



Proseminar SS11

“Awareness tools”



What applications provide awareness by using shared displays?

MIDDesktop (Shoemaker & Inkpen)

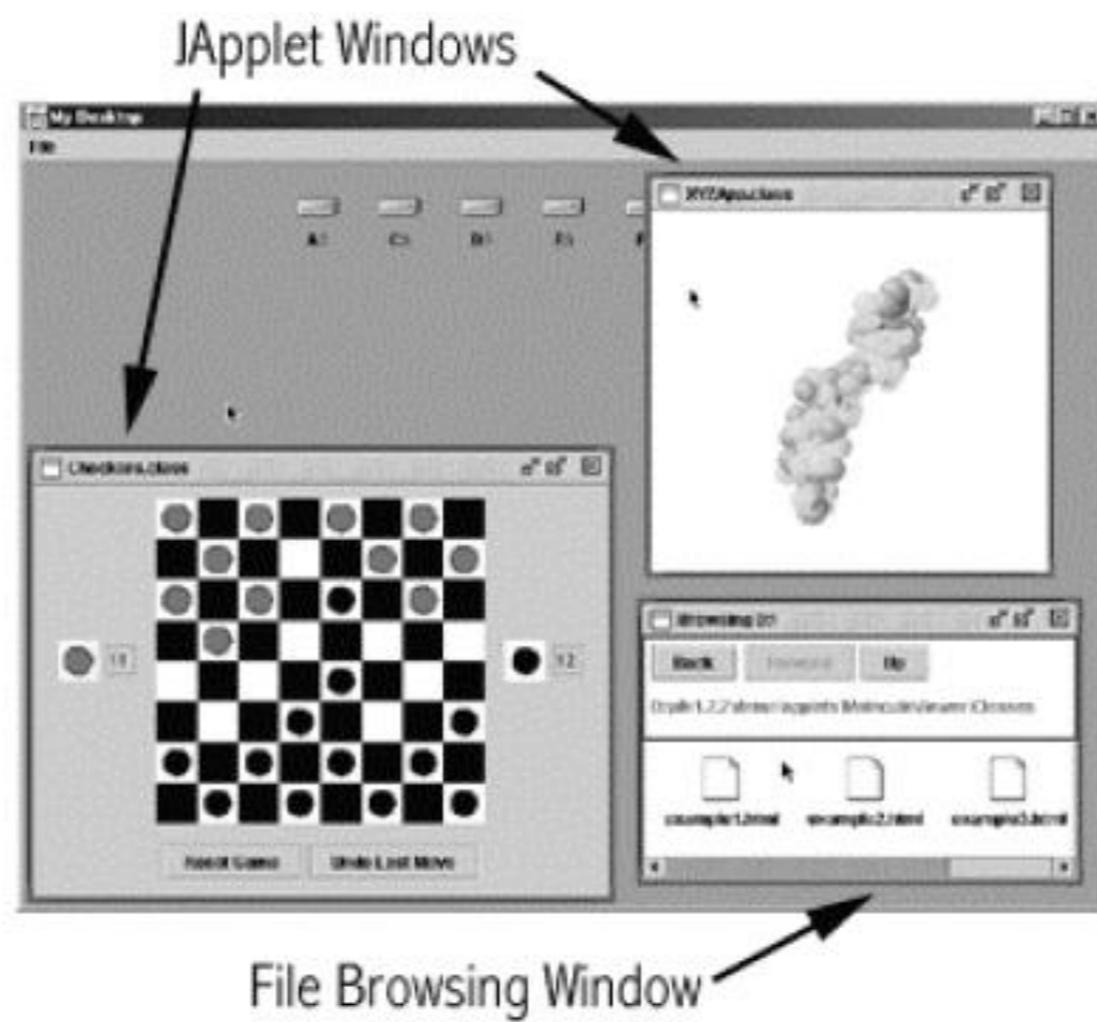


Figure 1. Screenshot of MIDDesktop with 3 mice.
Source: [1]

KidPad (Hourcade, Bederson, Taxen & Druin, 2002)

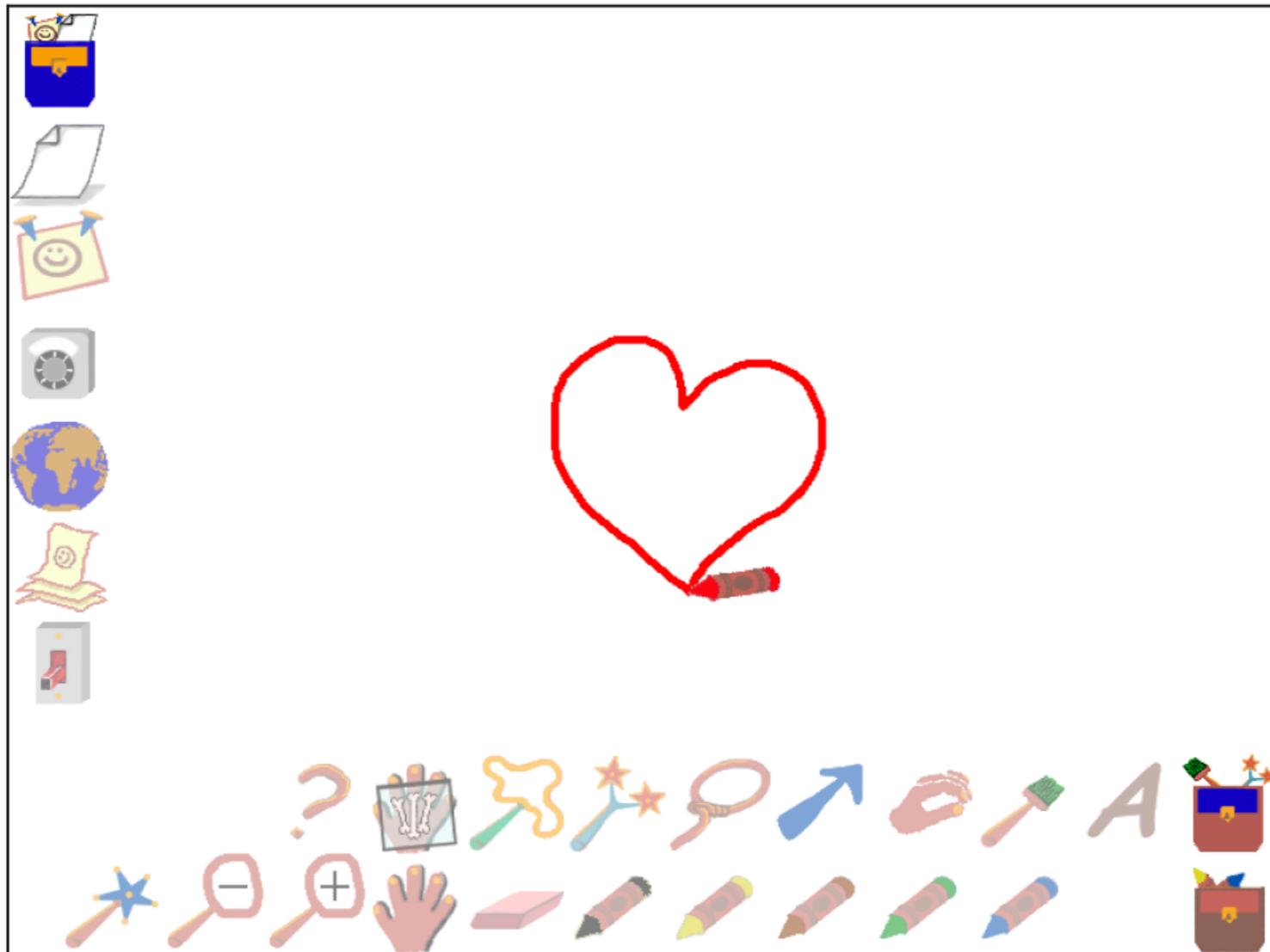
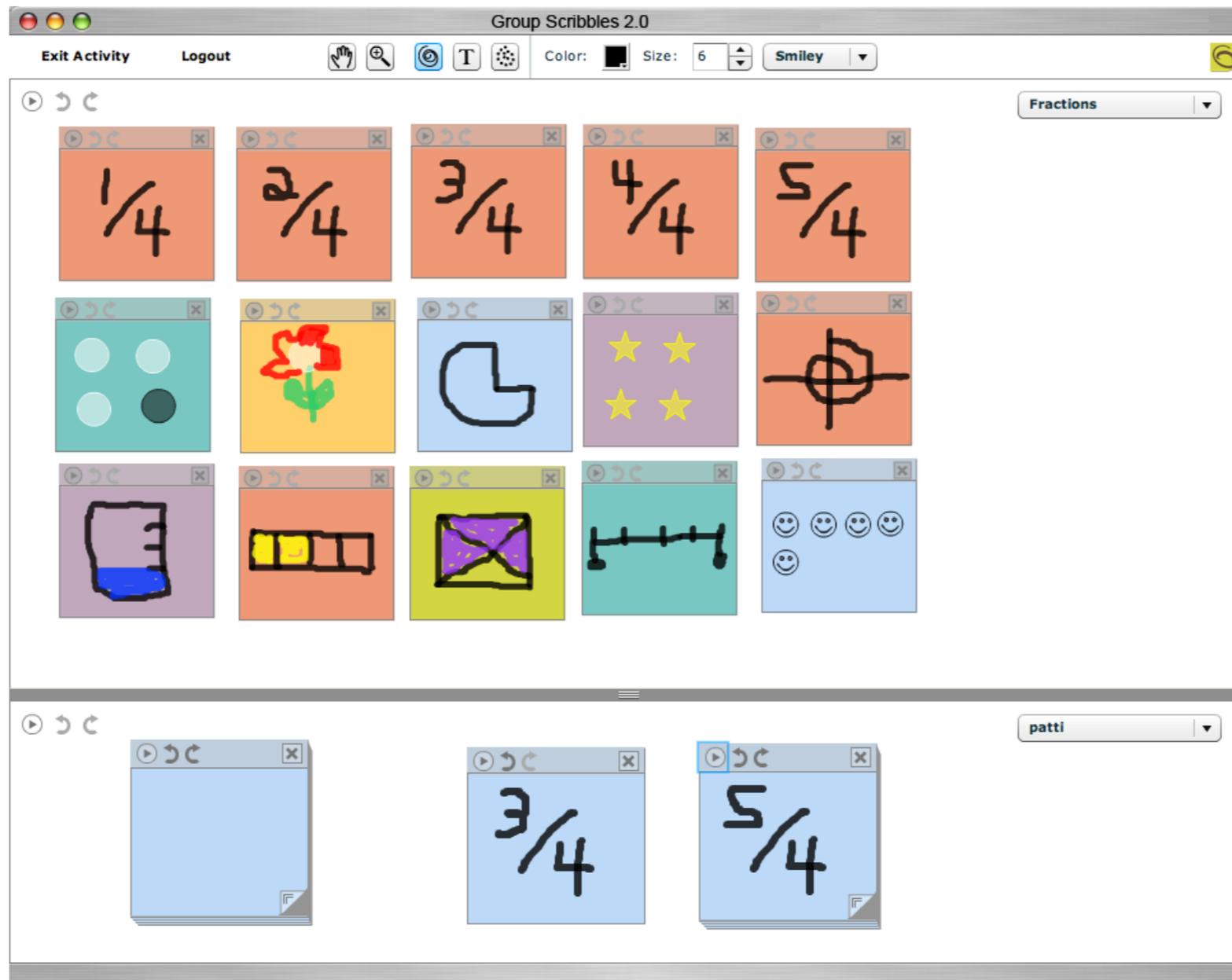


Figure 1: KidPad with all three toolboxes open. Source: [2]



Group Scribbles (SRI International's Center for Technology in Learning, 2006)



Source: [3]



What applications provide awareness by integrating awareness tools in private workspaces?

GroupKit (GroupLab, University of Calgary, 1992)

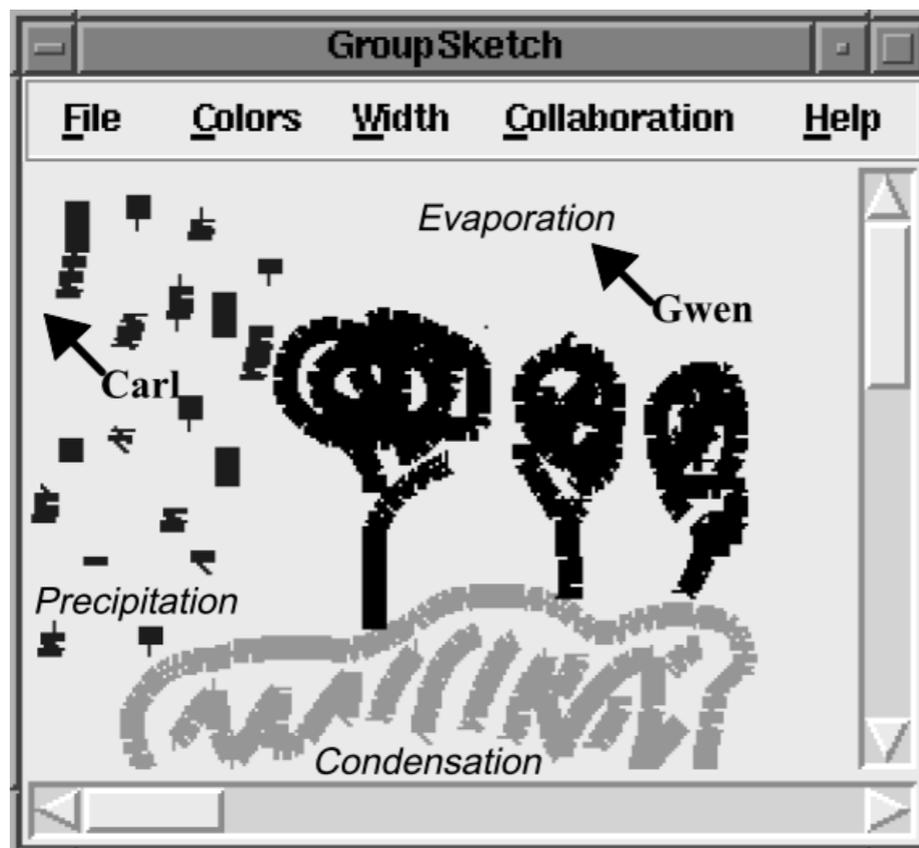


Figure 3. Multiple cursors in a group sketchpad

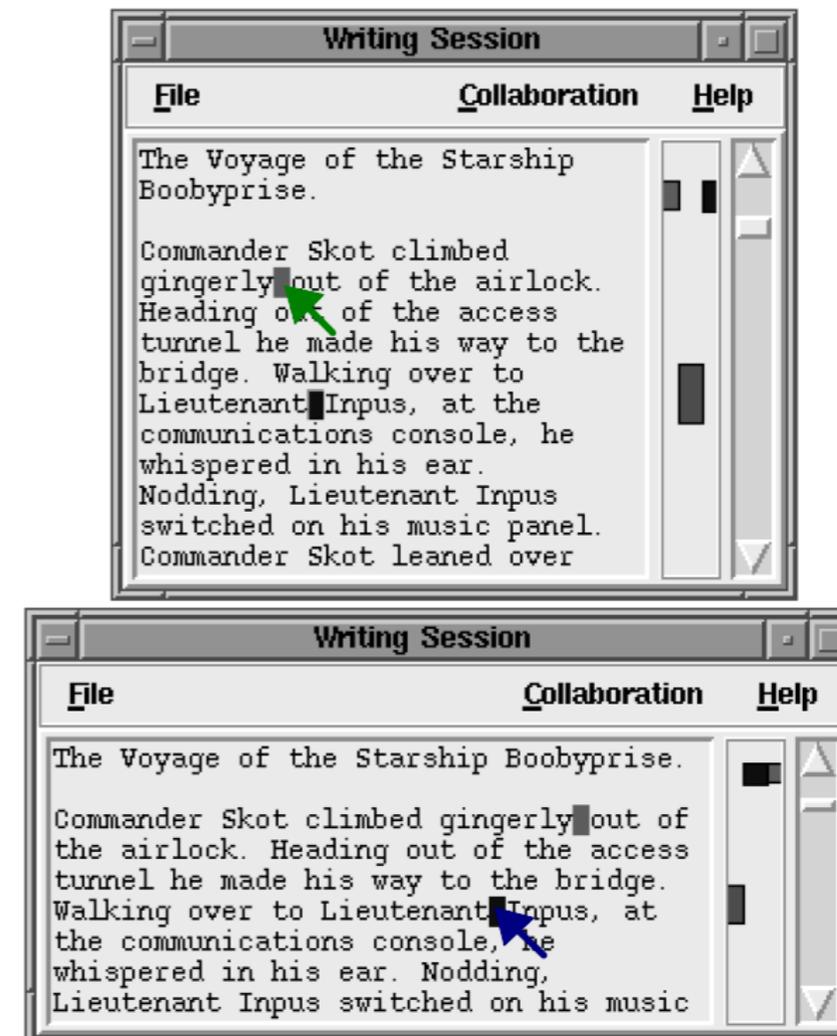


Figure 4. Two student's views into a peer writing session, showing semantic cursors and multi-user scroll bars.

Source: [4]



Shared Desktop Media Item (GroupLab, University of Calgary, 2006)

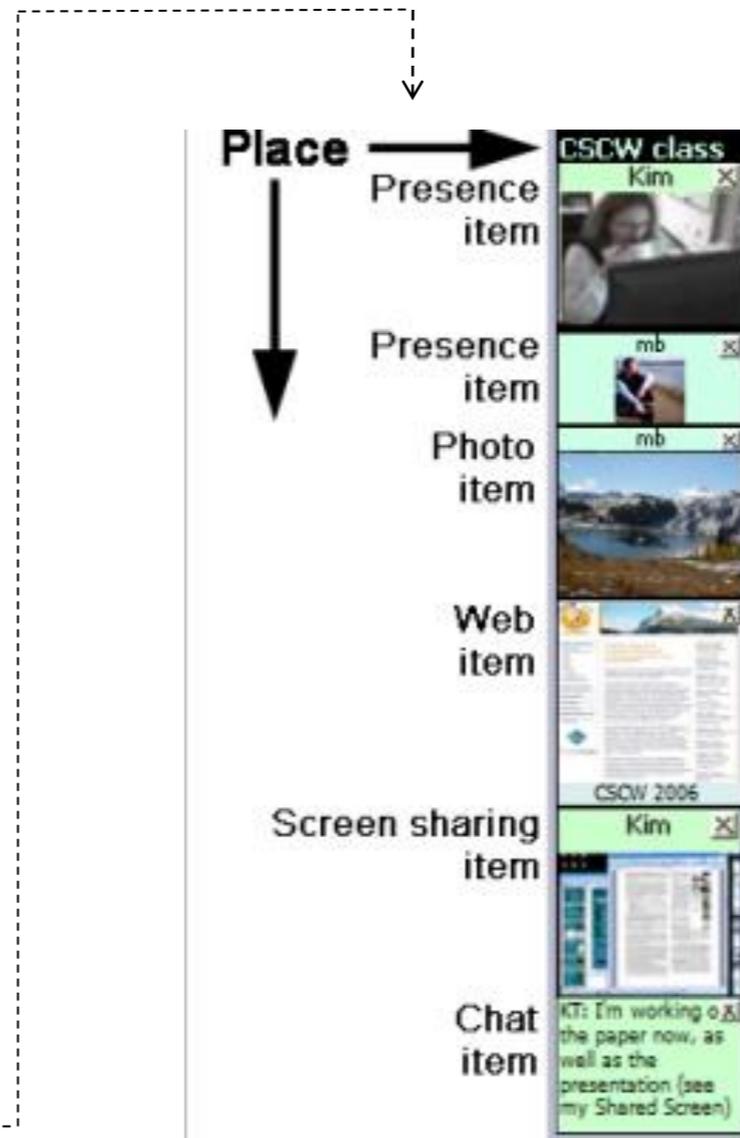
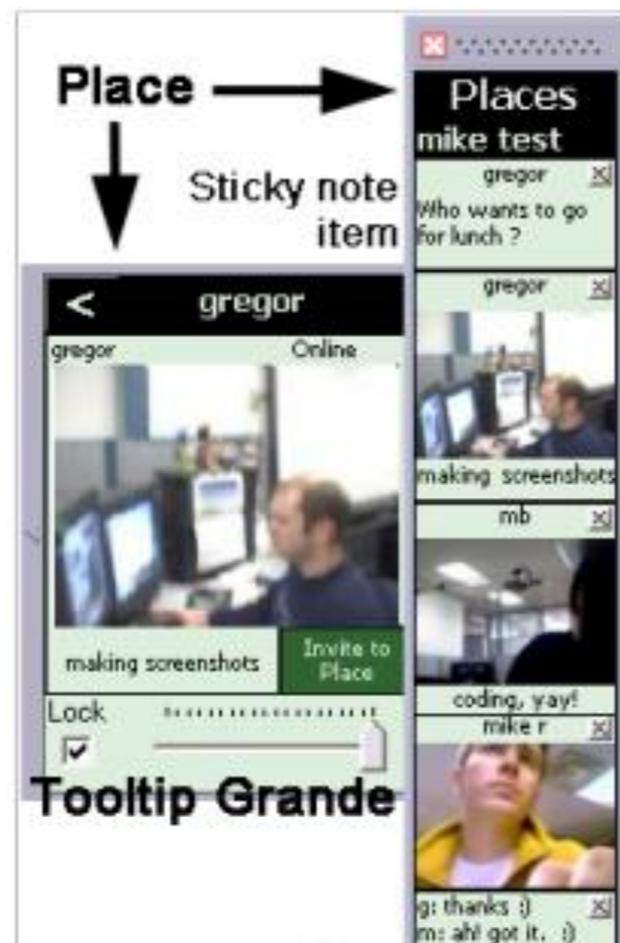


Figure 1. Community Bar

Source: [5]



Shared Desktop Media Item

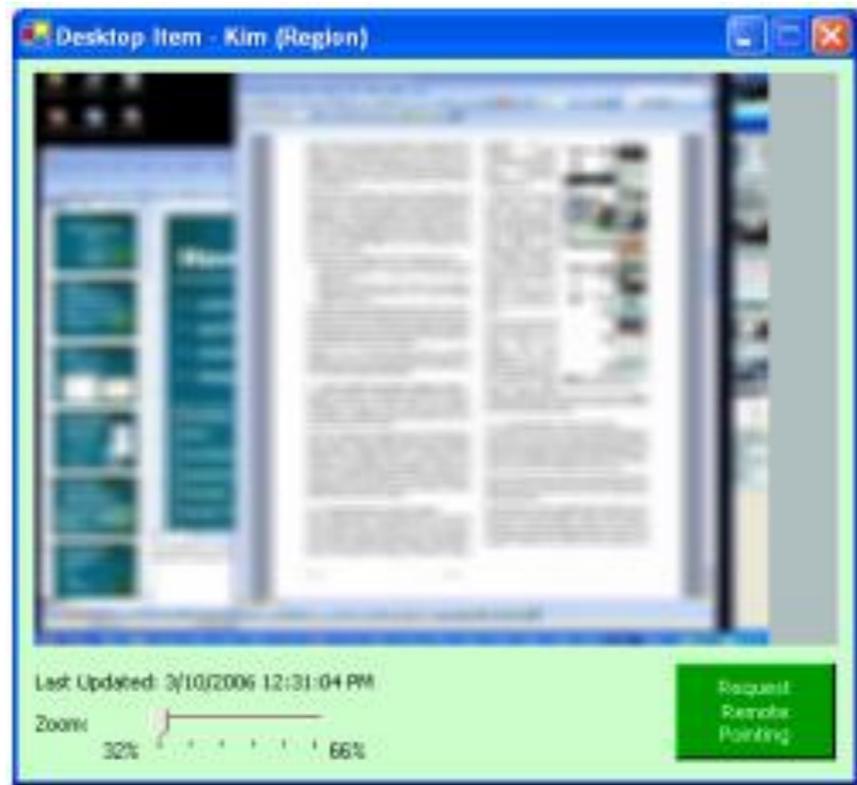
(GroupLab, University of Calgary, 2006)



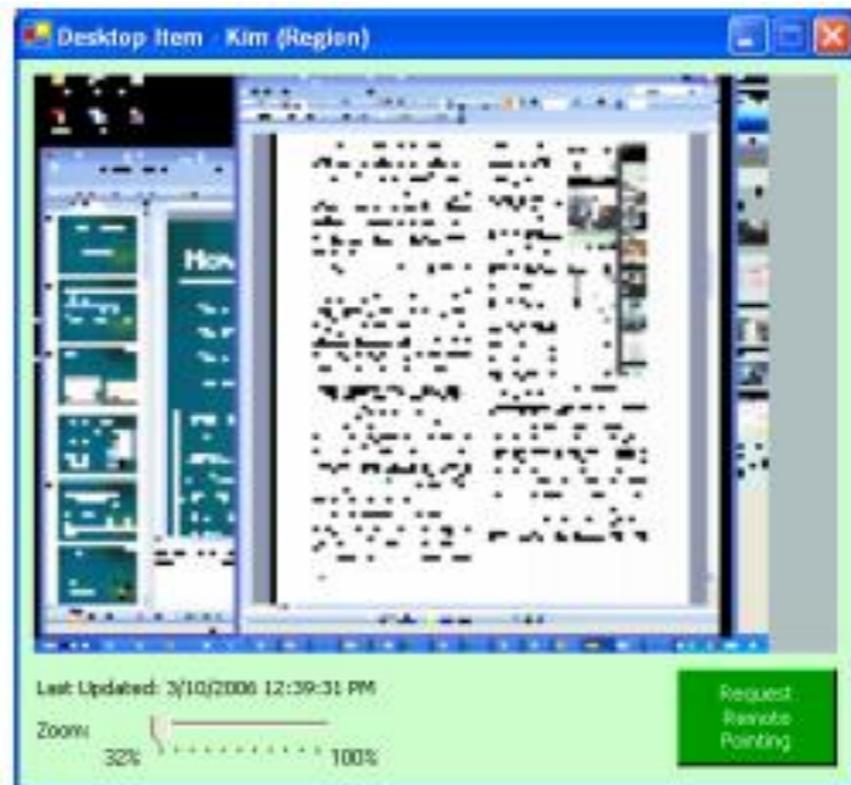
Source: [6]



Shared Desktop Media Item (GroupLab, University of Calgary, 2006)



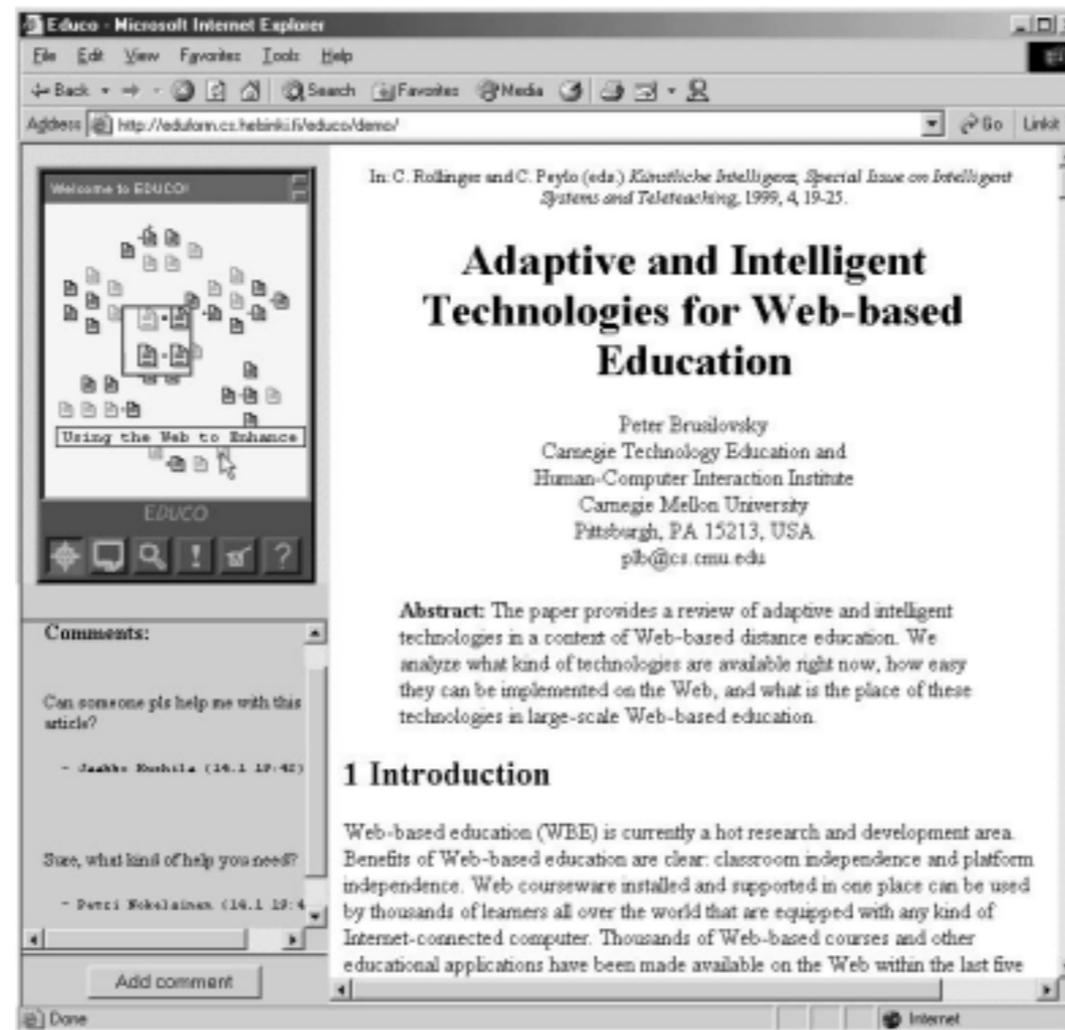
A. Blurring with a low level of clarity



B. Pixelization with a medium level of clarity

Source: [5]

EDUCO (2002)



Source: [7]

Fig. 1. The user interface of EDUCO.

EDUCO (2002)

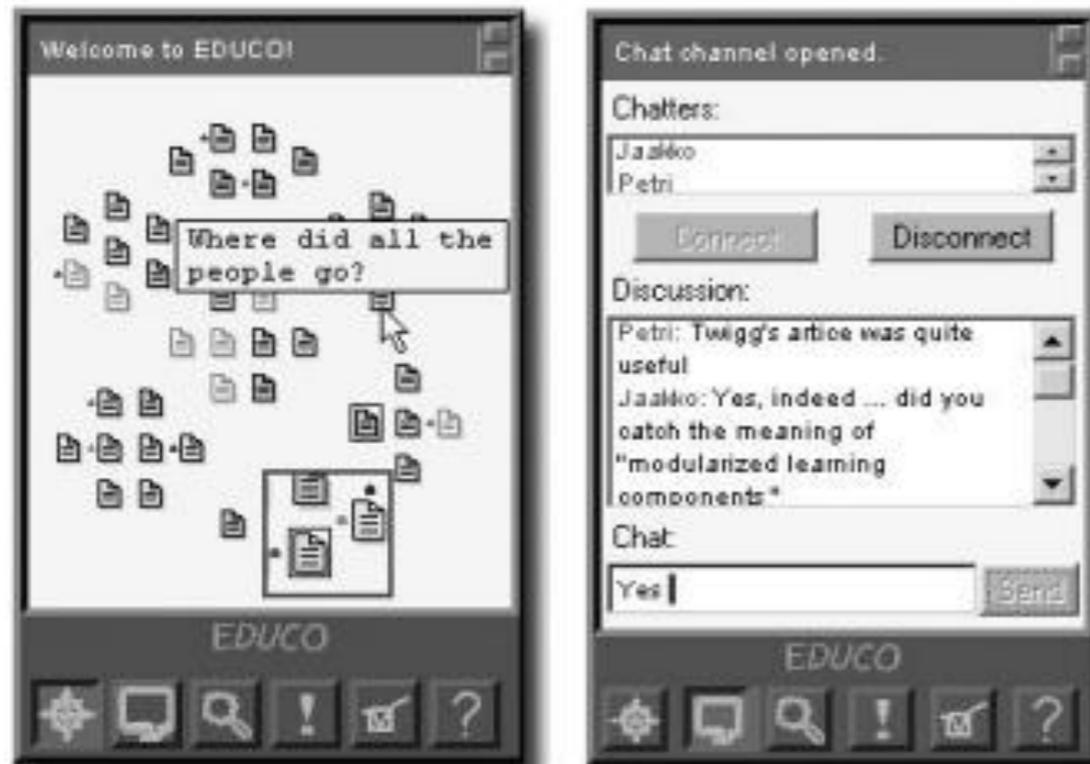


Fig. 2. The “map” and “chat” views of EDUCO.



Fig. 3. The “search” and “alarm” views of EDUCO.

Source: [7]

EDUCO (2002)



Fig. 4. The “preferences” and “help” views of EDUCO.

Source: [7]



What are benefits and drawbacks of both approaches?

Shared Display:



Richer communication

Children are under better control

Developing a learning community

One Display -> Feeling of reaching the goal together

Users have to be on location

Number of participants is limited

Distraction

Awareness Tools:



For all kinds of programs

Accessible from everywhere

Number of students is unlimited

Privacy has to be taken care of

Reduces the communication

Certain actions are slow and clumsy

Participation of students is doubtful

Problems with synchronizing discussions



Thank you for your attention!

Sources:

Pictures:

- [1] *Garth B. D. Shoemaker and Kori M. Inkpen, MIDDesktop: an Application Framework for Single Display Groupware Investigations, Technical Report TR 2000-1. Simon Fraser University. January, 2000*
- [2] *Hourcade, J.P., Bederson, B.B., Druin, A., Taxen, G. (2002). KidPad: Collaborative Storytelling for Children. In Extended Abstracts of Human Factors in Computing Systems (CHI 2002)*
- [3] <http://groupscribbles.sri.com/images/screenshots/Fractions1.png>, 27.06.11
- [4] *Carl Gutwin, Gwen Stark, Saul Greenberg, Support for Workspace Awareness in Educational Groupware (1995)*
- [5] *Tee, K., Greenberg, S. and Gutwin, C. (2006) Providing Artifact Awareness to a Distributed Group through Screen Sharing. In Proceedings of the ACM Conference on Computer Supported Cooperative Work - ACM CSCW 2006, pages 99-108, November*
- [6] <http://grouplab.cpsc.ucalgary.ca/Publications/2006-SharedDesktopVideo.CSCW>, 27.06.11
- [7] *J. Kurhila, M. Miettinen, P. Nokelainen, H. Tirri, EDUCO - A Collaborative Learning Environment Based on Social Navigation, In AH '02: Proceedings of the Second International Conference on Adaptive Hypermedia and Adaptive Web-Based Systems (2002), pp. 242-252*

Sources:

Further sources (most of the picture sources also used for content):

- *Karel Kreijns, Paul A. Kirschner, Wim Jochems, Identifying the pitfalls for social interaction in computer-supported collaborative learning environments: a review of the research (2003)*
- *Giedre Kligyte, Teemu Leinonen, D3.1 Study of functionality and interfaces of existing CSCL/CSCW systems (2001)*