
Dr. Jean Ashby
Graduated Spring 2010

Dissertation Abstract
Increasing enrollments in community colleges has led to an increase in distance education courses. The developmental coursework necessary for many community college students is being offered both in online and hybrid environments. These students face challenges with the content and now find themselves needing to learn in a virtual classroom. Current research (Chernish, DeFranco, Lindner, & Dooley, 2005; Frederickson, Reed, & Clifford, 2005; Herman & Banister, 2007; Kromrey & Purdom, 1995; Scheetz & Guntner, 2004) shows that there is no difference in student success based on the learning environment, but this was completed primarily with upper-class and graduate students. This study investigated student success in a developmental math course taught in the face-to-face, hybrid, and online environments at a mid-Atlantic community college. Cognitive Load Theory was used during the design of the course and its principles were maintained in all of the learning environments. The sample was 167 students with an average age of 25 years, 58% were female, 49% were Caucasian and 43% were African-American.

The focus was on student success, but the impact attrition had on the results of the study is discussed. The study also investigated student characteristics and their relationship to success. Age, gender, race, student status, placement scores, financial aid, learning style, locus of control, and technology skills are all compared between successful and unsuccessful students to determine if specific traits were more beneficial within a particular environment.

Dr. Beverly Bye
Graduated Summer 2008

Dissertation Abstract
The purpose of this quasi-experimental research is to investigate the impact of a high fidelity simulation on knowledge and confidence levels among undergraduate baccalaureate nursing students within a Health Assessment course. Today’s healthcare workers are surrounded with the ever-changing technology in addition to high patient acuities. The challenge for nurse educators is to prepare nursing graduates not only to perform clinical skills, but to be able to integrate theoretical knowledge into the clinical setting at a time when nurse educators are as few as the nurses on the patient care units. Clinical sites are becoming limited as the number of practicing nurses on hospital units decreases. Moreover, there is a growing shortage of nurse faculty. Due to the decrease in nurse educators and limited clinical placements in hospital settings, innovative teaching methodologies to teach clinical and assessment skills need to be integrated within nursing programs. The participants in this study were first semester junior level nursing students from three baccalaureate level Health Assessment classes. Two classes of approximately 15-20 students each were exposed to simulation- an actor (standardized patient) or a high fidelity simulator while the third group experienced a traditional classroom and lab -not simulation. A pre and post test was designed to measure knowledge learned and a survey instrument was used to measure student confidence levels after the learning experience. It is expected that results will impact the development and integration of innovative teaching modalities for nurse educators.

Dr. Cheryl Fisher
Graduated Spring 2008

Dissertation Abstract

Continuing medical education (CME) on the Internet has grown steadily over the past several years however, the quality of Web-based CME has received limited attention. Additionally, few of these courses appear to be based on sound educational principles or CME research. It is also well documented in the literature that discussion and interaction between students and instructor can have an impact on student learning and student satisfaction. Based on these findings, this study will determine if an asynchronous discussion board has an effect on the improvement of student satisfaction and learning outcomes in a CME course. A student satisfaction survey was administered at the end of the course and a pre-post test was utilized to determine if learning outcomes increased. Results of this study will help to shape future development of CME course design.

Dr. Junko Handa
Graduated Winter 2006

Dissertation Abstract
This qualitative case study investigated the perceptions and challenges an experienced English instructor faced in the transformation of learning environments as his technology evolved. This one-year research project, involving international students as participants, evaluated the instructor’s adoption of technology using Levels of Use of the Innovation (LoU) (Halls, Loucks, Rutherford, and Newlove, 1975). The data were collected through interviews with the instructor and students, e-mail correspondence, transcriptions of discussion board threads, students’ papers, and the researcher’s logs as a technology mentor. The data were analyzed using N6 Software and other inductive methods. The instructor’s decision-making was mapped over time. Findings revealed gradual, though not linear, open-mindedness and integration of technology as a result of skill-building, direct contact with technology, time to reflect, recognition of positive student outcomes, and mentoring. The type of mentoring was significant, as was the professor as an agent of his own changing pedagogy.

Dr. Diane Larrimore
Graduated Spring 2006

Dissertation Abstract
During the last few years, K-12 teachers have requested professional development that is delivered through a learning environment that enhances and supports the critical knowledge they need to successfully prepare students for the 21st century. A hybrid-based learning environment, which is the seamless integration of the best practices of a traditional classroom with the most effective features of online learning, may be the active learning framework educators are seeking. The purpose of this mixed methodological research study is to examine and assess the experience K-12 teachers who completed a hybrid-based, professional development course. These teachers’ retention of knowledge, transference of content into classroom instructional practices and overall perceptions about the effectiveness of the hybrid-learning environment will be studied.
Technology in schools has become quite commonplace. It is essential that principals possess knowledge and proficiency in technology skills and technology integration in order to be effective instructional leaders. As critical issues transform from access to effectively integrating technology into curriculum, this study aimed to determine the extent to which technology leadership behaviors identified in the NETS-A (2002) standards from ISTE are being implemented by elementary principals. Of the 35 survey questions posed to principals, 28 were perceived as strengths. Only seven questions were perceived as a weakness. The six NETS-A strands in order of relative strength were: Productivity and Professional Practice; Learning and Teaching; Support, Management, and Operations; Social, Legal, and Ethical Issues; Leadership and Vision; and Assessment and Evaluation. This study explored the hierarchy of skills needed for effective technology leadership and informed professional development needs in regards to technology skills and technology integration of principals. A conceptual framework delineating the components of effective technology leadership in elementary schools is presented.

Dr. Gabriele Meiselwitz

Graduated Winter 2004

Dissertation Abstract

Many institutions in higher education are offering at least some of their curriculum online and use a course management system (CMS) to support these online learning environments. Usability evaluation tools are often used to measure the quality of a user’s experience when interacting with a web site. The purpose of this study was to evaluate the relationships between usability factors and learning outcomes in an online learning environment as well as to investigate differences in learning outcomes and system usability between several selected student groups (selected groups were: gender, age, student standing, student computer competency scores). Subject of evaluation were eight sections of an introductory computer science course taught in hybrid format using a CMS. A survey instrument, integrating usability research into evaluation of student learning outcomes in online learning environments, was developed. Results of the study have direct implications of the design and development of online instruction.
Moving beyond the racial achievement gap to determine conditions that promote African American student success requires exploring the history of African American education and what works for successful African American learners. The study uses Appreciative Inquiry (AI) as a positive approach and research methodology for unlocking the phenomenon of student success for African American learners—past, present, and future—in a public education system. It employs technology as a data collection and analysis tool, but also as a tutor and tutee.

The study organization is a single gender, selective enrollment, urban public high school. Two groups of respondents are the subjects of this study. The first group consists of African American alumnae of the school who attended it during the post-\textit{Brown v. Board of Education (1954)} era and self-identify as being successful academically and professionally. The second group is that of current African American students who were from among the school’s juniors and seniors. Findings inform effective instructional practices as well as characteristics of an environment conducive to teaching and learning. Additionally, the study yields recommendations for the school’s future and implications for public education.
Novice programmers often struggle when attempting to learn how to write code while reducing the number of programming errors. This study investigates tools and techniques that can be used to reduce some of the obstacles many students face when learning to write a computer program. Specifically, this research aims to evaluate if entry-level programming students who use the Alice 2.0 programming environment demonstrate a better understanding of fundamental programming concepts than students who use a traditional C++ programming environment. Approximately 70 students from two face-to-face CS0 sections taught by the same instructor participated in this research. The instruments used in this research included a pre-test, demographic questionnaire, three programming assignments, a post-test, course evaluations, and final course grades. A rubric was used for the instructor to grade each programming assignment. Each assessment activity was carefully aligned with one or more course learning objectives. Results of this study showed students who used the Alice programming environment consistently scored higher in the layout (visual appeal) grading component for all programming assignments. There were no differences found between the two programming environments in regards to code functionality or design, or in the pre- and post-test scores between the two groups. A larger percentage of students from the group that used the Alice programming environment successfully passed the course. However, students in the Alice group rated the instructor and overall course significantly lower than students who used the C++ programming environment.

Dr. CarolAnn Stevens
Graduated Winter 2008

Dissertation Abstract

Using learner-centered teaching practices can change the state of technology integration in Elementary Schools (ES). A quasi-experimental, pretest/posttest survey was used to identify changes in the use of technology by ES students, ES teachers' technology skill, the use of computer technology to meet curricular objectives, and a learner-centered learning environment during technology professional development to change ES teacher’s pedagogy. In the setting of an elementary school in the Baltimore / Washington corridor, twenty-five classroom ES teachers participated in research that measured: the time that ES teachers' used technology with their ES students, ES teachers' technology skill level, direct instruction with technology, and change of pedagogical practices. Additional computer lab usage data was collected for two years. Results from both data sources indicated that a learner-centered professional development series was related to significant changes in time that ES teachers' used technology with their ES students, ES teachers' technology skill level, and direct instruction with technology. This study points to the conclusion that job-embedded, learner-centered professional development is an effective way to provide technology professional development in an elementary setting.

Dr. S. Raymond Wang
Graduated Winter 2008

Dissertation Abstract
This dissertation research investigated the quality of school library media specialist education by examining students’ perceptions of the knowledge and skills that they acquired through their school library media specialist education programs, as they related to the professional guidelines and the current national standards. The dissertation study invited graduate students currently enrolled in two school library media specialist education programs to self-evaluate their acquired knowledge and skills, in preparation to meet the professional competencies set forth by the national accreditation agencies. This goal was accomplished through the development of a self-assessment tool based on the AASL Standards for Initial Programs for School Library Media Specialist Preparation.

The validity of the research instrument was established by a panel of experts currently working in the field of school library media education. The reliability of the instrument was established by administering the assessment instrument to a sample of subjects currently enrolled in school library media specialist education. Using the established research instrument, this dissertation study surveyed current students and looked at how they perceived their academic preparation, in order to meet the AASL competency standards in their present stage of study in school library media specialist education. Results indicated that the survey instrument was effective in revealing how students’ perceptions changed, as they completed more course work in their school library media specialist program. Several recommendations for future research and instructional improvement were also made.