Team Design Process: Interpretation, Brainstorming, and Designing

The process the team goes through is as important as the models they produce in creating a final interface design. The process we promote is termed *Working-on-the-Wall*. This approach to team work drives the team toward a consensus understanding of the work that the design is going to support and the conceptual design of the interface. The hallmark of this process is that the team works within in a "war room" mentality. Students use a single site where the team meets to do the Interpretation Sessions (modeling), Visioning Sessions (brainstorming), and the Prototype Development. All work is performed together as a team. All the work is done on large sheets of paper that are affixed to the wall with tape or magnets.

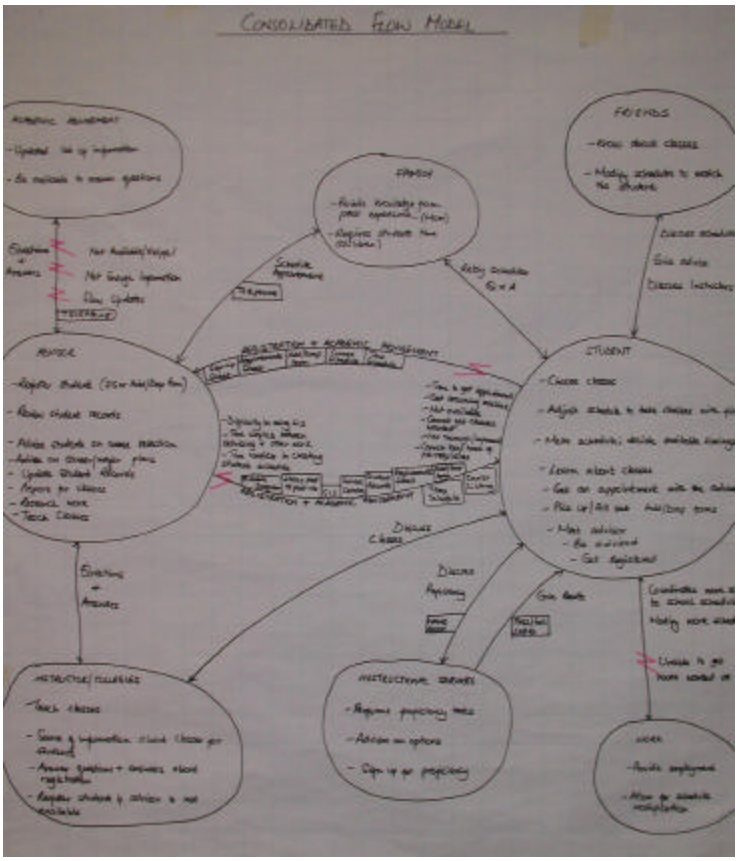
Students participating in an Interpretation Session

Doing the work on the wall provides all of the team members an opportunity to see all of the activity and, as a consequence, invites everyone in the team to contribute to the development process. Allowing everyone to see and participate helps to drive the team to a consensus of the work that needs to be supported and the design ideas that are implied by the interpretation of the data. Using large sheets of paper provides the team with a type of group memory. For every session, the team is to put all previous work back on the wall before beginning. This allows them to remember decisions that were made, review interpretations, and to easily pick-up where they left off from the previous session.

Student Design Team working in Design War Room

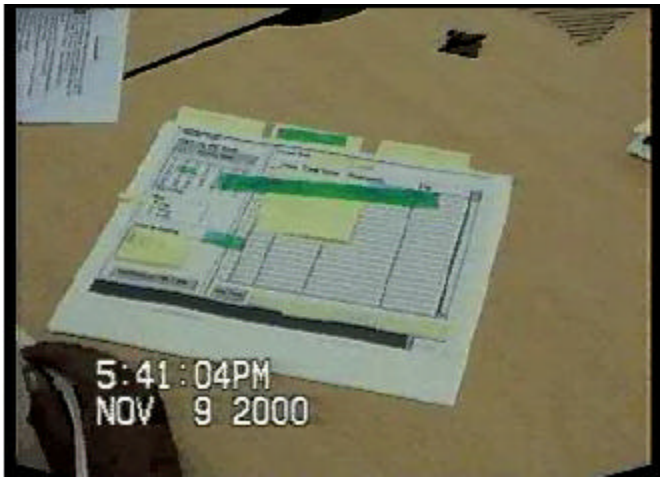
Once the individual interviews are complete, team members get together to create the work models for each interview. This is done during an “Interpretation Session”. One member reads her field notes from the interview, while other members create the different work models. All models are created at the same time. Everyone is invited to comment on each evolving model. While the process tends to be a bit chaotic at times, it does allow everyone to contribute. From the individual work models a single model is created called the Consolidated Model. Teams consolidate models by looking for similarities across individuals. An Affinity Model is also created to reveal the scope of issues that the final software design should address (See Work Modeling).

After the models are created, Teams are directed to “vision” possible solutions to the project. This involves brainstorming 2 or 3 possible solutions to the project. From the 2 or 3 solutions a single idea should be developed by trying to combine the positive aspects of each brainstorm idea while mitigating any of the negative aspects. At this level of brainstorming the Team should be focusing in on the overall organization of the application. For example, if a metaphor is to be used to form the application, this is the point of discussing how it would apply to the user’s tasks. There should not yet be any discussion of specific controls like buttons for this or check boxes for that.



Consolidated Flow Model

From the visioning idea, a Paper Prototype is developed (See Paper Prototyping). It is at this point that specific visual elements are discussed. The Team uses the Usability Lab to do Paper Prototype Testing with potential users and the War Room to discuss the changes to design resulting from problems that arose during the tests. From the Paper Prototype, a hi-fidelity Prototype is created and tested.



Paper Prototype Session