

CURRICULUM VITAE

Wayne A. Nelson
2011
Department of Educational Leadership
Southern Illinois University Edwardsville
Edwardsville, IL 62026
(618) 650-3586

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

- 1999- present 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 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 - 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
- 1988-1993 Assistant Professor - Department of Educational Leadership, Southern Illinois University Edwardsville, Edwardsville, IL.
- 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., 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., & 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 the 33rd 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.ace.org/10862>
- 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., 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-present
- Editorial Review Board, *Journal of Educational Multimedia and Hypermedia*, 1993-present
- Editorial Review Board, *Journal of Interactive Learning Research*, 2002 – present
- 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 a 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 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 with Human Code 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 – present.
 - Created curriculum for content of interactive online games for children K-5,
 - Participated on teams to design, develop and evaluate online interactive games.