Supporting the Creative Problem Solving Process

- Computer tools can provide enormous benefits for the creative process
  - Remote collaboration
  - Access to design rationale
  - Execution of a design
- Current tools can inadvertently inhibit the creative process
  - They support some parts of the creative process, but fail to support all of them
- Users need tools that provide benefits without inhibiting the process

Design Goals

- Sketching and structuring
- Rapid exploration of the design space
- Working with multiple ideas in parallel
- Collaboration
- Reflection and “anywhere” refinement

Iterative Design

- Performed three low-fidelity prototype evaluations and learned:
  - Controls for navigation between canvases should be distinct from controls for navigation within a canvas.
  - Tools should allow for personal territory within the global context.
  - Users should not be allowed to do hidden work within canvases over which they do not have sole ownership.

SCWID Interface

- A server program viewed on a large display
  - Shows the global context of the work
  - Provides group awareness
  - Enables the juxtaposition and review of multiple design ideas at once
- Multiple clients viewed on private displays
  - Allows a user to sketch details
  - Affords navigation within the global context
  - Provides controls for both the private and large displays
  - Supports both shared and private work

Implementation

Works with virtually any configuration:
- Tiled display, plasma screen, or projector display with multiple private displays connected over a network
- Single computer with multiple displays
- Remote clients connecting to a central server
- Individual client as zoomable interface