

Jeremy Roschelle

As director of the Center for Technology in Learning at SRI International, Mr. Roschelle works with more than 60 talented researchers and staff to develop innovations in math and science learning and to study the impact of educational interventions. Through cognitive science-based research on the "Envisioning Machine" and later "SimCalc," he has explored how computer-based representations can make the mathematics of change and the related physics of motion accessible to many more students. Two running themes in his work are the study of collaboration in learning and the appropriate use of advanced or emerging technologies (such as component software and wireless handhelds) in education. More recently, Mr. Roschelle has been addressing large-scale use of innovative technologies in education, both through consulting to companies with a large impact in the market and through implementation research on scaling up SimCalc to a wide variety of teachers and classrooms.

His 1992 paper on *Learning by Collaborating* is frequently cited as a seminal work in Computer Supported Collaborative Learning. A 1993 paper with Jack Smith and Andy diSessa on *Misconceptions Reconceived* is an important reference work on the nature of students' conceptual development. A 2001 review paper on the topic of *Changing How and What Children Learn in School with Computer-Based Technologies* often appears in graduate syllabi. His 2002 paper with Roy Pea, *Walk on the Wild Side*, has been influential in understanding the future possibilities for wireless handheld learning devices. Mr. Roschelle also authored an important early video analysis tool, "CVideo," and contributed to the literature on video-based research methods.

Mr. Roschelle became intrigued with educational technology through an undergraduate research opportunity in the Logo group while he was a computer science student at Massachusetts Institute of Technology (MIT), where he worked on Music Logo and Boxer. He received the first Ph.D. in Berkeley's Educational: Math, Science, and Technology program and pursued educational technology research at both Xerox PARC and the Institute for Research on Learning. After stints in the former British colonies of Massachusetts and Australia, he settled down at SRI International in 1997.

Mr. Roschelle founded SRI's Strategic Learning Consulting practice, which translates research knowledge into innovative products. He serves on the editorial boards of five leading journals and has been a program chair of a Computer-Supported Collaborative Learning conference, an IEEE Wireless and Mobile Technologies in Education workshop, and two AERA Special Interest Groups. He has been invited to give keynote addresses in North America, Asia, and Europe.