Chapter 10

Conclusion

"Lectures," said McCrimmon, "are our most flexible art form. Any idea, however slight, can be expanded to fill fifty-five minutes; any idea, however great, can be condensed to that time. And if no ideas are available, there can always be discussion. Discussion is the vacuum that fills a vacuum. If no one comes to your lectures or seminars, you can have a workshop and get colleagues involved. They have to come, and your reputation as an adequately popular teacher is saved."

John Kenneth Galbraith, A Tenured Professor

The system presented here offers the possibility of producing distance lectures as a by-product of classroom teaching. The approach avoids the huge costs normally involved in courseware production. Instructors are not required to adapt their traditional teaching style for the sake of producing distance-learning materials. However, for teachers who want to enrich their lessons with multimedia elements, the system provides a range of options from plain images to interactive animations.

The board is a new GUI metaphor. At the time being, the desktop is the dominating user interface, a metaphor being designed for the small, personal screen that is part of the usual work desk. Even pen-computing approaches, which have become popular recently, are considered mainly for personal displays. In a teaching situation, where a large display may be observed by a larger audience, the board is the proper metaphor. This way, the relation between teaching tool, teacher, and students is preserved, which has been proven to be valuable for centuries. The audience can track the instructor's developing the subject on the board. The technical implementation of the teaching device is formed by the pedagogical needs, instead of letting the device be purely driven by the technical development.

The E-Chalk system has been widely used and it has been tested in a broad range of real-life teaching. Both the anecdotic evidence and the systematic evaluation proves the system to be an added value in classroom teaching as well as for a number of distance-teaching scenarios. The evaluation studies show it to be easy to use, and that skills in traditional chalk lecturing transfer well into teaching with E-Chalk. The studies give a solid base to the assumptions on the advantage of the approach. A number of possible improvements has been

identified, many of them have already been implemented in the system, some of them are still under development. The most important need for enhancement was identified in the audio playback quality, which has been considerably improved by a number of different techniques.

The distance lectures are not substituting classroom teaching but supporting it. Students are helped to revise the materials with a living and active script. The remote viewer does not have to be familiar with any technical details to receive the lecture. Only a browser is needed and no special software has to be installed. All substantial information in the form of audio and dynamic board image can be received using low-bandwidth connections.