How Do Prototyping Practices Affect Design Performance?

By: Steven Dow
November 10, 2009

Abstract:
How does the structure of prototyping practice affect learning, motivation, and performance? In this talk, I will describe research on iteration and comparison, two key principles for discovering contextual design variables and their interrelationships. We found that, even under tight time constraints when the common intuition is to stop iterating and start refining, iterative prototyping helps designers learn. Our results also demonstrate that creating and receiving feedback on multiple prototypes in parallel — as opposed to serially — leads to more divergent concepts, more explicit comparison, less investment in a single concept, and better overall design performance. This talk highlights relevant research in cognitive and social psychology and shares the results of our preliminary design studies.

About the Speaker:
Steven Dow is a Postdoctoral Scholar in the HCI Group at Stanford University where he researches creative problem-solving, human-computer interaction, and entertainment computing. He is a co-recipient of a Hasso Plattner Design Thinking Research Grant 2009-10. He received an MS and PhD in Human-Centered Computing from Georgia Institute of Technology and a BS in Industrial Engineering from University of Iowa.