# ROBERT H. SEIDMAN

Southern New Hampshire University (ret) 2500 N. River Road, Manchester, NH 03106

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# SUMMARY OF BACKGROUND

**Ph.D. & M.S.** School of Computer and Information Science, Syracuse University.

Research areas: artificial intelligence, database query languages, developmental and cognitive psychology.

**Research:** Undergraduate and graduate computer curriculum innovation and reform; competency-based higher education policy analysis; teaching computer programming; computer simulation and modeling; artificial intelligence and fuzzy logic; systemic analysis of national educational systems; logical structures of reasoning; cognitive effects of computer programming.

**Teaching:** Undergraduate and graduate computer simulation and modeling; computer programming; systems analysis and design; artificial intelligence and expert systems; computer-based educational technologies; ecommerce; big data analytics.

**Publications:** Books**,** chapters, instructional computer guides, conference papers, foundation and government grants. Executive Editor - *Journal of Educational Computing Research.* Co-author: *Saving Higher Education: The Integrated, Competency-Based Three-Year Bachelor's Degree Program*; *Fluency with Alice*; *Predicting the Behavior of the Educational System.*

**Administrative**: Chair – Graduate and Undergraduate Department of Computer Information Technology (1997-2003); Coordinator - Undergraduate Department of Computer Information Technology (2013-2014)

# TEACHING EXPERIENCE

**Professor** (1981-2014): Southern New Hampshire University. Undergraduate courses in information technology, ecommerce, artificial intelligence, systems analysis and design, introduction to information technology, and big data analytics in the Three-Year Degree Honors program. Guest lecturer on artificial intelligence in undergraduate Honors courses. Graduate courses in information technology, artificial intelligence, simulation and modeling, expert systems, and in quantitative analysis. Leadership in undergraduate and graduate curriculum innovation, reform and development. Department Chair 1997-2003 & Department Coordinator 2013-2014. University Faculty Scholar 2010-2011.

**Assistant** Professor (1978-81): Department of Technology and Society, State University of New York at Stony Brook.

**Assistant Professor** (1973-75): Department of Computer Science, State University of New York College at Oswego.

# FORMAL EDUCATION

**Ph.D.** School of Computer and Information Science, Syracuse University.

"The Effects of Learning the LOGO Computer Programming Language on the Conditional Reasoning of School Children." 1980.

**M.S.** School of Computer and Information Science, Syracuse University.

"The Implementation of an Answer-Construction Question-Answering System." 1971.

**B.S.** Rutgers University, Electrical Engineering. 1968.

# PROFESSIONAL ASSOCIATIONS

American Educational Research Association Association for Computing Machinery Philosophy of Education Society (Fellow) IEEE Computer Society

American Association of Artificial Intelligence

# PUBLICATIONS & PRESENTATIONS

**Ongoing:** Executive Editor since 1984. Emeritus Editor since 2024 - *Journal of Educational Computing Research.* <https://journals.sagepub.com/home/jec> [International scholarly research journal published 8 times each year. Serves the educational computing research community and informs practitioners, worldwide. Published by SAGE.]

 **2025**

Seidman, R. H. (2025). Intentional and Unintentional Consequences. In Allison, J., et. al. (2025). From Generative AI to Extended Reality: Multidisciplinary Perspectives on Challenges, Opportunities, and Future of Educational Computing. *Journal of Educational Computing Research*, 63(6). <https://journals.sagepub.com/doi/10.1177/07356331251359964>

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**2024**

Seidman, R. H. (2024). Farewell. *Journal of Educational Computing Research*. Vol. 63(2). December 2024. https://doi.org/10.1177/07356331241311770

**2015** “Computers in Education: The good, the bad and the ugly.” Friends of the Rye NH Public Library. <https://0df3b506-92e0-4c5c-a170-793f556a6e28.filesusr.com/ugd/957815_8bf566bc86834211ac622a1cdd4d2b65.pdf>

**2014** “Innovation: Faculty Style.” Panel presentation at the Western Academic Leadership Forum Annual Meeting in Albuquerque. <http://bit.ly/1BGL3a4>

**2012**Saving Higher Education: The Integrated, Competency-Based Three-Year Bachelor's Degree Program*.* Bradley, Seidman, Painchaud. San Francisco: Jossey- Bass/Wiley.

[https://www.wiley.com/WileyCDA/WileyTitle/productCd-0470888199,miniSiteCd-JBHIGHERED.html](https://www.wiley.com/WileyCDA/WileyTitle/productCd-0470888199%2CminiSiteCd-JBHIGHERED.html)

“Three-Year Degrees and the Liberal Arts: Quality Assurance.” American Association of Colleges and Universities Annual Meeting. January 2012. Washington DC. Seidman, Bradley & Painchaud.

EDUCAUSE 2012 Annual Conference. “Disruptive Innovation: Current Trends & Future Directions.” Speaker and panel member. [http://www.educause.edu/annual-](http://www.educause.edu/annual-conference/2012/disruptive-innovation-current-trends-and-future-directions) [conference/2012/disruptive-innovation-current-trends-and-future-directions](http://www.educause.edu/annual-conference/2012/disruptive-innovation-current-trends-and-future-directions)

**2011** “'A resounding ‘Yes' to the degree in three.” Washington Post Education blog. July 22, 2011. [http://www.washingtonpost.com/blogs/college-inc/post/guest-post-a-resounding-](http://www.washingtonpost.com/blogs/college-inc/post/guest-post-a-resounding-yes-to-the-degree-in-three/2011/07/22/gIQAGIgcTI_blog.html) [yes-to-the-degree-in-three/2011/07/22/gIQAGIgcTI\_blog.html](http://www.washingtonpost.com/blogs/college-inc/post/guest-post-a-resounding-yes-to-the-degree-in-three/2011/07/22/gIQAGIgcTI_blog.html)

**2010 “**Should colleges offer three-year bachelor's degrees? Yes - Their time has come.” *On Campus*. American Federation of Teachers. September/October 2010. Pg. 3. <http://bit.ly/1Em47uF>

**2009** Fluency with Alice - Supplement for Fluency with Information Technology: Skills, Concepts, and Capabilities**.** Lead author with Phil Funk, Jim Isaak, Lundy Lewis. Boston: Pearson/Prentice-Hall. <http://bit.ly/FluencyWithAlice>

“Highly Successful 3-Year Degree Program Graduates 10th Class in May 2009.” Tomorrow's Professor Blog & Listserv. Stanford University Center for Teaching & Learning. Posting #947. <http://cgi.stanford.edu/~dept-ctl/cgi-bin/tomprof/postings.php>

"Alice First: 3D Interactive Game Programming." Proceedings of the 2009 ACM- SIGCSE Annual Conference on Innovation & Technology in Computer Science Education. Universite Pierre et Marie Curie (Paris). July 2009. <http://it.snhu.edu/seidmanrobert/ITiCSE-09-Paris-Seidman.pdf>

**2006** "Fuzzy Logic & Fuzzy Reasoning: What-if-not Aristotle’s ‘Law of the Excluded Middle’?" in Copes, L. & Rosamond, F. A. (eds), Educational Transformations: The Influences of Stephen Ira Brown. Bloomington: Institute for Studies in Educational Mathematics - AuthorHouse.

 **2006** “A New Paradigm Learning Community for Students and Faculty: Southern New Hampshire University Three Year Honors Program.” Danforth Association of New England. “Learning Communities” conference. October 2006. Invited speaker: <http://web.simmons.edu/~browder/DANE/agenda2006.shtml>

**2002** "A Collaborative & Competency-based Three-Year Bachelor’s Degree: Empirical Results." American Educational Research Association, Annual Meeting, New Orleans. Co-author, Martin Bradley (ERIC ED 481060) https://eric.ed.gov/?id=ED481060

“Imagine.” Keynote address to The Johns Hopkins University Center for Talented Youth

- Talent Search Awards Ceremony, Manchester. <http://it.snhu.edu/seidmanrobert/John_Hopkins_Keynote.htm>

**2001** “Beyond Computers: The integration of computing & information technology into the school curriculum.” Keynote Address - Computer and Education16th Annual Computer Conference, Kingdom of Saudi Arabia. Proceedings - 2001. <https://0df3b506-92e0-4c5c-a170-793f556a6e28.filesusr.com/ugd/957815_50b43aea837a4d59802b9716e353f19f.pdf>

**1999** "New Hampshire College's Virtual Classroom Environment Guide." New Hampshire College.

**1998** "Re-engineering Four Years of College into Three: The Makings of a Competency-based Three Year Bachelor's Degree." American Educational Research Association, Annual Meeting, San Diego. (ERIC ED 421901)

**1997** Predicting the Behavior of the Educational System. With Thomas F. Green, senior author, and David P. Ericson, N.Y.: Educator's International Press - Classics in Education Series. [Reissue of Syracuse University Press, 1980.]

**1996** "New Hampshire College Guide to Email & the Internet." New Hampshire College. "National Education 'Goals 2000': Some Disastrous Unintended Consequences."

*Educational Policy Analysis Archives*; Volume 4. <https://doi.org/10.14507/epaa.v4n11.1996>

**1995** "National Education 'Goals 2000': Some Disastrous Unintended Consequences." American Educational Research Association, Annual Meeting, San Francisco. (<https://eric.ed.gov/?id=ED388673>)

**1990** "Computer Programming and Logical Reasoning: Unintended Cognitive Effects." *Journal of Educational Technology Systems*; 18 (2), 123-141.

"Knowledge Intensive Programming: A New Educational Computing Environment."

*Journal of Educational Technology Systems*; 18 (3), 207-214.

**1988** "New Directions in Educational Computing Research." Chapter in Teaching and Learning Computer Programming: Multiple Research Perspectives; Richard E. Mayer (ed.); NJ: Erlbaum

**1986** "Deductive Necessity and the Logical Structures of Reasoning: Piaget's Psycho- Logico Models." Occasional Paper Series, Research Report 86-2, New Hampshire College Graduate School, 92 pp.

"Transductive Reasoning and the Teaching of Conditional Logic to Children." Occasional Paper Series - Research Report 86-1, New Hampshire College Graduate School, 95 pp.

**1982** "The Logic and Behavioral Principles of Educational Systems: Social Independence or Dependence?" Chapter in The Sociology of Educational Expansion. Margaret S. Archer (ed.). London: SAGE Studies in International Sociology Series.

**1981** "The Effects of Learning a Computer Programming Language on the Logical Reasoning of School Children." American Educational Research Association, Annual Meeting, Los Angeles. (ERIC ED 205206)

"The Explanatory Power of Two Idealized Models of Educational and Social Attainment." American Educational Research Association, Annual Meeting, Los Angeles.

(ERIC ED 206068)

Journal of Educational Technology Systems Special Issue devoted to "Computer-Based Educational Technologies." Guest Editor, Vol. 10, No. 2.

"Electronic Funds Transfer." Chapter in Socio-Technological Instructional Modules Volume III, Thomas T. Liao (ed), Lexington: Ginn Publishing Company.

 **Pre-1981** See <http://bit.ly/DrRobertSeidman>

# Southern New Hampshire University Committees, Community and Professional Activities (partial)

Member of Degree-in-Three Design Team. Southern New Hampshire School of Business (2011)

Founding and continuing Editorial Board member of ***Amoskeag: The Journal of Southern New Hampshire University*** [**https://amoskeagjournal.wordpress.com/**](https://amoskeagjournal.wordpress.com/)

Executive Editor of the ***Journal of Educational Computing Research*** (ongoing) Editorial Board Member of the ***Journal of Educational Technology Systems*** (ongoing) Editorial Board Member of the ***Social Science Computing Journal*** (1993-98)

Editorial Board Member of ***The Continuum Review: A Journal of Contemporary Writing from North American Institutes for Learning in Retirement*** (1997-99)

Editorial Board of ***THEMES in Science and Technology Education*** (Greece)

<http://ouranos.edu.uoi.gr/theste/index.php/theste/index>

Program & Editorial Board member: **International Academy of E-Business** (1997-2004) Founding member of the NHC undergraduate Honors Committee (until 1996)

Guest Lecturer in Honors Program classes (to 2014) SNHU Study Abroad Faculty Liaison (2006-2008) SNHU Faculty Scholar (2010-2011)

Founding convener of the SNHU Faculty Center for Innovation and Excellence in Teaching (now the Center for Teaching and Learning).

Friends of the Rye NH Public Library guest speaker. January 2015. <https://0df3b506-92e0-4c5c-a170-793f556a6e28.filesusr.com/ugd/957815_8bf566bc86834211ac622a1cdd4d2b65.pdf>

Interview with *The Wall Street Journal* for a November 5, 2014 article featuring SNHU’s three- year degree competency-based programs. (<http://www.snhu.edu/18370.asp>)

Graduate School Curriculum Committee member (1994-7) and Chair (1996-7)

Member of President's Ad Hoc Distance Education Technology Committee (1995) Member of the New Hampshire College FIPSE 3-Year Degree Committee (1996-1997) Member of the Three-Year School of Business Honors Program Steering Committee (to 2014) New Hampshire College Computing Technology Roundtable - "White Paper" 1997

Graduate School Ad Hoc Technology Committee member and chair 1991-1997

Graduate and Undergraduate Information Technology Department Chair (1997-2003).

Undergraduate Information Technology Department Coordinator (2013-2014).

Director of the Graduate School Faculty Colloquium Series (1995-7) Reviewer for the National Educational Computer Conference

Proposal Reviewer for the Nebraska Research Initiative Program (1997-99)

Manuscript Reviews: *Amoskeag: The Journal of Southern New Hampshire University; The Continuum Review: A Journal of Contemporary Writing from North American Institutes for Learning in Retirement* (1997-99)*; National Educational Computing Conference (annual)*

Developed Web site for MS-IT program (1998-2003)

Supervisor of Graduate Research Assistants working on educational materials for artificial intelligence and expert systems courses and supervising Assistants in their role as Managing Editor Journal of Educational Computing Research (ongoing)

Chair of Board of Trustees, Horizon’s Edge School, Canterbury NH 1988-1994 Capitol Region Food Program volunteer (Concord, NH);

First Congregational Church - Homeless Shelter volunteer (Concord, NH);