

DONATIONS TO DAVID LEAR SULMAN COMPUTING, SCIENCE AND ENGINEERING FUND FOR JEWISH DAY SCHOOLS

In thinking about ways to recognize donors to our David Lear Sulman Computing, Science, and Engineering Fund, we decided to honor pioneers whose work propagated the philosophy that children learn by doing and construct knowledge through the act of making something, and then they created the tools for children to do this in the computer age. While these individuals may not be household names now, they should be. Without their work our children would not even be able to be educated for the 21st century.

Seymour Papert Donor	\$100,000 +
Marvin Minsky Donor	\$50,000 – \$100,000
Cynthia Solomon Donor	\$25,000 - \$50,000
Mitch Resnick Donor	\$5,000- \$25,000
LOGO Club Donor	\$500 - \$5,000

Turtles (everyone who gives anything)

Seymour Papert (1928-2016): Papert was a mathematician, computer scientist and educator who revolutionized the study of how children make sense of the world and how technology and learning intersect. He developed the theory “constructionism” which means that children learn by constructing knowledge when they actively make something and share it. While working at MIT and its Media Lab, he invented LOGO, the first programming language for children, and its iconic turtle, introduced the idea that the computer was another material to be “messed about with,” and developed the first programmable robotics construction kits with LEGO.

Marvin Minsky (1927-2016): Minsky was a cognitive scientist, pioneering explorer in the development of AI {artificial intelligence}, and founder of the MIT Artificial Intelligence Lab. He built the first neural network simulator, invented mechanical arms, hands and other robotic devices, and helped inspire the creation of the personal computer and the Internet. Minsky invited Papert to MIT and they collaborated and together made breakthroughs in AI. He worked on LOGO, helping to design the turtle’s robotic arm. In 1985 Minsky was one of the founders of the MIT Media Lab, an environment of such playful curiosity that it became the birthplace of the maker movement as well as programmable LEGO robotic sets, Scratch, MaKey MaKey, and FabLabs.

Cynthia Solomon is a pioneer in artificial intelligence, computer science and educational computing. She worked at MIT in the 1960’s with Papert and Minsky and helped create LOGO, the first programming language for children. In 1971 she and Papert co-wrote *Twenty Things To Do With A Computer* which proposed educative computer-based projects for kids, ideas that schools and students are still working on today.

Mitch Resnick is the current LEGO Papert Professor of Learning Research at the MIT Media Lab. He founded a group called the Lifelong Kindergarten research group that develops programming for Scratch, a software application that helps young children learn to code and is used free by children all over the world. His goal is for all children to learn to code so they become fluent in technologies and can express themselves; he says if you learn to code, then you code to learn.

Logo is the high-level programming language for children developed by Papert and Solomon

Turtle is a Logo robot that acts as a cursor and is Logo’s most well-known feature