



Panel - debate 1: Changing the subject

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Constructionism is often thought of as essentially a theory of instruction. There is truth to this, especially in its relation to traditional instructional strategies. But in fact, as Papert pointed out, it is much more than this. It is a theory of epistemology. It recognises that the computer presence can fundamentally alter the relationships between knowledge elements, how a subject domain is constructed, not only how it is conceived. Here is where the idea of 'restructuring' originates – how might a domain of knowledge be re-visioned to enhance its learnability – to make unlearnable ideas learnable by radically transforming how they are expressed. Hard ideas are sometimes hard because of the way we represent them: changing the representational infrastructure changes not only how 'easy' it is to learn an idea, but the idea itself. Key questions for this panel include:

- How can resistance to changes in current knowledge domains and curricula be challenged?
- What kinds of representations and what kinds of actions on them may catalyze the generation of meanings?
- How do we assess conceptual development in constructionist scenarios?
- What kinds of subjects are learnable given suitably-designed technologies and cultures?
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- The time for providing impressive examples is passing. We now need structure, comprehensive propositions and longitudinal data from learners. How can we intervene to make such changes happen?