MITnews

Papert misses 'Big Ideas' of the good old days in AI

today's news

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Professor Seymour Papert, visionary computer scientist and innovative developer of educational theory and technology, misses the good old days of "Big Ideas" about the nature of knowledge and human learning.

"I have been through three movements that began on a galactic scale and were reduced and trivialized," Papert said during the one-man informal symposium in Bartos Theatre on July 9. The three movements--child development, artificial intelligence and kid-friendly computer science--were especially vital and big in the early 1960s, he said.

For example, take world-renowned Swiss psychologist Jean Piaget--a "towering figure and a major theorist of how the mind works. Today, Piaget has been reduced to little strategies for presenting math problems," said Papert, who collaborated with Piaget in Switzerland.

"But the essence of Piaget was how much learning occurs without being planned or organized by teachers or schools. His whole point was that children develop intellectually without being taught! A 'Piagetian curriculum' is a contradiction in terms!" Papert declared.

Papert, professor of education and media technology at the MIT Media Laboratory and an author of numerous books on computers and education, came to MIT in 1963.

A cofounder with Marvin Minsky of the Artificial Intelligence Lab at MIT, Papert also mourned the flattening of the first days of artificial intelligence in the 1960s down to "bottom-line things like improving business."

"We started with a big 'cosmic question': Can we make a machine to rival human intelligence? Can we make a machine so we can understand intelligence in general? But AI [artificial intelligence] was a victim of its own worldly success. People discovered you could make computer programs so robots could assemble cars. Robots could do accounting!"

AI, he told his listeners, wasn't supposed to end up like that. AI was meant for Bigger Things.

"Can we rescue the original Big View from what it turned into?" Papert wondered aloud.

With an enthusiastic nod to Minsky, his longtime friend and colleague, Papert told the crowd, "Computer scientists weren't supposed to bring computers into classrooms. They were supposed to bring computer science to children in classrooms."

Dismissing the entire current national educational system as "idea-averse," Papert said computers themselves could offer children an elementary model for how their own minds work.

The benefits of working with computers could also include a simple and liberating new view of mistakes. "They're just bugs," said Papert.

In the second session, "A Laptop for Every Student," Papert looked at Maine's initiative to provide every middle and high school student with a laptop computer. He played a major role in creating and advancing this innovative program, which will help to define a new "media culture" where computers rather than papers and pencils become the dominant tools for education.

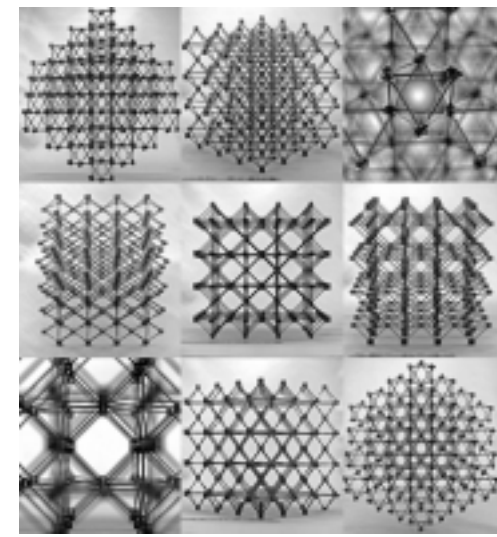"School is so out of step with society," Papert said.

multimedia

Professor Seymour Papert leads a symposium at the Media Lab on computers in education.
PHOTO / DONNA COVENEY

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TCochrane - **Laptop out of step with human?**   2010-09-07 04:02:54

Well that's must be a real problem after all who naturally picks up a pen, a stick on a beach and "writes"? Just about anyone. Who naturally picks up a keyboard and writes? Just about nobody. Our school and teachers are part of us. Seeing my children develop day to day through our school connects me with my neighborhood, even though I live most of my life out and away. So my thought is lets not force the laptop on to folk. What was that I heard "Ai vs intelligent Artifact", we need so much more than mouse and keyboard and screen to be part of society.