



# New Chalk Talk

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Teaching News

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## Learning and Teaching and then, Learning all over again\*\* (Part II)

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Seymour Papert (Papert 1993; 1996) believed that computers are partners in thinking and can be used to create user "micro-worlds", where inquisitive students learn through a process of exploration and discovery. Computers invite teachers/learners to tackle more complex tasks and to ask new and different kinds of questions collaboratively (Murray, 1997). I am not suggesting that computer-mediated technology inevitably gives rise to multi-logical learning, new, splendid forms of community, or other goodies, hawked by the evangelists, but it does open up possibilities for students to utilize their various intelligences.

Some people see the Internet as a new way to deliver information; others look at the Net as a huge database for students to explore. A third and very different vision is to see it as a medium for collaborative development - a new opportunity for learners to discuss, share, and collaborate.

The first vision sees education as formal instruction, but the second and third are clearly more "learner centered", based on an understanding that people actively construct knowledge from various experiences and explorations. The third vision also puts special emphasis on learning activities, based on the understanding that people assemble knowledge with particular effectiveness when they are actively engaged (Resnick and Rusk 1996).

To use the Internet as simply another way to 'push' information at passive learners is to engage in an anachronistic waste of this powerful tool (Crook, 1997). One must encourage dialogue and response, guide attention to key points in the discussion, scaffold strategies for questioning,  monitoring and elaborating, all aimed at getting learners to think in increasingly complex ways about alternative interpretations.

It is not the technology alone affecting minds but the whole “cloud of correlated variables” - technology, activity, goal, setting, teacher’s role, peer groups, cultural content - exerting a combined effect. Human biological evolution, now best understood in cultural terms, must incorporate the consciousness that tools and machines are inseparable from evolving human nature (Castells 1996).

A new form of understanding and wisdom is possible by combining the brain and computer in symbiosis (See, for instance, Berge and Collins 1995; Crook 1997; Jacobson, et.al.1996; Postma, et.al.1998; Schutte 1998; Yakimovicz and Murphy 1995). The challenge for teachers/learners is how to combine the strengths of the computer (brute force of computational speed, multimedia combinatory potential, and storage recall) with the human brain (creativity, imagination and lateral complex consciousness) in a constructivist project for teaching/learning.

Give me another 25 years and I think I’ll get it.

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\*\*This is a short synopsis of an earlier piece:

Herb Thompson 2002 “Cyberspace and Learning”, *Electronic Journal of Sociology*, <<http://www.sociology.org/content/vol006.001/thompson.html>>

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