CURRICULUM VITAE

Wayne A. Nelson
2018
Southern Illinois University Edwardsville
Edwardsville, IL 62026

Education

Ed. D. (1989) Virginia Polytechnic Institute and State University, Blacksburg, VA.

M. A. (1979) University of Montana, Missoula, MT.

B. A.   (1976) South Dakota State University, Brookings, SD.

Professional Employment

2016 –   Adjunct Online Instructor, Ashford University, San Diego, CA.
- teach online course: Trends & Issues Inst. Design & Tech. Online Learning
- teach online course: Promoting Student Success in the Online Learning

2012 –   Faculty Fellow for Online Learning and Assessment, Office of the Provost/Information Technology Services, Southern Illinois University Edwardsville, Edwardsville, IL.
- design and conduct faculty development activities for online teaching and innovative pedagogical strategies
- lead initiatives to integrate technologies into classrooms
- coordinate Excellence in Undergraduate Education grant program

1999- 2012 Professor – Department of Educational Leadership, Southern Illinois University Edwardsville, Edwardsville, IL.
- teach master's courses in instructional software design, interactive multimedia, instructional technology, authoring systems
- chair and serve on master's and doctoral committees

1995 - 2010   Professor (1999) and Department Chairman - Department of Educational Leadership, Southern Illinois University Edwardsville, Edwardsville, IL.
- provide administrative leadership for department of 12 faculty members and four graduate programs
- coordinate fiscal and clerical administration of department
- represent department at school and university levels, and in the community

1993- 1999 Associate Professor and Department Chairman - Department of Educational Leadership, Southern Illinois University Edwardsville, Edwardsville, IL.
- provide administrative leadership for department of 12 faculty members and four graduate programs
- coordinate fiscal and clerical administration of department
- represent department at school and university levels, and in the community
- teach doctoral courses in cognitive science, research design, learning and development
- teach master's courses in educational psychology, instructional design, interactive multimedia, instructional technology, computer programming, authoring systems
- teach undergraduate courses in educational psychology, audio-visual methods, computer programming
- chair and serve on master's and doctoral committees

1988-1993 Assistant Professor - Department of Educational Leadership, Southern Illinois University Edwardsville, Edwardsville, IL.
- teach doctoral courses in cognitive science, research design, learning and development
- teach master's courses in educational psychology, instructional design, interactive multimedia, instructional technology, computer programming, authoring systems
- teach undergraduate courses in educational psychology, audio-visual methods, computer programming
- chair and serve on master's and doctoral committees

1987-1988 Graduate Teaching Assistant - College of Education, Virginia Tech, Blacksburg, VA
- teach undergraduate courses in educational psychology and computer literacy.

1986-1987 Research Assistant - Education Microcomputer Lab, College of Education, Virginia Tech, Blacksburg, VA.
- consult with users and tutor students, develop software.
- schedule lab activities, repair and maintain lab equipment.

1980-1988 Assistant Professor - Department of Music, Ferrum College, Ferrum, VA
- coordinate Professional Music Degree Program
- teach courses in general and instrumental music.
- direct ensembles and perform in recitals and concerts.
- assist with drama, television, video and sound recording productions.

1979-1980 Instructor - Department of Music, Northern Montana College, Havre, MT
- teach general and instrumental music courses, and private lessons.
- direct performing ensembles.

Professional Honors

May, 1986 Hurt Faculty Achievement Award - Ferrum College, Ferrum, VA
         Presented for excellence in teaching, scholarship, and service.

Publications

Bueno, K. A., & Nelson, W. A. (1993). Collaborative second language learning with a contextualized computer environment. *Journal of Educational Multimedia and Hypermedia, 2* (2), 177-208.

Hull, G. L., & Nelson, W. A. (1991). *Instructional needs analysis of the U. S. Army Recruiting Command (USAREC) on-the-job recruiter training program* (Report No. 1590). Washington, DC: U. S. Army Research Institute for the Behavioral and Social Sciences.

Nelson, W. A. (1988). Problem solving and software design. *Computers in the Schools, 4* (3/4), 199-208. (Reprinted in Reed, W. M., & Burton, J. K. (Eds.). *Educational computing and problem solving.* New York: Haworth Press.)

Nelson, W. A. (1988). What does it mean to teach? *Ferrum Review, 7,* 30-33.

Nelson, W. A. (1989). Artificial intelligence knowledge acquisition techniques for instructional development. *Educational Technology Research and Development, 37*(3), 81-94.

Nelson, W. A. (1991). Mapping the structure of hypermedia documents. *HyperNEXUS: Journal of Hypermedia and Multimedia Studies, 1* (3), 5-7.

Nelson, W. A. (1994). Efforts to improve computer-based instruction: The role of knowledge representation and knowledge construction in hypermedia systems. *Computers in the Schools, 10* (3/4),371-399.

Nelson, W. A. (1994). Analyzing user interactions with hypermedia systems. *Computer Graphics, 28*(1), 43-45.

Nelson, W. A. (2000). Gagne' and the new technologies of instruction. In R. Richey (Ed.), *The Legacy of Robert M. Gagné* (pp. 229-252). Syracuse, NY: ERIC Clearinghouse on Information and Technology.

Nelson, W. A. (2003). Problem solving through design. In D. Knowlton & D. Sharp (Eds.), *Problem-based learning in the information age* (pp.39-44). San Francisco: Jossey-Bass.

Nelson, W. A. (2013). Design, research, and design research: Synergies and contradictions. *Educational Technology, 53*(1), 3-11.

Nelson, W. A. (2013). A lucid view of design and research in education. *Educational Technology, 53*(4), 54-56.

Nelson, W. A. (2014). The many facets of design and research in instructional design. In B. Hokanson & A. Gibbons (Eds.), *Design in educational technology: Design thinking, design processes and the design studio* (pp. 125-141). New York: Springer.

Nelson, W. A., Andris, J., & Keefe, D.   (1991). Technology where they least expect it: A computer-intensive teacher education curriculum. *Computers in the Schools 8* (1/2/3), 103-109.

Nelson, W. A., Bueno, K. A., & Hufstutler, S. (1999). If you build it, they will come, but how will they use it? *Journal of Research on Computing in Education, 32* (2), 270-286.

Nelson, W. A., & Knowlton, D. (2005). "Learning through Design" as a Strategy for Faculty Development: Lessons Learned in a Teacher Education Setting. In M. Orey , J. McClendon, & R. Branch (Eds.). *Educational Media and Technology Yearbook* (pp. 29-36). Westport, CN: Libraries Unlimited.

Nelson, W. A., Magliaro, S. G., & Sherman, T. M. (1988). The intellectual content of instructional design. *Journal of Instructional Development, 11* (1), 29-35.

Nelson, W. A., & Palumbo, D. (1992). Learning, instruction and hypermedia. *Journal of Educational Multimedia and Hypermedia, 1* (3), 287-299.

Nelson, W. A., & Palumbo, D. B. (2013). When design meets Hollywood: Instructional design in a production studio environment. In B. Hokanson & A. Gibbons (Eds.), *Design in educational technology: Design thinking, design processes and the design studio* (pp. 75-88). New York: Springer.

Nelson, W. A., & Smith, R. E. (1995). Chronicles of Teaching: A computer-based system to support communication and reflection about teaching. *Computers and Human Behavior 11* (3/4), 649-660.

Nelson, W. A., & Thomeczek, M. (2006). Design as a focus for technology integration: Lessons learned from a PT3 project. *Computers in the Schools, 23*(3/4), 93-104. (Simultaneously published in Johnson, D. L., & Kongrith, K., (Eds.). *Teaching teachers to use technology*. Binghamton, NY: Haworth Press.).

Orey, M. A., & Nelson, W. A. (1993). Development principles for intelligent tutoring systems: Integrating cognitive theory into the development of computer-based instruction. *Educational Technology Research and Development, 41* (1), 59-72.

Orey, M. A., & Nelson, W. A. (1997). The impact of situated cognition: Instructional design paradigms in transition. In C. Dills & A. Romiszowski (Eds.), *Instructional development paradigms* (pp. 283-296). Englewood Cliffs, NJ: Educational Technology Publications.

Richey, R., & Nelson, W. A. (1995). Developmental research. In D. Jonassen (Ed.), *Handbook for research on educational communications and technology.* New York: MacMillan.

Richey, R., Klein, J. D., & Nelson, W. A. (2004). Developmental research. In D. Jonassen (Ed.), *Handbook for research on educational communications and technology (2nd ed.)* (pp. 1099-1130). Hillsdale, NJ: Lawrence Erlbaum Associates.

Theodore, P. A., & Nelson, W. A. (2004). Distinctive features of computer-mediated bulletin board discussions. *International Journal of Instructional Technology and Distance Learning, 1*(8), 45-56.

Thomeczek, M. A., & Nelson, W. A. (2005). Potential barriers and opportunities for ubiquitous computing in higher education. In S. Powers and K. Janz (Eds.),

Ubiquitous and pervasive computing in higher education. (pp. 123-132). Terra Haute, IN: Curriculum Research and Development Center, Indiana State University.

Published Conference Proceedings

Andris, J. A., Nelson, W. A., & Smith, R. E. (1993). *LEAPINGS into the future: Using instructional design to develop an integrated preservice teacher education computer curriculum.* Proceedings of the annual Technology in Teacher Education Conference. Charlottesville, VA: Association for the Advancement of Computing in Education.

Nelson, W. A.   (1989). Visual representation of menu items in computer systems. In R. A. Braden, D. G. Beauchamp, L. W. Miller, & D. M. Moore (Eds.), *About visuals: Research, teaching and applications (Readings from the 20th Annual Conference of the International Visual Literacy Association)*. (pp. 313-319). Blacksburg, VA: Virginia Tech.

Nelson, W. A. (1990). Effects of adjunct questions on learning from hypertext. In D. Dalton (Ed.), *Proceedings of the 32nd Annual International Association for the Development of Computer-Based Instructional Systems Conference*. (pp. 368-372). Columbus, OH: ADCIS International.

Nelson, W. A. (1993). Knowledge acquisition and interface design for learning on demand systems. In P. R. Hyde, & R. B. Loftin (Eds.), *Proceedings of the Contributed Sessions: 1993 Conference on Intelligent Computer-Aided Training and Virtual Environment Technology.* Vol II. (pp. 321-327). Houston, TX: Software Technology Branch, NASA/Johnson Space Center.

Nelson, W. A. (1996). Gagné's impact on the development of new technologies. In Simonson, M. E., et al., (Eds.), *Eighteenth Annual Proceedings of the Association for Educational Communications and Technology*. Washington, DC: Association for Educational Communications and Technology.

Nelson, W. A., Bueno, K. A., & Md. Yusof, S. (1991). Design, development and testing of a contextualized computer environment for Spanish language acquisition. In D. Dalton (Ed.), *Proceedings of the33rd International ADCIS Conference* (pp.209-218): Columbus, OH: ADCIS International.

Nelson, W. A., Harmon, S. W., Orey, M. A., & Palumbo, D. B. (1993). Techniques for analysis and evaluation of user interactions with hypermedia systems. In H. Maurer (Ed.), *Educational Multimedia and Hypermedia Annual - 1993* (pp. 585-588), Charlottesville, VA: Association for the Advancement of Computers in Education.

Nelson, W., & Knowlton, D. (2002). Faculty Development by Design. *Society for Information Technology and Teacher Education International Conference 2002*(1), 666-668. [Online]. Available: http://dl.aace.org/10862.

Nelson, W. & Schmitz, M. (2016). Changing institutional paradigms for online education: A cautionary design and development tale. In *Proceedings of E-Learn: World Conference on E-Learning in Corporate, Government, Healthcare, and Higher Education 2016* (pp. 38-44). Chesapeake, VA: Association for the Advancement of Computing in Education.

Nelson, W. A., & Smith, R. E. (1994). Learning how to teach: A computer-based system to enhance teacher reflection. In M. Simonson (Ed.), *Sixteenth Annual Proceedings of the Association for Educational Communications and Technology*. Washington, DC: Association for Educational Communications and Technology.

Nelson, W. A., & Smith, R. E. (1994). The Teacher Chronicles: Using a case-based multimedia system to support reflection by beginning teachers. In *EDMEDIA '94 - World Conference on Educational Multimedia and Hypermedia*. Charlottesville, VA: Association for the Advancement of Computing in Education.

Nelson, W. A., & Smith, R. E. (1996). Chronicles of Teaching: Using computer-based communication to tell stories and reflect about teaching. In D. C. Edelson & E. A. Domeshek (Eds.), *Proceedings of the International Conference on the Learning Sciences* (pp. 243-248). Charlottesville, VA: Association for the Advancement of Computers in Education.

Orey, M. A., & Nelson, W. A. (1990). How to apply intelligent tutoring design principles to the design of computer-based instruction. In D. Dalton (Ed.), *Proceedings of the 32nd Annual International of the Association for the Development of Computer-Based Instructional Systems.* (pp. 377-382). Columbus, OH: ADCIS International.

Orey, M. A., & Nelson, W. A. (1991). Using intelligent tutoring system design principles to integrate cognitive theory into computer-based education. In M. Simonson & C. Hargrave (Eds.), *Thirteenth Annual Proceedings of the Association for Educational Communications and Technology* (pp. 611-624). Washington, DC: Association for Educational Communications and Technology.

Orey, M. A., & Nelson, W. A. (1994). Situated learning and the limits of applying the results of these data to the theories of situated cognition. In M. Simonson (Ed.), *Sixteenth Annual Proceedings of the Association for Educational Communications and Technology*. Washington, DC: Association for Educational Communications and Technology.

Orey, M. A., & Nelson, W. A. (1994). Visualization techniques for examining learner interactions with hypermedia environments. In M. Simonson (Ed.), *Sixteenth Annual Proceedings of the Association for Educational Communications and Technology* . Washington, DC: Association for Educational Communications and Technology.

Conference Papers

Crooks, S., Nelson, W. A., & Smith, R. E. (1999, February). *Using multimedia and computer conferencing to enhance problem based learning.* Paper presented at the annual conference of the Association for Educational Communications and Technology, Houston, TX.

Joyner, O., Nelson, W. A., M.-Yusof, S., Ardhana, W., & Lertchalolarn, C. (1990, February). *A study to test the efficacy in an Asian culture of a translated learning styles test instrument previously written in English and validated in a western culture.* Paper presented at the annual meeting of the Eastern Educational Research Association. Clearwater, FL.

Nelson, W. A. (1987, February). *Item representation in a menu selection task: the role of graphics in the human-computer interface.* Paper presented at the annual meeting of the Eastern Educational Research Association. Boston, MA.

Nelson, W. A. (1987, April). *Knowledge organization and procedural differences in expert and novice instructional designers.* Paper presented at the annual meeting of the American Educational Research Association. Washington, DC.

Nelson, W. A. (1988, February). *Solving instructional design problems: An examination of the "systems" approach.* Paper presented at the annual meeting of the Eastern Educational Research Association. Miami, FL.

Nelson, W. A. (1988, April). *The interface is half the battle: Design considerations for the development of expert systems for instructional design.* Paper presented at the annual conference of the International Association for Computing in Education. New Orleans, LA.

Nelson, W. A. (1989, February). *Developing expert systems from instructional design algorithms.* Paper presented at the annual meeting of the Eastern Educational Research Association. Savannah, GA.

Nelson, W. A. (1989, February). *Effects of content representations on the development of instructional objectives.* Paper presented at the annual meeting of the Eastern Educational Research Association. Savannah, GA.

Nelson, W. A. (1989, March). *Development and testing of an expert system for aiding instructional media selection decisions.* Paper presented at the annual meeting of the International Association for Computing in Education. San Francisco, CA.

Nelson, W. A. (1990, February). *The structure of instructional design knowledge.* Paper presented at the annual meeting of the Eastern Educational Research Association. Clearwater, FL.

Nelson, W. A. (1991, April). *Adjunct questions as a learning strategy for hypertext documents.* Paper presented at the annual meeting of the American Educational Research Association, Chicago, IL.

Nelson, W. A. (1991, April). *Effects of prior knowledge and task characteristics on information access in hypertext documents.* Paper presented at the annual meeting of the American Educational Research Association, Chicago, IL.

Nelson, W. A. (1991, August). *Learner modeling for intelligent hypermedia environments.* Paper presented at the International Conference on the Learning Sciences, Evanston, IL.

Nelson, W. A. (1992, April). *Adaptive hypermedia instructional systems: Possibilities for learner modeling.* Paper presented at the annual meeting of the American Educational Research Association, San Francisco, CA.

Nelson, W. A. (2008, April). *Design studios: Reflecting practice in pedagogy*. Paper presented at the annual meeting of the American Educational Research Association, San Diego, CA.

Nelson, W. A. (2012, April). *Instructional Design and Design Research: Where Are We, and Where Are We Headed*? Paper presented at the annual meeting of the American Educational Research Association, Vancouver, BC.

Nelson, W. A. (2012, April). *Learning Experience Design: Principles and Processes.* Paper presented at the annual meeting of the American Educational Research Association, Vancouver, BC.

Nelson, W. A. (2012, July). *The many facets of design and research in instructional design*. Paper presented at the AECT 2012 Summer Research Symposia, Louisville, KY.

Nelson, W. A. (2012, July). *Instructional design in a studio environment: What happens when design meets Hollywood?*. Paper presented at the AECT 2012 Summer Research Symposia, Louisville, KY.

Nelson, W. A., Andris, J., & Keefe, D. (1990, May). *Technology where they least expect it: A computer-intensive teacher education curriculum.* Paper presented at the Technology and Teacher Education Conference. Greenville, NC.

Nelson, W. A., Bush, L., & Rhodes, S. (2001, April). *A learning environment for learning about learning environments.* Paper presented at the annual meeting of the American Educational Research Association, Seattle, WA.

Nelson, W. A., & Bueno, K. (1999, February). *Adopted and invented learning strategies in a multimedia learning environment.* Paper presented at the annual meeting of the Association for Educational Communications and Technology, Houston, TX.

Nelson, W. A., & Bueno, K. A. (1999, April). Adopted and invented learning strategies in a multimedia learning environment. Paper presented at the annual meeting of the American Educational Research Association, Montreal, CA.

Nelson, W. A., Harmon, S. Orey, M. A., & Palumbo, D. (1993, June). *Techniques for analysis and evaluation of user interactions with hypermedia systems.* Panel discussion at ED-MEDIA '93 - World Conference on Educational Multimedia and Hypermedia, Orlando, FL.

Nelson, W. A., & Joyner, O. (1990, February). *Effects of document complexity and organization on learning from hypertext.* Paper presented at the annual meeting of the Eastern Educational Research Association. Clearwater, FL.

Nelson, W. A., & McCoy, L. (1988, February). *Development of logical reasoning skills through computer programming instruction.* Paper presented at the annual meeting of the Eastern Educational Research Association. Miami, FL.

Nelson, W. A., & Mohammed.-Yusof, S. (1991, November). *Intelligent tutoring with Hypertalk: Who needs Lisp or Prolog?* Paper presented at the annual meeting of the Association for the Development of Computer-Based Instructional Systems, St. Louis, MO.

Nelson, W. A., & Orey, M. A. (1991, April). *Reconceptualizing the instructional design process: Lessons learned from cognitive science.* Paper presented at the annual meeting of the American Educational Research Association.

Nelson, W. A., Palumbo, D. B., & Orey, M. A. (2010, February). *Designing and design-based research.* Paper presented at the annual meeting of the Eastern Educational Research Association, Savannah, GA.

Nelson, W. A., & Smith, R. (1994, February). *Learning how to teach: A computer-based system to enhance teacher reflection.* Paper presented at the annual

meeting of the Association for Educational Communications and Technology, Nashville, TN.

Nelson, W. A., & Smith, R. (1994, February). *Learning how to teach: A computer-based system to enhance teacher reflection.* Paper presented at the annual meeting of the Association for Teacher Education, Atlanta, GA.

Nelson, W. A., & Smith, R. E. (1995, March). *Using computer technology to support reflection on classroom practices.* Paper presented at the annual meeting of the Eastern Educational Research Association, Hilton Head, SC.

Nelson, W. A., & Smith, R. E. (1995, April). *Technological support for beginning teachers: A multimedia computer system for sharing stories and reflecting on classroom practice.* Paper presented at the annual meeting of the American Educational Research Association, San Francisco, CA.

Nelson, W. A., & Smith, R. (1996, April). *Constructivism and classroom teaching: How computer-supported collaborative learning can help beginning teachers.* Paper presented at the annual meeting of the American Educational Research Association, New York, NY.

Nelson, W. A., Wellings, P., & Palumbo, D. (2001, April). *Combining technology and narrative in a learning environment for workplace training.* Paper presented at the annual meeting of the American Educational Research Association, Seattle, WA.

Nelson, W. A., Wellings, P., Palumbo, D. B. & Smith, R. E. (2003, June). *Supporting learning with content, tools and community: Thinking outside of the learning management system box.* Paper presented at ED-MEDIA '02 World Conference on Educational Multimedia, Hypermedia, and Telecommunications, Honolulu, HI.

Orey, M. A., & Nelson, W. A. (1988, February). *Reconstructive versus reproductive processes for addition facts.* Paper presented at the annual meeting of the Eastern Educational Research Association. Miami, FL.

Orey, M. A., & Nelson, W. A. (1994, February). *Situated learning and the limits of applying the results of these data to theories of situated cognition.* Paper presented at the annual meeting of the Association for Educational Communications and Technology, Nashville, TN.

Orey, M. A., & Nelson, W. A. (1994, February). *Visualization techniques for examining learner interactions with hypermedia environments.* Paper presented at the annual meeting of the Association for Educational Communications and Technology, Nashville, TN.

Orey, M. A., Nelson, W. A., & Burton, J. K. (1988, August). *Ashcraft and Baroody: An eclectic alternative*. Paper presented at the annual meeting of the American Psychological Association. Atlanta, GA.

Polite, M.M., Krchniak, S., & Nelson, W. A. (1993, February). *Paradigms for educational change: Why school restructuring alone doesn't work*. Research symposium presented at the annual meeting of the Eastern Educational Research Association, Clearwater, FL.

Richey, R., Smith, P., Ragan, T., Fields, D., & Nelson, W. A. (1996, February). *The Legacy of Robert M. Gagné*. Symposium presented at the annual conference of the Association for Educational Communications and Technology, Indianapolis, IN.

Smith, R. E., Gallagher, W., & Nelson, W. A. (1995, March). *The cutting edge in case studies: Using computers to enhance understanding of classroom situations*. Paper presented at the annual meeting of the Association for Teacher Education, Detroit, MI.

Smith, R. E., Nelson, W. A., & Gallagher, W. (1994, February). *Learning how to teach: A computer-based system to enhance teacher reflection*. Paper presented at the annual meeting of the Association of Teacher Educators, Atlanta, GA.

Smith, R. E., Nelson, W. A., & Gallagher, W. (1996, February). *A gateway to teacher reflection in the classroom: Using computers to enhance understanding of classroom situations*. Paper presented at the annual meeting of the Association of Teacher Educators, St. Louis, MO.

Theodore, P. & Nelson, W. A. (2005, January). *Using Computer-mediated Bulletin Board Discussions to Facilitate Interaction among Pre-Service Teacher Education Students*. Paper presented at the Hawaii International Conference on Education., Honolulu, HI.

Presentations and Seminars

Bueno, K., & Nelson, W. A. (1991, March). *A contextualized computer environment for elementary Spanish*. Presented at the annual Midwest Education and Technology Conference, St. Louis, MO.

Mohammed-Yusof, S., & Nelson, W. A. (1991, March). *Intelligent tutoring in a hypermedia environment*. Presented at the annual Midwest Education and Technology Conference, St. Louis, MO.

Nelson, W. A. (1989, March). *Expert assistance for media selection: Some possibilities*. Presented at the annual Midwest Education and Technology Conference. St. Louis, MO.

Nelson, W. A. (1989, October). *Using spreadsheets to enhance mathematics instruction.* Presented at the annual meeting of the Illinois Council of Teachers of Mathematics. Peoria, IL.

Nelson, W. A. (1990, March). *Learning by browsing: Information seeking within hypertext documents.* Paper presented at the annual Midwest Education and Technology Conference. St. Louis, MO.

Nelson, W. A. (1992, September) *Multimedia for Learning and Instruction.* Presented at seminar sponsored by Apple Computer, Inc. and Advanced Systems and Peripherals, St. Louis, MO.

Nelson, W. A. (1992, October). *Knowledge mapping: An instructional strategy for hypermedia systems.* Presented at the Hypermedia '92 Conference, Bloomington, IN.

Nelson, W. A. (1992, October). *Hypermedia and instruction: Incorporating theories of knowledge representation and knowledge construction.* Presented at the Hypermedia '92 Conference, Bloomington, IN.

Nelson, W. A. (1992, September) *Multimedia for Learning and Instruction.* Presented at seminar sponsored by Apple Computer, Inc. and Advanced Systems and Peripherals, St. Louis, MO.

Nelson, W. A. (1992, November) *Multimedia for Learning and Instruction.* Presentation at seminar sponsored by the University of Missouri-St. Louis, St. Louis, MO.

Nelson, W. A. (1992, December). *Computer-assisted assessment.* Presentation at Science Conference '92, sponsored by Illinois Educational Service Center #16, Project for Excellence in Science and Mathematics, and the Illinois Science Teachers Association. Edwardsville, IL.

Nelson, W. A. (1993, February). *Computer-assisted assessment.* Christian-Montgomery Regional Science Educators Symposium, sponsored by Central Illinois Educational Service Center # 14, Illinois Educational Service Center #16, Sangamon State University, and Southern Illinois University Edwardsville. Carlinville, IL.

Nelson, W. A. (1993, April). *Multimedia in the Classroom.* Presentation made to faculty at Jefferson City Schools, Jefferson City, MO.

Nelson, W. A. (1993, May). *Teachware in the University Classroom.* Presentation made to academic computing coordinators from area universities and community colleges. Apple Market Center, St. Louis, MO.

Nelson, W. A. (1993, September). *Computer-based assessment*. Illinois Science Teachers Association, Collinsville, IL.

Nelson, W. A. (1993, Feb.). *Instructional design for classroom teachers.* Edwardsville Community Schools District No. 7. Edwardsville, IL.

Nelson, W. A. (1994, June). *Multimedia in the Classroom.* Workshops presented for the Office of Academic Computing, Southern Illinois University Edwardsville.

Nelson, W. A. (1994, October). *Technology evaluation and status report.* Riverview Gardens School District, St. Louis, MO.

Nelson, W. A. (1995, February). *Technology in Education.* Invited presentation to the Hartford-Wood River School District's Technology Committee, Wood River, IL.

Nelson, W. A. (1995, April) *The Schools of the Future,* Invited participant for a televised "town hall" meeting, KETC (Channel 9), St. Louis, MO.

Nelson, W. A. (1995, November). *The Edwardsville School District Technology Plan.* Invited presentation to the Edwardsville School Board, Edwardsville, IL.

Nelson, W. A. (1996). *Learning with technology.* Presentation for a grant writing workshop sponsored by the Regional Technology Hub 5, Alton, IL.

Nelson, W. A. (1997, January). *Technology applications seminar.* St. Clair County Regional Office of Education, Belleville, IL.

Nelson, W. A. (1997, November). *Asynchronous Learning.* Invited presentation to the Board of Trustees, Southern Illinois University Edwardsville, Edwardsville, IL.

Nelson, W. A. (1997, October). *Engaged learning and technology.* Alton-Riverbend Conference, Alton, IL.

Nelson, W. A. (1997, October). *Models for instructional design.* Invited presentation at the annual meeting of the Media and Technology division, U. S. Department of Veteran's Affairs, St. Louis, MO.

Nelson, W. A. (1998, June). *Alternative Models for Teaching.* Engaged Learning Institute, Belleville, IL.

Nelson, W. A. (1998, June). *Instructional Design Models and Processes.* Seminar presented for employees of the the Training Department, A. G. Edwards, Inc., St. Louis, MO.

Nelson, W. A. (1998, August). *Learning Communities.* Engaged Learning Institute, Collinsville, IL.

Nelson, W. A. (2002, November). *Instructional design: Why is it so important?* Invited keynote presentation at the Online Learning Conference, sponsored by the Federal Reserve Bank of St. Louis. St. Louis, MO.

Nelson, W. A., & Crooks, S. M. (1997, April). *New Approaches to Training: Learning as a shared experience.* St. Louis Chapter, American Society for Training and Development, St. Louis, MO.

Nelson, W. A., Crooks, S. M., & Katayama, A. (1997, October). *Learning, Instructional Design, and Technology Development.* A series of seminars presented at the National Imagery and Mapping Agency, St. Louis, MO.

Nelson, W. A., & Loucks, M. (1994, March). *Technology in Education*. Presentation for the faculty of the Edwardsville School District, Edwardsville, IL.

Nelson, W. A., Orey, M. A., & Palumbo, D. (1993, February). *Analyzing and evaluating user interactions with hypermedia systems.* Research symposium presented at the annual meeting of the Eastern Educational Research Association, Clearwater, FL.

Nelson, W. A., & Smith, R. E. (1993, May). *Computers in the Science Curriculum*. Workshop for faculty at Blue Mound Schools, Blue Mound, IL.

Grants Received

Andris, J., Nelson, W. A., Beaman, M., & Hostetler, D. (1991). *Equipment and software for the Building III Computer Complex.* Funded by the Excellence in Undergraduate Education Grants Program, Southern Illinois University Edwardsville. ($30,317).

Lin, C., Nelson, W., Rossow, M., & Smith, S. (1991). *Intelligent tutoring system prototypes for engineering design.* Funded by the Graduate School Special Research Initiative, Southern Illinois University Edwardsville ($10,000).

Nelson, W. A. (1988). *A Descriptive Analysis of the Instructional Design Process.* Funded by the Graduate School, Southern Illinois University Edwardsville. ($3000).

Nelson, W. A. (1988). *Formative Evaluation of an Expert System Designed to Aid Instructional Media Selection Decisions.* Funded by the Graduate School, Southern Illinois University Edwardsville. ($1700).

Nelson, W. A. (1991). *The Teachware Project: Supporting effective undergraduate education with computer technology.* Funded by the Excellence in Undergraduate Education Grants Program, Southern Illinois University Edwardsville. ($15,030).

Nelson, W. A. (1992). *The Teachware Project: Phase II.* Funded by the Excellence in Undergraduate Education Grants Program, Southern Illinois University Edwardsville. ($22,236).

Nelson, W. A. (1992). *Learning on demand: Exploring new architectures for learning with computers.* Funded by a grant from the Funded University Research program of the Graduate School, Southern Illinois University Edwardsville. ($6900).

Nelson, W. A. (1997). *Chronicles of Teaching.* Funded by the Regional Center for Distance Learning and Multimedia Development, Southern Illinois University Carbondale. ($750).

Nelson, W. A. (2001-2004). *Plugging in to LITES.* Funded by the Preparing Tomorrow's Teachers to Use Technology program, U. S. Department of Education, Washington, DC. ($1,113,399).

Nelson, W. A., & Smith, S. (1990). *Controlling computer-based instruction with neural networks.* Funded by the Faculty Development Fund, Southern Illinois University Edwardsville. ($5600).

Thomeczek, M., & Nelson, W. A. (2011). iCan Succeed: Literacy Education in Children with Autism. Funded by the Seed Grants for Transitional and Exploratory Projects, Southern Illinois University Edwardsville. ($12,951)

Professional Affiliations

American Educational Research Association
Association for the Advancement of Computing in Education
Association for Educational Communications and Technology

Professional Activities

Discussant

- Psychology and Reading paper session at the annual meeting of the Eastern Educational Research Association, 1989.
- Images and Imagery paper session at the annual meeting of the Eastern Educational Research Association, 1990.
- Computers and Anxiety paper session at the annual meeting of the Eastern Educational Research Association, 1993.

- Learning Environments paper session at the annual meeting of the American Educational Research Association, 2000.
- Scaffolding and Its Impact on Learning paper session at the annual meeting of the American Educational Research Association, 2006.
- Visualization and Spatial Cognition paper session at the annual meeting of the American Educational Research Association, 2007.
- Ways of Thinking About Design and Instruction paper session at the annual meeting of the American Educational Research Association, 2010
- Research-Based Frameworks for Instructional Design Education and Expertise Development paper session at the annual meeting of the American Educational Research Association, 2011.

Reviewer

- Editorial Review Board, Journal of Research in Education, 1990-1996.
- Editorial Review Board, Journal of Educational Computing Research, 1991-2013
- Editorial Review Board, Journal of Educational Multimedia and Hypermedia, 1993-2013
- Editorial Review Board, Journal of Interactive Learning Research, 2002 – 2013
- Grant proposals for the U. S. Department of Education, Office of Educational Research and Improvement, Fund for the Improvement and Reform of Schools and Teaching, 1990.
- Grant proposals for the U. S. Department of Education, Office of Bilingual Education and Minority Languages Affairs, Transitional Bilingual Education Program, 1993.
- Research proposals for the meeting of the Association for Educational Communications and Technology, Research and Theory Division.
- Research proposals for the annual meeting of the American Educational Research Association, 1998-present in the areas of Division C (Learning), Design and Technology Special Interest Group, and the Instructional Technology Special Interest Group.
- Textbooks for Educational Psychology published by Wadsworth (1991, 1992) and Longman (1992).
- Textbook for Instructional Design published by Addison-Wesley, 1995.

Consultant

U. S. Army Recruiting Command and Army Research Institute, Washington, DC, 1990-91.
- Conducted needs assessment used to validate and redesign training programs for Army recruiters.

Southwestern Bell, St. Louis, MO, 1991.
- Created print-based instructional materials for a series of training modules.

Software Systems Specialists, St. Louis, MO, 1992.
- Evaluated instructional software created for health education of elementary school students

Illinois Science Teachers Association, 1993.

- Developed interactive assessment activities for grade 4 and grade 6 state science testing

Human Code, Austin, TX, 1996-2000.
- Consulted on the design of curriculum and the learning strategies to be embedded in products for LeapFrog Toys.
- Created and documented a design methodology for all projects undertaken by the Learning Technologies division of the company.
- Provided field evaluation reports for Entertech, an interactive training system for technology industry workers.

NewMetrics Corp., St. Louis, MO, 1996-1997.
- Designed training modules and online help for new software product.

J.K. & Kathryn Albertson Foundation, Boise, ID through Human Code, Austin, TX, 1999-2001.
- Worked as a consultant to design and deliver Teaching with Technology, a three-year professional development project funded by the J.A. & Kathryn Albertson Foundation.

Real Estate Appraisal Institute, Chicago, IL, 2000-2004.
- Worked with subject matter experts to design online training modules for appraisers.

Foundation for Credit Education, 2006-2007
- Created an online training system and supported web-based real-time seminars.

Walt Disney Company, through MoWerks Learning, Athens, GA, 2009 – 2013.
- Created curriculum for content of interactive online games for children K-5,
- Participated on teams to design, develop, and evaluate online interactive games.

Walt Disney Company, 2013-present
- Participated on teams to design curriculum materials for Disney Nature films.

Triangle Associates, St. Louis, MO, 2008-2016.
- Design, develop, manage hosting, and provide data analysis for online surveys, including development of automated administrative tools and reporting system.