METHODOLOGY: *Participants:* The 109 participants were graduate students in Health Science who are training for a doctorate and plan to teach and serve as professional leaders in a wide range of health care settings. *Materials:* During the first and only physical meeting of the class, at the beginning of the term, consenting participants were asked to complete a pretest knowledge test, and an Internal Control Index (Duttweiler, 1984; Rotter, 1969) evaluation. The Internal Control Index (Duttweiler, 1984) was administered in an attempt to determine self-reliance, motivation, and disposition toward challenges and/or adversity. To assess these qualities the participants were presented with 28 statements such as: “When part of a group, I prefer to let other people make all the decisions” or “I prefer to learn the facts about something from someone else rather than having to dig them out for myself”. Participants were then asked to decide, on a scale of A-E (A being rarely, E representing usually). *Procedure:* Participants were given one (1) full week to complete the task of viewing a presentation and then taking the corresponding quiz. A 10-minute time limit was imposed upon the quiz and the questions consisted of a combination of rote memorization and learning transfer items. Online activity was measured by total hits to the website, total passive hits to the discussion posting or slides, and total active hits in the form of contributions to the discussion posting.

RESULTS: Millennial students showed poorer transfer memory and more internal locus of

control (LOC) than older students. Late boomers represented the most external LOC and were better at transfer memory tasks. Late boomers were also more active in the websites associated with the online courses.

CONCLUSIONS: The results support a socio-cultural interpretation of the externalization of adult online learners.

Resnick Auditorium: 9:45

Vanguri, P. Integration of online discussion boards to enhance peer-to-peer interaction during clinical instructor workshops. Athletic Training Program, Nova Southeastern University

INTRODUCTION: Workshops provide a unique opportunity to enhance dialogue between colleagues in any allied health profession. These positive peer-to-peer interactions promote mentoring that may be continued beyond the classroom.

PURPOSE: This study investigated communication between peers using online discussion boards in conjunction with in-class workshop sessions. This provided participants time to synthesize information from the workshop sessions and promoted further dialogue outside of the classroom. In addition, significant opportunity for follow-up between the participants and instructor was also facilitated through the online discussion board.

METHODOLOGY: During a four-week workshop on instructional strategies for clinical instructors, participants were able to access a secure online discussion board using a course management system. Following each in-class session, weekly discussion board posts provided the opportunity for additional interaction with questions facilitated by the instructor. Participants were given specific requirements for initial posts and replies to posts from other participants. Transcripts from these discussions were analyzed through a qualitative analysis using the QSR*N6 Software.

RESULTS: Results from this study further assessed the acquisition of knowledge from the in-class sessions and also revealed favorable impressions on the online format to increase time for peer-to-peer discussion.

CONCLUSIONS: Future use of online discussion boards in conjunction with clinical instructor workshops may also facilitate similar peer-to-peer dialogue for other allied health professions.

Resnick Auditorium: 10:20

Peach K. Best practices for effective online teaching in a high school setting. University School, Nova Southeastern University.

PURPOSE: This session will focus on the effectiveness of online learning for providing students with the skills needed to succeed in the information age. A variety of interactive online teaching methods will be discussed, which are intended to increase student engagement and promote critical thinking skills.

METHODOLOGY: We will evaluate how an online classroom can be used to increase communication between faculty and students, and in turn, enhance academic engagement and achievement. Examples of the various online learning tools, such as the discussion board and chat room, will be discussed and analyzed.

RESULTS: This session will begin with a review of the seven principles of good practice in undergraduate education, as developed by Arthur Chickering and Zelda Gamson. These

principles can be applied to teaching and learning in any environment. Emphasis will be placed on the use of web-based online technology, specifically WebCT, and its usefulness in the implementation of good teaching practices in a high school setting.

CONCLUSIONS: Participants in this session will gain the knowledge that will enable them to create and implement online programs that will increase student engagement and promote critical thinking skills.

Resnick Auditorium: 11:00

Iemma P, Thomson W. Embracing technology in the classroom. College of Allied Health and Nursing, Nova Southeastern University.

PURPOSE: Upon completion of this session, participants will be able to: 1. Identify social networking tools to support student learning 2. Utilize selected social networking tools as a teaching strategy to assist in meeting course or unit objectives 3. Evaluate how selected social networking tools support student learning.

METHODOLOGY AND RESULTS: This session will introduce the participants to a variety social networking tools such as YouTube and Web 2.0. During the session the participants will engage in interactive activities aimed at utilizing these tools in meeting specific student learning objectives.

DISCUSSION: Increased use of Internet-based social networking tools in education support both personal and professional development.

Melnick Auditorium: 9:45

Oviawe E, Casimir P, Desrosie J, Thomson W. Integration of electronic medical records (EMR) into nursing simulation lab. College of Osteopathic Medicine, Masters of Biomedical Informatics, Nova Southeastern University

INTRODUCTION: Healthcare workforce is increasingly moving towards the global adoption of information technology for efficient delivery of healthcare services. Despite the growing importance of EMR, health professions students have been given little or no hands-on training on EMR during their course of training. The modernization of healthcare calls for the integration of EMR into the learning process of HPD students, thereby exposing them to its use.

PURPOSE: By incorporating EMR into various HPD curricula, students become familiar with this complex technology prior to entering healthcare environment workforce and thus become more comfortable with the skill and technology.

METHODOLOGY: NSU-Nursing Simulation Lab EMR with initial focus on nursing students was designed using the platforms of Microsoft Access, SQL and Visual Basic to provide practical and interactive learning experience while using EMR as part of nursing simulation. It also provides real-life learning experiences for Biomedical Informatics (MSBI) students in the areas of EMR development, implementation and evaluation.

RESULTS: Expect the incorporation of EMR into HPD curricula will greatly improve students learning outcomes and give them hands-on experience to seamlessly adopt the use of such EMR applications in any healthcare environment. And also for the MSBI students to effectively develop, implement, evaluate and customize any EMR applications to the need of organizations.

CONCLUSIONS: (a) Incorporating use of EMR into the curriculum of other colleges (b) measuring the learning outcomes of the students as it relates to effective medical practices

and information retrieval via medical simulations and the use of social networks in 3D virtual environments like Second Life.

Melnick Auditorium: 10:20

Lee K, Melendez B, Carmona M. A pilot to study the use of mobile technology in the classroom. Physical Therapist Assistant Program, Miami Dade College.

INTRODUCTION: Normally, a class full of students distracted by their cell phones or iPods would be a bad thing. However, those involved with the Physical Therapy Assistant Program at the Medical Center Campus of Miami Dade College are actually excited about it!

PURPOSE: The program recently began a pilot that handed out either an iPod Touch or iPhone to each of the 50 students in program. This mirrors a growing trend in education that has seen fewer laptops coming to class and more pocket-sized devices replacing them. Those technologies include lecture capture, learning objects, a student response system, mobile reference materials, and a new breed of educational software that is now available through an online store known as the “App Store.” The App Store is built into both the iPod Touch and the iPhone, and allows students to download the software directly without a computer.

METHODOLOGY: The program recently began a pilot that handed out either an iPod Touch or iPhone to each of the 50 students in the program.

RESULTS: We believe making access to information easier will pay tremendous dividends to our students. We also think this has the potential to positively affect retention and learning outcomes since it has allowed us to change the way instruction is delivered to better fit how students learn.

CONCLUSIONS: The pilot will continue through the end of the year. There are plans for a formal evaluation at the end of our fall semester, Dec 2009. Early success for the PTA program has led to an adoption the technology by the Miami Dade College, Nursing Program.

Melnick Auditorium: 11:00

Lonnemann E, Noteboom T. Utilizing a wiki to promote evidence-based practice and collaborative learning between physical therapist students, clinical instructors and academic faculty in a doctor of physical therapy program.

INTRODUCTION: This presentation describes the development of two fully editable websites or “wikis,” for use in a doctor of physical therapy program. The focus of these Wikis is student summative learning and potential collaboration with the clinical physical therapy community, facilitating the communal acquisition of knowledge rather than that of the individual learner.

PURPOSE: The purpose of this project is to 1) describe a rubric for a course assignment utilizing an internal Wiki in two physical therapy courses. 2) provide a forum that connects academic programs and clinical faculty, and 3) discuss the use of web-based interactive communication for professional development with emphasis on evidence-based practice (EBP).

METHODOLOGY: Description A rubric was created for wiki page development in two courses at two universities: Musculoskeletal Management, and Pathophysiology of Complex Patient Problems. Requirements included: description of the disorder, clinical presentation,

diagnostic tests, medical/physical therapy management, and references including links to current best evidence and multimedia. Clinical instructors (CI's) will be invited to review student submissions, edit pages and add clinical case reports or descriptions.

RESULTS: Summary of Use: The APTA Education Strategic Plan (2006-2020) promotes physical therapist (PT) continued professional competence and clinical application of EBP guidelines. The model presented describes an effective strategy to provide: 1) student practice in reviewing and disseminating professional literature related to current EBP guidelines; 2) an interactive forum between CI's and students for collaborative learning; 3) an ongoing forum to present contemporary clinical practice standards and expectations; 4) student exposure to nationwide clinical practice; and 5) academic appreciation to CI's for contributions to the training of future clinicians.

CONCLUSIONS: Key Words: wiki, collaborative learning, clinical instructors, evidence-based practice

Auditorium B: 9:45

Rafalko J, Natalio E. e-Portfolio: An innovative electronic educational technology for faculty to document their teaching, scholarship, and service. College of Allied Health and Nursing, Nova Southeastern University.

INTRODUCTION: The most valuable component of a university are faculty that motivate, stimulate, and facilitate students' learning. The e portfolio is an electronic compilation of documents that highlight faculty through periodic self and peer assessment and evaluation of individual goals and education philosophy as reflected by their teaching, service, and scholarship.

PURPOSE: The purpose of this presentation is to demonstrate and discuss the use of e portfolio as an effective electronic media for faculty illustration of innovative students' learning.

METHODOLOGY: The College of Allied Health and Nursing of the Health Professions Division in 2009 initiated the formal electronic process of faculty appointment, reappointment, and continuing contract by e portfolio. Computer WordPress and Slideshare software were used by faculty to create e portfolios that are stored on a university Web server and peer evaluated.

RESULTS: Professors have been currently reviewed by e portfolio within the College of Allied Health and Nursing NSU Fort Lauderdale campus.

CONCLUSIONS: The e portfolio is an effective electronic media for faculty illustration of innovative student learning. The e portfolio provides electronic documentation of faculty teaching, scholarship, and services that impact on students' learning while reflecting educational quality. Recommendations: 1. To demonstrate and assist faculty in moving toward an electronic e portfolio system. 2. To share lessons learned by individual professors and administration in enhancing the documentation of innovative students' learning.

Auditorium B: 10:20

Nehrenz G. Open access journals: Development, management, and their use as an educational tool. College of Allied Health and Nursing, Editor for the Internet Journal of Allied Health Sciences and Practice (IJAHSP)Nova Southeastern University

INTRODUCTION: The Internet Journal of Allied Health Sciences and Practice is a peer-

reviewed, open-access, multidisciplinary, international journal, published by the College of Allied Health and Nursing at Nova Southeastern University. Since 2003, the journal has been visited by an increasing number of countries and has published authors from around the globe.

PURPOSE: The purpose for developing the IJAHSP was to create a journal that was credible, peer-reviewed, and free to the healthcare audience, that would allow for more time spent with the first-time author. The purpose of this presentation is to present the history, methods and successes of the journal as well as the management and ongoing development of a web-based journal.

OUTCOMES. Over the past 7 years, the journal has published over 200 manuscripts from countries around the globe. The journal is regularly visited by readers in more than 100 countries. Both first time and seasoned authors have published and many remain affiliated as review board and editorial board members. The journal has remained a free, open-access site and is accredited by the Health-On the-Net (HON) organization.

Auditorium B: 11:00

Hawk J, Glickman L. Applying the sections model in an entry level doctor of physical therapy program. University of Maryland School of Medicine, Department of Physical Therapy and Rehabilitation Science.

INTRODUCTION: This presentation is an innovative application of technology gurus Bates and Poole's (2003) SECTIONS model in eDPT Curriculum and the positive impact on learning. With the pressures to create cost-effective and efficient teaching programs and methods, faculty and the millennial generation of digital natives embrace this approach and reap the benefits of the initial investment of time and technology infrastructure.

PURPOSE: The purpose of this presentation is to demonstrate the utility of Bates and Poole's (2003) SECTIONS model in a specific environment. The model considers factors such as Students, Ease of use, Cost, Teaching and Learning, Interactivity, Organizational issues, Novelty, and Speed for implementation.

METHODOLOGY: The SECTIONS model was applied to the Department of Physical Therapy and Rehabilitation Science's eDPT Program to not only help select and implement the appropriate technological innovations but ultimately to help solve specific curricular challenges such as competing priorities for faculty and the need for higher levels of psychomotor lab skill integration for students.

RESULTS: The result of the application of the SECTIONS model to this specific educational environment is the development of an ongoing library of multimedia videos of basic clinical skills available through the department's iTunesU site. This form of educational enhancement addresses specific curricular needs as well as cultivates student independence and life-long learning, skills needed for physical therapy professionals.

CONCLUSIONS: While this is one example of the application of the SECTIONS model, there are lessons learned and applications to other educational environments.

POSTER PRESENTATIONS 11:30-12:30

Tu K, Conover G. Student participation in question generation. College of Medical Sciences, Nova Southeastern University.

INTRODUCTION: When students were involved in making decisions as to what questions

were to be generated, it allowed them to understand the subject matter better. It was an active, self learning process as opposed to attending lectures only.

PURPOSE: To evaluate the attitude, knowledge and performance of Postgraduate Dental students (DDS, DMD) attending the Advanced Head and Neck Anatomy Course.

METHODOLOGY: Students (n=43) from 5 specialties in Dentistry and those attending the Advanced H and N anatomy course were given 250 Anatomy questions similar to those asked in the Dental Boards. Each student was given 6 questions to study, find answers and generate similar questions and exchange the questions and answers among themselves. Of the 43, 38 responded by submitting 228 questions. In the examination, they were given 10 questions generated by them, 20 from the old board type questions and 20 new generated by Faculty.

RESULTS: The grades of these students were 16% better than the previous year's results, 2008 versus 2009. They felt they learned more by their involvement.

CONCLUSIONS: This method was found useful for those who already have a basic knowledge of anatomy. The authors intend to use this method in the future. One of the spin-offs was we were able to expand the number of questions we had in the Question-bank for use in the future.

Bucker J, Snyder K, Bulow R. Effects of multitasking on the academic performance of the millennial generation. Fischler Center

INTRODUCTION: This applied dissertation was designed to analyze media multitasking and its possible effects on the academic performance of the millennial generation.

PURPOSE: In this analysis, the researcher analyzed the implications of dividing one's attention into many small slices while attending to academic tasks. Schools across the country are experiencing an influx of students who multitask using assorted media while performing academic tasks in their home environment. As a result, parents, teachers, and administrators are concerned about the media's effect on academic performance in the home and how that translates to the classroom environment.

METHODOLOGY: This research attempted to ascertain the types of media being used by middle school-age students by the use of the survey. This information was used to replicate their use while performing academic tasks in a classroom environment. The collected data were analyzed to show the effects, if any, on academic performance.

RESULTS: When completing the first assessment, students had no extraordinary distractions. When completing the second assessment, the students had the one distraction of watching television. When completing the third assessment, the students had an additional distraction of listening to MP3 players or iPods added to the first distraction or media task. The fourth and final assessment included the aforementioned two distractions, or media tasks, plus an additional distraction, or media task, of talking or texting on the phone.

CONCLUSIONS: An analysis of the data revealed that students' academic performance was negatively affected in the number of problems completed and the percentage of accuracy with each addition of media.

Fecho G, Woodruff C, Rumsey J. Student utilization of course podcasting and bloggings in optometric education. College of Pharmacy, Nova Southeastern University.

INTRODUCTION: Blogs and podcasts are syndicated text, audio, or video files that are updated regularly covering many topics. The use of podcasts and course blogs has received

much positive attention in the College of Optometry. Our understanding how millennial students are using this technology is of great interest. Studying how these resources are used in the academic setting can prove useful to the educator looking for novel ideas to reach this generation of professional students.

PURPOSE: This survey examined the usefulness and utilization of blogs and podcasts by Optometry students. Our secondary objective is to motivate other educators to integrate this technology into their courses.

METHODOLOGY: In this study, we emailed a link to an anonymous online survey to gather information regarding student utilization of podcasting and blogging in the Optometric Curriculum at Nova Southeastern University. The survey was strictly voluntary with no penalty to the student for lack of participation. The survey remained active for a two-week period.

RESULTS: Students agreed that blogs (66.89%) and podcasts (70.95%) are a useful component to a course's online presence. We found that 77% of the students reported using blogs and podcasts on a regular basis, primarily for exam preparation and supplementary information gained in lectures.

CONCLUSIONS: Our data tells us that our students are using both blogs and podcasts on a regular basis if the resource is available to them. They also feel that this technology is indeed a useful part of their educational experience.

Clark J, Garbani N. Evaluating the adult learner: Creating a jeopardy-type game to enhance learning skills in online and blended classroom environments. College of Allied Health and Nursing, Health Sciences Department, Sonography Program, Nova Southeastern University.

INTRODUCTION: Research suggests that key indicators of engagement in an adult learning environment include the amount of interaction between students and the quality of that interaction. Using an interactive jeopardy-type game to engage students in material review may result in improved retentiveness and critical thinking for students than can be achieved by using other traditional review methods.

PURPOSE: The purpose of this study was to develop and assess a creative way to review class materials and clinical skills in both first-year vascular sonography students in a blended program and graduate health science students in an online program.

METHODOLOGY: Within each class, students were divided into two teams. Teams were encouraged to study together and to develop effective game strategies. The game was made available via the web ct course shell to each student for a specified period of time. Each participant played the game and submitted their score. Once every student completed the game, the team totals were tallied and the team with the highest score won a novelty prize.

RESULTS: Analysis is ongoing and will be available during winter 2009.

CONCLUSIONS: Creative teaching is accomplished when the environment provides a learning community in which participants collaborate in order to achieve learning goals. The online jeopardy game provides an engaging and fun experience for health science students. It creates unique opportunities to review didactic material and to reinforce clinical skills.

Ransdell S, Kent B, Gaillard-Kenney S. Multimedia, motivation and online learning: The effects of visual text, narrated text, and talking heads. College of Allied Health and Nursing, Health Sciences Department, Nova Southeastern University.

INTRODUCTION: We want to know what to teach teachers so that they will present

content knowledge in the best possible light. And by light we mean the light, sound, and images that computer text, narrated text, and a “talking head” can provide and for whom. For those students who begin an online class with a relatively external locus of control, can we empower them to take charge of their own learning? For those students who begin with limited multimedia design and content knowledge, can we bring them up to speed? Does narrated text lead to transfer learning? What do teachers need to know and do to answer these questions? Our research will provide support for the answers.

PURPOSE: The purpose of this research is to develop a model of the strongest possible online teachers as learners.

METHODOLOGY: *Participants:* The 109 participants were graduate students in Health Science who are training for a doctorate and plan to teach and serve as professional leaders in a wide range of health care settings. *Materials:* During the first and only physical meeting of the class, at the beginning of the term, consenting participants were asked to complete three information-controlled content modules online, half rote, half transfer (application) type questions about statistics and about conflict resolution.

RESULTS: The results support the static-media hypothesis and indicate that controlling for media type, rote memory skill, pretest knowledge, and age, students are better able to answer transfer learning questions when they are presented with text with narration (TN) then with a talking head (TH) or with computer text alone (CT).

CONCLUSIONS: As in previous research by Mayer et al., (2005), when student read information via TN, they are better able to transfer their learning from what is presented to what they need the information to do for them in the learning environment.

Purvis C, McNally D, Apetz E², Dribin L. Use of traditional and computerized practical exams in neuroanatomy. College of Medical Sciences, Nova Southeastern University; ²East Carolina University School of Medicine, Greenville NC.

INTRODUCTION: In a previous study, we discovered students would not be opposed to a PowerPoint practical using photos of lab specimen (HPERS 2008). The midterm practical exam utilized PowerPoint. However, the final practical was a traditional exam using tagged specimen.

PURPOSE: To evaluate student perceptions of different practical exam formats.

METHODOLOGY: Optometry (N=104), Physical (N=43) and Occupational (N=29) Therapy students were given a multiple choice survey.

RESULTS: Almost all of the students found the practical exams enjoyable (45%) or helpful (50%). Many students felt this traditional practical was much better than (46%) traditional practical exams they had taken previously. Most students indicated they would request this method in the future (81%). Almost the entire class said specimens were clear (94%).

However, only 67% of the students preferred the traditional tagged practical over the PowerPoint method. Almost unanimously (92%), the class preferred this multiple choice practical exam over the typical fill-in-the blank lab practical exams.

CONCLUSIONS: Although students were very pleased with the PowerPoint practical, they preferred the traditional exam. However student perceptions of this exam may be affected by the use of a multiple choice format. Regardless, it is clear the combination of multiple choice and tagged neuro-anatomical structures is the preferred testing method. It allows for word recognition without anxiety over spelling, while validating time spent studying in lab.

Purvis C, McNally D, Lufti N, Tu K, Dribin L. Student perceptions of neuroanatomy study aids. College of Medical Sciences, Nova Southeastern University.

INTRODUCTION: Since time in the curriculum for basic sciences is decreasing, there is a need for study aids to enhance student learning.

PURPOSE: To evaluate the effectiveness and usage of Neuroanatomy study aids: a practice practical, review lecture, review workbook and our website.

METHODOLOGY: Various study aids were provided for Neuroanatomy students (N=177). Optometry (N=104), Physical (N=43) and Occupational (N=29) Therapy students were given a multiple choice survey.

RESULTS: Many students did not take advantage of the practice practical (46%). Those who did said it was only somewhat helpful (29%). The majority of students attended the lab review lecture (87%) and found it very helpful (41%) or somewhat helpful (40%). Most students (82%) used the review workbook (50%). However some students only used the practice questions (28%). Almost the entire class used the anatomy department website and found it very helpful (92%).

CONCLUSIONS: The practice practical required students to return to lab. The lab review lecture meant additional classroom time. However, the website gave students 24 hour access to view lab specimen. Most importantly, they were able to review and learn the material at their own pace, outside of class, at their convenience. The results show this generation of learners prefers using a website over traditional study aids. Health Professions educators should consider using and developing websites to maximize student learning.

Echols M, Whitehead B, Wilkinson M. Using technology for student remediation.

INTRODUCTION: The challenge to offer remediation to students who do not successfully complete a course is faced by many professional schools. The COM faculty support the effort to offer programs to students. The effort to provide remediation without impacting the matriculation through the curriculum was compounded with block scheduling. This provided an opportunity to examine an alternative format and utilize existing technology to resolve this challenge.

PURPOSE: The pilot remediation project was designed to maximize the opportunity for students to review content and demonstrate successful mastery of the content through an examination.

METHODOLOGY: At COM course lectures are recorded live on the Tegrity system and stored in WebCt. For this one month program, students were required to review all course content using Tegrity, complete outside readings and demonstrate mastery by completing a computerized multiple choice examination. The course utilized WebCt, Tegrity and computerized testing technology.

RESULTS: Using computerized examinations, 11 exams were completed in one day. Eight were done at the FLL campus and three were administered at external clinical sites. Eighty-eight percent of the students successfully completed the course. A survey was completed to gain student input about the program. Results indicated 100% felt the program was beneficial, information was easy to access, and computerized exams were easy to use. All students indicated they would recommend the program in the future.

CONCLUSIONS: This program allowed students to retake a failed course and demonstrate content mastery prior to the beginning of a new academic year. This allowed for minimal

impact on progression through the curriculum and avoided interruption of training and ultimately financial aid. It is our recommendation that this program be considered for implementation by the college in the coming academic year.

Bernstein S. A seminar model for enhancing physical therapy education: The integration of distance education techniques for global education. Florida International University, Physical Therapy Program.

INTRODUCTION: This “Webinar Conference Seminar” (WCS) model evolved due to the need to arrange Physical Therapist’s in Private Practice to lecture and share their knowledge with students. Since most of the lecturers were at a distance, travel and time constraints were problematic.

PURPOSE: The WCS model is to enhance education where speakers, instructors and students are at a distance with telephone and Internet capabilities.

METHODOLOGY: In this developmental project both the speaker and student were at home or office using a telephone and conference calling. At a pre-determined time each student and presenter telephoned and followed voice prompts to join the conference call. The students also logged into a Web based chat room. The course professor moderated structured communication to avoid simultaneous multiple conversations.

RESULTS: The project was assessed after 14 conference calls. The results indicated a majority of the students were pleased with the discussion and the convenience of attending class online from home. All the presenters were satisfied with the procedure.

CONCLUSIONS: The WCS model is a powerful scalable means to explore global education. The WCS model is scalable to slide shows, video, and session recordings for future playback. It is a convenient and efficient means to learn at home and experience global lecturers. The “Web Conference Seminar” model is viable option for quality education.

Hagen KP. Multimedia tools for your teaching toolbox. Department of Educational Development, Health Professions Division, Nova Southeastern University.

INTRODUCTION: Today’s instructors are expected to create digital presentations as a normal part of their duties. Internet sites such as YouTube and Merlot demonstrate what can be achieved with the creative use of video, text, audio, and graphics editing. For the instructors who would like to create their own presentations in order to customize material to their own style or the needs of their students, a variety of tools have been developed which have the ability to turn anyone save the most technophobic into a reasonably competent multimedia creator. This poster examines tools needed to create multimedia presentations.

PURPOSE: To empower instructors to create their own multimedia presentations.

METHODOLOGY: This poster will review some popular tools for creating multimedia presentations: video camera, web cam, field recorder, tablet PC, and headphone/microphone.

RESULTS: N/A

CONCLUSIONS: Assembling all the tools necessary to craft multimedia presentations can require an initial outlay of around \$2,000, and the learning curve for some of the devices is steep; however, the benefit is the ability to create customized presentations that will more effectively reach students.

WORKSHOPS: 1:30 – 3:00

Terry Auditorium: 1:30-3:00

Rubertone P. Webquests: A strategy for active learning. Drexel University Department of Physical Therapy and Rehab Sciences.

SPEAKER: Ms. Rubertone has been a Clinical Assistant Professor and Director of Clinical Education at Drexel University for 12 years. She has a strong interest in the pedagogy of active student learning through the use of technology. Ms. Rubertone is currently in the dissertation phase of her Doctor of Education Degree (EdD).

PURPOSE: Participants will examine the rationale for a WebQuest as a tool for student learning and examine the component parts of a WebQuest. Participants will also analyze examples of WebQuests and create draft WebQuests of their own.

TEACHING METHODS: Background information and examples of WebQuests will be provided, including a working WebQuest created by the presenter. Collaborative teaching strategies will offer participants an opportunity to share ideas for constructing WebQuests. WebQuests are teaching strategies that are common among K-12 grades, but are just beginning to emerge in higher education. They are based on real world problems that reach the Millennial Student and are intended to develop students' higher order thinking skills. Students are presented with a realistic problem and are instructed to solve it using resources and external links embedded in the WebQuest. All WebQuests contain standard component parts: Introduction, Task, Process, Resources, Evaluation, and Conclusion. Participants will be given useful online resources and templates for creating WebQuests so that they will be able to create working WebQuests that are applicable to their own settings.

IMPACT: It is expected that participants of this workshop will have the necessary tools to be able to create a WebQuest for a course of their choosing.

Resnick Auditorium: 1:30-3:00

Lee A. Maximizing technology use in physical therapy education. Mount St. Mary's College

SPEAKER: Alan C. Lee, PT, DPT, CWS, GCS

PURPOSE: This workshop will provide an overview of podcasting with an emphasis on how technology use may improve student learning in the classroom and outside the classroom. Upon completion, participants will be able to: 1. Identify outcome-driven experiential learning using instructional technology. 2. State potential barriers and benefits to use of technology in physical therapy education. 3. Use software for video editing and podcasting. 4. Perform video editing and podcasting production.

TEACHING METHODS: Case Study, Demo, Lab, Lecture, Question & Answer, Small Group Discussion and workshop. Seminar participants will observe video editing, and podcasting in physical therapy related coursework. In addition, participants will identify potential use of technology in their own instructional coursework. Course Session Outline: 45 min: Podcasting Overview 45 min: Podcasting Preparation to Product

IMPACT: Overall, the participants will learn to create a technology-related product by the end of the workshop with a plan to integrate the product in their own classroom instruction.

Assembly Building II Computer Lab: 1:30-3:00

Randsdell, S. WebCT, PowerPoint, and Tegrity: What works, for whom, and why? College of Allied Health and Nursing, Department of Health Sciences, Nova Southeastern University.

SPEAKER: Sarah Randsdell has taught and conducted research about educational practices for learning for over 25 years. Her PhD is in cognitive psychology and she has designed online hybrid courses for the last 4 years with a special interest in multimedia interactions with learning.

PURPOSE: This workshop seeks to help instructors realize the potential of emerging technologies for online learning. Instructional resources such as Blackboard or WebCT for organizing a course, PowerPoint for delivering slides and narrated text, and Tegrity for showing animated images of the instructor teaching the course, are increasingly the norm. Technological advances continue to outstrip our theoretical understanding of how they work (i.e. Mayer, 1997; Reiber, 1990). Models of best practices must take into account the boundary conditions of the effects of multimedia tools on learning.

TEACHING METHODS: A wide range of teaching styles and methods are demonstrated using WebCT, PowerPoint, and Tegrity. Multimedia combinations afford different types of learning among different types of learners. Principles of multimedia design from meta-analytic studies by Mayer (2009) will be described as they relate to instructor design choices.

IMPACT: Online learners can anticipate ever increasing use of multimedia techniques for enhancing learning. Online instructors must keep informed about ongoing analyses of the impact of various combinations of content, media, and learners.

Melnick Auditorium: 1:30-3:00

Glavin K, Smal P, Vandermeeren N, AuBuchon J. Digital storytelling: Integrating technology and career construction theory to explore client's narratives. Center for Psychological Studies, Nova Southeastern University.

SPEAKER: Kevin Glavin, Phd, PC(Assistant Professor Nova Southeastern University)(Center for Psychological Studies(Past President of Ohio Career Development Association(Membership Chair for National Career Development Association

PURPOSE/OBJECTIVES: 1) Describe Digital Storytelling. 2) Explain how to use technology to digitize storytelling. 3) Explain the use of Digital Storytelling in examining client's career narratives. 4) Show the advantage of gathering career information through clients' subjective narratives. 5) Demonstrate quick and simple exercises to help clients narrate their own story. 6) Explain how to extract interests and values from clients' narratives.

TEACHING METHODS: 1) PowerPoint Presentation. 2) Live demonstration using YouTube. 3) Case Examples. 4) Audience Participation. This session will explain how to apply narrative therapy in career counseling. Attendees will learn how to help clients create and interpret their own digital narratives. Free software resources will be explored, and a demonstration will be provided. One method for determining the appropriate use of technology in career counseling is to ground activities in theory, such as Career

Construction theory (Savickas, 2005). YouTube can be utilized as an interactive use of technology to explore a client's narrative. This exercise prompts clients to search YouTube and pick three videos that hold personal meaning for them. Clients are then asked to write a short paper explaining what the videos contain, and why they chose them. Finally, clients present their videos and explain their choices by identifying repeated patterns and themes. The videos and accompanying explanations paint an intimate picture of what is most important to the individual, and provide valuable information that interest inventories alone cannot extract. This exercise can be improved by asking clients to use their own media to create their own videos. Software is freely available to help clients organize and develop their own digital narrative.

IMPACT: 1) Practitioners will learn how to conduct career counseling in a new and novel way. 2) The subjective nature of this project replaces inventory scores with rich narratives. 3) Clients will gain a clearer sense of their own identity and self concept. 4) Clients and practitioners will be made aware of the importance of career counseling, and how rich narratives can provide deep and intimate pictures of the self.

Hull Auditorium: 1:30-3:00-Invited Speaker

Simonson M, Ibarra A. Trigger videos and teaching in the health professions. Fischler School of Education and Human Services, Nova Southeastern University.

SPEAKER: Michael Simonson is a program professor at Nova Southeastern University in the Instructional Technology and Distance Education program. He earned his Ph.D. from the University of Iowa in Instructional Systems. He works with schools, organizations, and corporations to assist them to integrate instructional technology and distance education into teaching and training, and on the development of virtual schools. Simonson has authored four major textbooks dealing with distance education, instructional technology, instructional computing, and instructional media. Mike has over 150 scholarly publications, and in excess of 200 professional presentations dealing with distance education and instructional technology. Simonson has considerable experience working with domestic and international businesses and industries, especially on projects related to instructional technology, virtual schools, and distance education. Technology planning, distance education/virtual school policy development and effective design of online instruction are current projects. He is editor of the Quarterly Review of Distance Education, Distance Learning Journal, and Proceedings of Selected Research and Development Papers presented at the Annual Conventions of the Association for Educational Communications and Technology. He has won the award for most outstanding research in the field of distance education presented by the United States Distance Learning Association. Most recently he has been an external evaluator South Dakota's Connecting the Schools and Digital Dakota Network projects, and is a consultant for the U.S. Army Research Institute. Simonson was honorably discharged as a Captain from the United States Marine Corps (R).

PURPOSE: Define Trigger Video Use Trigger videos in traditional and distance instruction
Produce trigger videos

TEACHING METHODS: Demonstration, examples, and hands-on practice using digital camcorders and digital video editing.

IMPACT: Workshop attendees will understand the use and be able to produce simple trigger

videos