

REBEKAH KINCAID NIX

Educational Background

Curtin University of Technology, Science Education (Perth, Australia)

Doctor of Philosophy, 2003

Research focused on developing a model to create a unique learning environment that results in a positive change in science teachers' attitude toward and understanding of educational applications of information technology. A "transparent" information technology learning environment unifies the three "classic" learning environments enabling direct transfer of knowledge through development of a virtual field trip. Specifically, this study determines if the program design fosters individual communication, collaboration and creativity.

University of Texas at Dallas, Science Education (Richardson, Texas)

Master of Arts in Teaching, 1998

Research focused on defining what educators want from the World Wide Web and how content providers and administrators might fulfil needs with emerging multimedia tools. Studies included advanced educational research and science courses, in addition to development of lessons/units that reflect original applications of technology in teaching.

GLOBE Teacher Certificate – Global Learning & Observations to Benefit the Environment

University of Texas at Dallas, Geosciences (Richardson, Texas)

Bachelor of Science (Cum Laude), 1986

Texas Teacher Certificate – High School Science, Composite

Colorado School of Mines, Geological Engineering (Golden, Colorado)

Professional Experience

University of Texas at Dallas (1999–present)

Richardson, Texas; providing high-quality educational and research programs driven by the development, diffusion, understanding and management of advanced technology

Educational Assistant. Recruited by Dean of Natural Science and Mathematics to investigate options and develop strategy for migrating department courses to remote delivery using the World Wide Web; Departmental Liaison addressing faculty/staff technology support issues. Created and maintained websites for the School of Natural Sciences and Mathematics; the Global Environmental Change and Melville Research Vessel Cruise virtual field trips; developed and produced Science Education program brochure and Science/Mathematics Education department website. *Senior Lecturer.* Hired by Director of Teacher Development program to teach Educational Technology course based on principles of use rather than details of hardware/software. Produced and supported online course since Fall semester, 2000. *Teaching Assistant.* Worked with Dean of General Studies to facilitate development of a distance learning program based on Math Methods course delivered using the latest classroom presentation technologies. Recommended development models for courses in Chemistry, Physics and Science Education, including content and research.

REBEKAH KINCAID NIX

MultiMedia Access Corporation (MMAC) (1994–January 1999)

Dallas, Texas; manufacturers of innovative video communications systems

Corporate Marketing/Investor Relations. Recruited as Manager of Graphics and Publications to design and maintain corporate-level materials, as well as initiate marketing support programs to launch new products. Emerging technologies required a strong educational component along with persuasive application and technical information. Focus shifted to corporate research and development to support Initial Public Offering and meet on-going Securities Exchange Commission requirements.

United States Data Corporation (USDATA) (1991–May 1994)

Richardson, Texas; manufacturers of real-time automation software and auto id systems

Marketing Communications Coordinator. Joined international marketing department to develop marketing support programs to launch new products and support existing product line. Interfaced with engineering, technical support, training and sales to produce materials with consistent themes, messages, and style to promote corporate image. Established department-wide processes that streamlined production, external printing, archiving, distribution and maintenance of materials.

Visual Information Technologies, Inc. (VITec) (1988–October 1991)

Plano, Texas; manufacturers of imaging hardware, software and applications

Special Projects Documentation Specialist. Hired by Senior Technical Writer on part-time basis to re-design and edit users' guides and technical documentation of software and hardware products. Performance resulted in full-time position in Support Services (training) with responsibility for all technical information in System Integration Products and Services and international standards documents. Provided technical and design support for development of marketing presentations, product literature, catalogs and sales tools.

S. Morrice & Associates, Ltd. (1987–August 1988)

Denver, Colorado; independent international petroleum consulting company

Geological Consultant. Completed two international petroleum prospect development projects including lease and licensing terms, research, field work in Belize and Northern Ireland, data analysis and report generation for commercial and government presentations for investment and educational purposes. Actively involved with the Institute for the Study of Earth and Man (Southern Methodist University) as speaker liaison supporting various international conferences and workshops.

The Container Store (1986–1987)

Dallas, Texas; retail store specializing in storage/organization products

Stock and Display Supervisor. Started as part-time seasonal cashier. Hired as full-time salesperson and stocker. Also performed accounting duties as Transaction Coordinator including opening registers, making change and deposits and completing daily reports. As Stock and Display Supervisor, trained and managed team responsible for store appearance, merchandise from/ to trucks, inventory, and product displays.

REBEKAH KINCAID NIX

Publications

Nix, R.K., Fraser, B.J., & Ledbetter, C.E. (2003). Evaluating an Integrated Science Learning Environment (ISLE) Using a New Form of the Constructivist Learning Environment Survey (CLES). Learning Environments Research (in review).

Nix, R.K. (2003). Virtual field trips: Using information technology to create an integrated science learning environment. Unpublished doctoral thesis, Curtin University of Technology, Perth, Western Australia.

Nix, R.K. (2000). Science-related virtual field trips on the world wide web. The Texas Science Teacher, 29(1), 18-23.

Ledbetter, C.E., & Nix, R.K. (2000). Bringing Back Big Bend: Teachers' Adventure to be Shared through Virtual Tour. Dallas Outdoors, 1(5), 9-11.

Nix, R.K. (1999). ED4372: Educational technology/ED5320: Issues in educational technology. Online course offered by the University of Texas at Dallas through the UT-System TeleCampus.

Parker, F.S., & Nix, R.K. (1994). Sounding the silence or 'why people sing in the shower'. Dallas, Texas: RNIX Company.

Presentations

Nix, R.K., Fraser, B.J., & Ledbetter, C.E. (2003, April). Evaluating an Integrated Science Learning Environment (ISLE) Using a New Form of the Constructivist Learning Environment Survey (CLES). Paper presented at the annual meeting of the American Educational Research Association. Chicago, IL.

Nix, R.K., & Ledbetter, C.E. (2002, April). Drawing conclusions: A quick assessment of student understanding through concept map evaluation. Paper to be presented at the annual meeting of the National Association for Research in Science Teaching, New Orleans, LA.

Nix, R.K., Ledbetter, C.E., & Fraser, B.J. (2001, December). Evaluation of an integrated science learning environment that bridges university field classes and field trips. Paper presented at the annual meeting of the Australian Association for Research in Education. Fremantle, Australia. ISSN 1324-9320.

Nix, R.K. (2001, August). Think about I.T.: A process approach to educational technology. Paper presented at the annual meeting of the Information Technology and Distance Education, Austin, TX.

Nix, R.K. (2001, April). Virtual field trips: The next best thing to being there (and sometimes better!). Presented at the annual meeting of the National Association for Geology Teachers, Albuquerque, NM.

Nix, R.K., Ledbetter, C.E., & Fraser, B.J. (2001, April). A web (page) that works: What a concept (map)! Paper presented at the annual meeting of the National Association for Research in Science Teaching, St. Louis, MO.

Nix, R.K., & Ledbetter, C.E. (2001, February). Bringing back Big Bend. Virtual field trip (Global Environmental Change website) workshop presented to K-12 science teachers at Mini-CAST, the annual local Conference for the Advancement of Science Teaching, Dallas, Texas.

Nix, R.K., & Ledbetter, C.E. (2000, October). Communication, collaboration & creativity: Integrating real-world technology into science education. Presented at the annual Conference for the Advancement of Science Teaching. College Station, TX.

REBEKAH KINCAID NIX

Grants and Contracts

MT SCIENCE: Mobile Technology for teaching and learning SCIENCE in the real world. PI. Awarded Technology Infrastructure Board, August, 2002, 12 months, \$50,000.

Continuing Education for Leaders and Lifelong Learners (CEL3). Co-PI. Pre-proposal submitted to National Science Foundation, March 15, 2002, 60 months, \$5,632,805.

Course Development for Online Instruction (ED4372/ED5320). PI. Awarded March 16, 2002 by University of Texas at Dallas Center for Online Learning and Teaching, 3 months, \$3,500.

MAT-SE Online! A distance learning strand of the Master of Arts in Teaching degree in Science Education. Co-PI. Submitted Nov 14, 2000 to University of Texas TeleCampus, 12 months, \$141,054.

Professional Activities

Innovation in teaching and training: design and delivery of technology-supported professional development modules (CAST, Heard Museum, Dallas Zoo/Aquarium), design and production of virtual field trips (TORCH, Global Environment Change; Subduction Factory, Melville R/V Cruise) and educational resource websites (Educational Technology Resources 'Etweb', Science Education Research 'SER', Ecology Field Methods); extensive training and experience with instructional design and current course delivery platforms (particularly VCampus, WebCT, Blackboard).

Contributions to science and learning: participation and presentation in educational and scientific organizations (Australian Association for Research in Education, National Association of Geoscience Teachers, National Association for Research in Science Teaching, Science Teachers Association of Texas); support for recruitment efforts and collateral materials development for Science Education.

Development and refinement of tools: membership in the Technology Leadership Academy (PT3) and Sigma Xi; liaison to university Information Resources representing Natural Science and Mathematics faculty; review volunteer for UT-System TeleCampus platform selection and Texas Science Teacher journal; observation and assistance in in-service presentations at Regional Educational Service Centers; alignment of resources with state/national standards.

Broadening participation: technology integration through Botball robotics; role model presentation through Kilby Awards Foundation; international research and reform through Institute for the Study of Earth and Man at Southern Methodist University; educational materials production through RNIX Company and SCE Associates; incorporation of new methods through Park Cities Counseling Center and Texas Counseling Association; other community events.

Honors and Awards

December, 2004: nominated for the National Association for Research in Science Teaching Outstanding Doctoral Dissertation Award

September, 2003: Visiting Fellow – Science and Mathematics Education Centre, Division of Engineering, Science and Computing, Curtin University of Technology, Perth, Western Australia.

Professional Membership

American Educational Research Association, member (2002–present)

Southwest Association for Educators of Teachers of Science, member (2002–present)

Australian Association for Research in Education, member (2001–present)

Technology Leadership Academy, member (2001–present)

Geological Society of America/National Association of Geoscience Teachers (NAGT), secretary (2000)

National Association for Research in Science Teaching, member (1999–present)

Sigma Xi Research Society, member (1999–present)