

Yasmin Kafai

Abstract: We are witnessing a remarkable comeback of computer programming in schools. While computers seem to be accessible everywhere, particularly outside school, where children and youth are connecting to wider networks of other young users, their capacity to wield such devices critically, creatively, and selectively is decidedly less potent. Learning the language of computers introduces students to processes for not only thinking and solving problems but also for making more meaningful connections online. Computational participation moves beyond the individual to focus on wider social networks and a DIY culture of digital "making." I describe contemporary examples of computational participation: students who code not for the sake of coding but to create games, stories, and animations to share; the emergence of youth programming communities; the practices and ethical challenges of remixing; and the move beyond stationary screens to programmable toys, tools, and textiles.

Bio: Yasmin Kafai is Professor of Learning Sciences at the University of Pennsylvania. She is a researcher and developer of online tools and communities to promote computational participation, crafting, and creativity across K-16. Her book publications include "Connected Code: Why Children Need to Learn Programming," and the forthcoming "Connected Gaming: What Making Video Games Can Teach Us About Learning and Literacy" (both by MIT Press) as well as several edited volumes such as "Textile Messages: Dispatches from the World of Electronic Textiles and Education", and "Beyond Barbie and Mortal Kombat: New Perspectives on Gender and Gaming." She coauthored the 2010 National Educational Technology Plan for the United States Department of Education, wrote the 2006 synthesis report "Under the Microscope: A Decade of Gender Equity Projects in the Sciences" for the American Association of University Women, and was a contributing member to the National Research Council workshop series "Computational Thinking for Everyone." Kafai earned a doctorate from Harvard University while working with Seymour Papert at the MIT Media Lab. She is an elected Fellow of the American Educational Research Association and past President of the International Society for the Learning Sciences.