

*DEPARTMENT OF MATHEMATICS • ITHACA COLLEGE • ITHACA NY 14850
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DANI NOVAK

EDUCATIONAL BACKGROUND

- PhD: (Mathematics) University of Connecticut, 1981
- MA: (Mathematics) Technion Israel, 1976
- BA: (Mathematics) Technion Israel, 1974

PROFESSIONAL EXPERIENCE AND PROJECTS

SeeLogo: (1981 – Present) When I came to Ithaca College in 1981 I was inspired by the work of Seymour Papert from MIT to start (1984) a computer camp for children, for this purpose I co-designed (With Dr. David Rosenthal) a computer language (SeeLogo) and continue to develop the program and use it in many situations described below. You can download the language from www.ithaca.edu/seelogo. Currently I am co-designing a new version of SeeLogo that will be based on Java. I have been using the language in most Math classes that I taught at Ithaca College and also in many outreach programs for kids and teachers from the local community. I consider SeeLogo as one of my major accomplishments in this life.

SeeLogo Software (1995 - Present) Writing software and lessons in SeeLogo to be used in Math Education.

Prisoner Express (2006 – Present) Writing lessons and curriculum for the Prisoner Express program through Cornell University. See www.prisonerexpress.org

RELATED EXPERIENCES AND PROJECTS:

Saturday Academy: (1996) I was one of the original founders of the Saturday Academy (for minority children) program in Ithaca. I am continuing to be involved occasionally when needed.

Math Learning Center: (2006) Founded the Math Learning center at Ithaca College.

Echo (2003 – Present): I have been one of the founders (we were 4 to start up with) of a new Ithaca College program that brings New students together in an overnight outdoor experience before coming to College. The program is growing and making a positive impact on the student population.

WORKSHOPS AND PRESENTATIONS

Summer camps: (1984 – present) I have been directing an annual computer program for children and involving my students in the process. The program uses the SeeLogo language and through it brings the beauty of mathematics to many kids that otherwise view Math as a scary or boring subject

Math Fairs: (1995 – present) I have been directing annual (and bi-annual) Math Fairs for children from local schools. Usually hundreds of kids are coming to these fairs that involve Ithaca College Students and teachers from the local community.

Partnership in Teaching: (1995 – Present) I have been an active member of the Partnership in teaching program that brings Ithaca College teachers to give talks in local school.

Integrating the Holocaust Experience into teaching: (1990 – Present) After I Published my mothers book on the web (see: <http://www.ithaca.edu/dani/zdenka/>) I have been working on integrating the lessons of the Holocaust into teaching with the goal of opening the minds of students to a universal way of thinking through Math and Philosophy. In that sense I view myself first as a teacher and only next to this as a math teacher. Among some projects related to this are: Creating the Spiral of Life Art Design in SeeLogo (Dynamic Art). Organizing a unique one semester ad-hock course right after September 11, 2001 that had hundreds of Ithaca College students enrolled with the question “Why?”. Giving a talk about the “Math and Logotherapy” in the Holocaust Museum Yad Vashem in Israel (June 2006). See: <http://www.ithaca.edu/dani/programs/talks/yadvashem/index.htm>

TEACHING & PROFESSIONAL EXPERIENCE

- (1982- present) Teaching all level of Undergraduate Math courses ranging from basic math to Linear Algebra and Group Theory. I am continuing to teach new courses (Statistics and Analysis) and like the challenge:
- (1994 — Present) Designed and taught a course “Mathematical Art with Computers” that incorporates art and mathematical thinking and uses SeeLogo
- (1995 — present) Designed and taught a course “Math Fundamental with computers for *Math* anxious students that uses SeeLogo
- (1997— present) Co-Designed and taught course “Power Algebra” that integrates the use of scientific calculators into Precalculus
- (2006) Invited teacher for the Interdisciplinary Light Course at Ithaca College

PUBLICATIONS

- Generalization of Continuous Posets: Transactions of the American Mathematical Society, V. 272, N. 2, August 1982.
- On the Duality between the concepts of “Finite’ and ‘Directed’,” Houston Journal of Mathematics, V. 8, N. 4, 1982.
- ‘SeeLogo’ (with David Rosenthal), a computer language developed for the Apple II (K12 Micro-Media 1986)
- A Programming System for Young Children (with David Rosenthal) Six Annual Computer in Education Conference, Computer Science Press, 1986.

MEMBERSHIPS: National Council Teachers Mathematics (NCTM)