

Jennifer Tennille Pinder Ellis
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EDUCATION

Louisiana State University Baton Rouge, LA
College of Education, Department of Educational Theory, Policy & Practice
Doctor of Philosophy in Curriculum and Instruction
Science Education, Educational Technology, December 2009
Dissertation: *Assessing the Development of High School Chemistry Students' Conceptual and Visual Understanding of Dimensional Analysis via Supplemental Use of a Proprietary Interactive Software Program*
Major professor: W.H. LeBlanc Alumni Professor James H. Wandersee--BS, MS, PhD, FLS, FAAAS

UNIVERSITY OF MICHIGAN Ann Arbor, MI
School of Information
Master of Science in Information, emphasis in effective use of Information Technology, August 2003

TUSKEGEE UNIVERSITY Tuskegee, AL
College of Engineering
Bachelor of Science in Chemical Engineering, cum laude December 2000

TEACHING EXPERIENCE

08/11-Current University of Tennessee at Chattanooga Chattanooga, TN
School of Education
Assistant Professor

08/07-12/08 Hamilton County Department of Education Chattanooga, TN
Signal Mountain Middle/High School
Career and Technical Education
Instructed high school students in business technology courses mainly web design and computer applications.

Central High School
Technology, Communication and Business Academy
Instructed high school students in business technology courses mainly web design and keyboarding/word processing.
Functioned as school Blackboard administrator.

01/07-05/07 Louisiana State University Baton Rouge, LA
College of Education, Division of Integrated Studies
Instructor on record for ELRC 2507: Introduction to Classroom Technology.

6/02-8/02 NATIONAL TECHNOLOGY TRANSFER CENTER Wheeling, WV
Entrepreneurial Technology Apprenticeship Program- Instructor/Teaching Assistant
Instructed a course in Professional and Leadership Development.
Served as a teaching assistant for graduate courses in Technology Ethics, Technical Writing, and Entrepreneurship.
Assisted in facilitating instruction of the Fundamentals of Technology Transfer.

WORK EXPERIENCE

08/11-Current University of Tennessee at Chattanooga Chattanooga, TN
School of Education
Assistant Professor

01/09-7/11 University of Tennessee at Chattanooga Chattanooga, TN
Walker Teaching Resource Center
Design, implement and manage a variety of programs to improve faculty teaching and technology skills related to online and distance education and to effectively integrate and utilized educational and administrative technology.
Develop and deliver curriculum for the Online Faculty Fellows program as well as coordinate and facilitate all training sessions (online and face-to-face).
Consult with faculty to analyze instructional problems and to design, develop, and evaluate curriculum and instructions, instructional materials and media.
Establish and maintain liaisons with faculty and staff to provide educational resources to improve teaching and learning.
Coordinate and communicate with other technology professionals on and off campus to ensure efficient use of technology across the campus.

08/05-06/06 Louisiana State University Baton Rouge, LA
Centers for Excellence in Learning and Teaching-Intern
Assist instructors in enhancing their teaching via effective technology integration.
Update center's website with useful teaching resources for effective integration of Clickers into lectures.

Division of Continuing Education-Researcher
Designed program evaluation to determine what deficiencies were deterring secondary science students and teachers from participating in the state science fair.
Developed data collection instruments, collected and analyzed data, and wrote final recommendations to increase participation of students, teachers, and schools.

06/03-08/05 United States Army, TACOM-ARDEC Picatinny Arsenal, NJ
Picatinny Arsenal
Facilitated the installation of the Detonators & Explosive Trains Laboratory
Determined technical capability at detonator production facilities and serve as an onsite liaison between detonator production manufactures, and ARDEC engineers.
Contributed as a detonator producibility expert in all laboratory functions.

Participated in the execution of M54/M86 Burster Tube manufacturing program
Served as a chief member of the production preparation committee and as quality control specialist.
Provided data collection and analysis for all x-ray and compositional analysis results.
Devised ways to improve production effectiveness and efficiency through computer modeling.

PRESENTATIONS & PUBLICATIONS

Ellis, J. T. and Tehrani, S. (July 2011). Best Practices on Providing STEM Faculty Professional Development in Teaching and Learning. 9th Annual International Conference on Education and Information Systems, Technologies and Applications (EISTA) 2011. July 19-22, 2011, Orlando, Florida.

Ellis, J. T. (March 2011) . Using Real-World Examples to Enhance Student's Visual and Conceptual Understanding of Dimensional Analysis. 241st American Chemical Society National Meeting & Exposition, March 27-31, 2011, Anaheim, California.

Holmes, A. E. & Ellis, J. T. (2011). Patterns of Online Use and Improved Student Performance with Repeatable

Online Assessments, The Geological Society of America-Southeastern Section, March 23-25, 2011, Wilmington, North Carolina.

Ellis, J. T. (March 2011). Maximizing Educational Technology Tools in a LMS to Assess Student's Conceptual and Visual Understanding. EDUCAUSE Midwest Regional Conference 2010, March 15–17, 2010, InterContinental Chicago, Chicago, Illinois.

Ellis, J.T. (February 2011). Using Game-Based Learning to Help STEM Students use Prior Knowledge to Build Scaffolds to Enhance Conceptual and Visual Understanding of Dimensional Analysis. Society for Applied Learning Technology: New Learning Technologies 2011, February 23-25, 2011, Orlando, Florida.

Ellis, J.T. (November 2010). Managing the New Demands of Blackboard Learn and Connect. 2010 West Tennessee Technology Symposium, November 3, 2010, Martin, Tennessee.

Kwon, K.C. & Pinder, J. T. (2000) Reactivity of Metal Oxide Sorbents in the Removal of Hot Hydrogen Sulfide. published in Recent Developments in Air Pollution Control, edited by Mark P. Cal, Pg 77-87, Topical Conference Proceedings for the Spring AIChE National Meeting, March 5-9, 2000, Atlanta, GA.

Kwon, K.C. & Pinder, J. T. (2000) Reactivity of Metal Oxide Sorbents in the Removal of Hot Hydrogen Sulfide, presented at the Spring AIChE National Meeting, March 5-9, 2000, Atlanta, GA.

Kwon, K.C. & Pinder, J. T (2000) Initial Reaction Kinetics of Solid Sorbents with H₂S at High Temperatures, presented at the AIChE Annual Meeting, November 12-17, 2000, Westin Bonaventure/Marriott Downtown Los Angeles, CA.

SCHOLARLY WORKS SUBMITTED AND IN PREPARATION

Ellis, J.T. (2011). Assessing the Development of Chemistry Students' Conceptual and Visual Understanding of Dimensional Analysis via Supplemental use of Web-Based Software. *Journal of Chemical Education*

Ellis, J. T. (2012) Utilizing Lean/Six Sigma Practices to Determine the Effectiveness and Efficiency of Teaching and Learning Centers. *Education Technology Research and Development*.

Ellis, J.T. (2012). Evaluating Textbooks for Effectiveness in Enhancing Student's Conceptual and Visual Understanding of Key Content. *Journal of Science Teacher Education*.

Ellis, J.T. (2012). Supporting STEM Faculty Teaching and Learning Practices. *Academic Informing Science and Engineering*

RESEARCH GROUPS

Center for Research on Collaboratories and Technology Enhanced Learning Communities (COTELCO)
Dr. Derrick L. Cogburn, Principal Investigator and Center Director, American University/Syracuse University
Faculty Associate

Co-chair for the faculty evaluation committee for the Institute on Disability and Public Policy (IDPP) for the ASEAN Region, which provides graduate education programs, support services, research, and policy development by/for/with people who are disabled.

Going Global, Locally-Examining geographically distributed collaborative learning between students and faculty in developed and developing countries. Focusing specifically on the future of e-learning/cyber-learning models with respect to enhancing student learning and engagement.

WEB-BASED SOFTWARE TOOLS

Ellis, J. (2009). Conversionoes[®]. (Interactive dimensional analysis software)

INSTITUTIONAL, DISCIPLINARY AND PROFESSIONAL SERVICE

Conference Reviewer

Hawaii International Conference on System Science (HICSS) 2011, Minitracks.
Hawaii International Conference on System Science (HICSS) 2012, Minitracks.

Grant Reviewer

NSF HBCU-UP proposals Reviewer for Southern University 2009
NSF 11-564 Partnership for International Research and Education (PIRE), Southern University 2011

Conference session chair/discussant

SREB Institute on Teaching and Mentoring 2009, Session chair and discussant, Multiculturalism in the Classroom.

Course Reviewer

Blackboard Exemplary Course Program Reviewer (2011), to evaluate how well nominated courses conforms to effective practices for Course Design, Interaction & Collaboration, Assessment and Learner Support.

Professional Service

Unpaid consultant to Rosemary Pinder, AJ Ferrell Middle School reading coach, Using educational technology tools to improve literacy skills, 2007-2010.

INSTITUTIONAL & COMMUNITY SERVICE

2010-	University of Tennessee at Chattanooga Efficiency & Effectiveness Committee
2009-	University of Tennessee at Chattanooga Training Advisory Group
2009-	University of Tennessee at Chattanooga Distance Learning Council
2009-	University of Tennessee at Chattanooga Online Advisory Group
2009-2010	Chattanooga Regional Science and Engineering Fair Judge Chattanooga, TN
2008-2009	Signal Mountain Middle/High School Newspaper Advisor Signal Mountain, TN
2007-2008	Central High School Lady J's Sponsor Harrison, TN
2011-	UTeaChattanooga Board Member
2011-	Girl's Inc. Chattanooga Board Member

CERTIFICATIONS

Lean/six sigma

VSE CORPORATION

Black Belt Certification

Used design for Six Sigma CDOV and DMAIC processes

Developed standardized procedures for data acquisition and material properties measurement on new equipment.

Implemented efficient data collection techniques to measure properties of highly explosive material.

Improved the existing design and schedule to acquire data more effectively and efficiently.

PROFESSIONAL PROFILE

Research interests are in enhancing STEM teaching, learning and assessment via effective educational technology integration.

Trained in professional development of K-16 educators.

Experienced in curriculum design, development and instruction which include the development and delivery of online and distance learning courses.

Knowledge of pedagogy needs assessment and evaluation tools and methods.

Proficient and experienced in IBM PC and Macintosh hardware, Microsoft Office software, standard productivity software, web-based authoring systems, course management software, website and graphic design software, and multimedia applications.

FELLOWSHIPS

2005- 2009 Huel Davis Perkins Doctoral Fellow (SREB Doctoral Scholars Program Affiliate)
Louisiana State University

2001-2003 National Consortium for Graduate Degrees for Minorities in Engineering and Science (GEM)
Fellow
University of Michigan

HONORS

Phi Beta Kappa
Golden Key National Honor Society (Pres. 1999-2000)
Phi Kappa Phi Honor Society
Southern Regional Educational Board Scholar
Central New Jersey and Kansas City InRoads Academic
Scholar

Beta Kappa Chi Honor Society (Scientific Honor
Society)
Alpha Kappa Mu Honor Society (General Honor
Society)
Omega Chi Epsilon (Chemical Engineering Honor
Society)

PROFESSIONAL AFFILIATIONS

Girl's Inc.-Board Member (Current)
UTeaChattanooga-Board Member (Current)
American Educational Research Association
International Society of the Learning Sciences
International Society for Technology in Education
Southern Regional Faculty & Instructional
Development Consortium
Educase

Society for Applied Learning Technology
National Science Teachers Association
Southern Regional Educational Board
American Chemical Society
American Institute of Chemical Engineers
Association of University Technology Managers
Chattanooga Women's Leadership Institute