Photoshop with friends: A synchronous learning community for graphic design

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Photoshop with Friends: A Synchronous Learning Community for Graphic Design

Abstract
Photoshop with Friends is an online community of learners exchanging just-in-time help on graphic design tasks. The system attempts to provide an interactive, visual, context-aware, and personalized mode of learning. Developed as a Facebook application, Photoshop with Friends allows users to help each other in live sessions, with built-in screen sharing, recording, and voice chat support. Major design decisions are guided by two laboratory studies that identified challenges in learning graphic design skills on the web.

Keywords
graphic design, online learning, synchronous help

ACM Classification Keywords
H.5.2 [Information Interfaces and Presentation: User interfaces]: graphic design.

Introduction
An increasing number of professional and amateur designers are learning graphical design software to create websites, retouch photos, and merge images. While trial-and-error is a popular learning strategy for many [1], users often combine exploration with external help [2], learning on ones own using prepared resources and learning with others. The web has expanded the amount
and diversity of help options available, affecting the way users find, access, and learn from external help resources. Today’s learners use the web to find information and post questions on social Q&A sites and user forums.

Figure 2: To better support the visual nature of graphical tasks, questions are labeled with image thumbnails rather than just words.

Answer information

Photoshop with Friends

System Design
To support the visual language, Photoshop with Friends uses images as primary unit of communication. The system encourages browsing through user-posted images in a grid layout (Figure 2), with text descriptions supplementing each image. Pairs start a synchronous session upon joining a virtual room and agreeing to work together. To lower the barrier to joining in synchronous sessions, we implement two features. First, a lobby chatroom allows pairs to clarify their objective before starting a session. This prevents inaccurate descriptions from misguiding the teacher and helps learners revise their description. Second, each session is limited to 5 minutes to minimize the teacher’s time commitment and make exiting sessions socially appropriate.

The system supports various learning methods: 1) learners can choose to record a session so that they or others can review the recording later and discuss (Figure 3), 2) the system can recommend relevant web tutorials and forum entries for each session to further the learning, 3) teachers can add video replies to learner questions asynchronously by self-recording their solution, and 4) spectators can join live sessions and watch other pairs work on tasks. In addition to enhancing the synchronous learning experience, our design also addresses community-building, teacher motivation, and matchmaking.

The next step is to evaluate the system with actual users to see if it achieves the stated design goals.

References