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# Through Glass: Reframing Technical Communication Practices via Google Glass

BY JASON THAM

WEARABLE TECHNOLOGY is more than a popular fad. It is part of the next evolutionary steps for personal computers, which have evolved from room-sized machines to mobile devices we hold in our hands to flexible devices we now wear on our head or wrists. In her recent study, *Garments of Paradise: Wearable Discourse in the Digital Age* (2014), Susan Elizabeth Ryan of Louisiana State University School of Art regards wearable technology as an evolving set of ideas and behaviors—a technology that has tangible effects on our bodies and on our interactions with others.

Accordingly, wearable innovations are opening new opportunities for re-thinking our daily activities—everything between the personal and professional. For technical communicators, such innovations allow for new approaches in designing and visualizing technical content across multiple media, audiences,

and contexts. In this entry, I explore the different ways in which technical communicators might integrate the use of one kind of wearable technology—Google Glass—into a range of activities from researching and data gathering to editing and writing. (Google Glass is a wearable computer with an optical head-mount display [see image above].)

## Documentation

One key feature of technologies such as Google Glass is that they allow technical communicators to engage in hands-free point-of-view documentation. Using voice commands and the Glass camera, technical communicators could record meetings with clients or discussions with subject matter experts (SMEs) and use those recordings for later reference. One simple way is to take, access, and organize these recordings using Google Glass in conjunction with programs like Evernote, a software that is designed for note-taking, bookmarking, and archiving memos. Think of it

as a voice-controlled notepad on Google Glass.

During review sessions, user tests, or focus group discussions, technical communicators could use the wearable technology to track comments provided by users and edit resulting suggestions through video recording. Users could employ the same technology to bookmark and catalog places in a given text, website, or interface where changes are recommended by snapping a picture or recording the suggestions in video. These images and videos could then be



This column features the work of individuals currently enrolled in or recently graduated from educational programs in the field. Contributors examine how theories and concepts encountered in their classes can be applied to technical communication practices. To submit a column, email the editor at [STAMANTK@ecu.edu](mailto:STAMANTK@ecu.edu).

sent to a range of individuals—from project managers to technical illustrators to other technical communicators—after the review session. Such feature adds value to the review process, one that enriches collaboration between the user and the technical communicator.

Similar to these user-testing situations, technical communicators may use the wearable technology to capture images and videos when editing and revising their own work or the work of others and offer voice feedback to collaborators or other project team members. Devices such as Google Glass also allow technical communicators to personally record overall sessions (e.g., user tests, focus groups, interviews, etc.) via the Glass camera and review the footage for feedback, improvement, and/or professional development purposes. Using third-party software like ANVIL, these videos could be annotated and shared with others throughout the course of a project.

## Communication

Multiple Google Glasses can be paired during user testing, focus groups, or field tests of different products to allow technical communicators (as well as other project team members) to communicate with one another via a backchannel during a given session or meeting. Technical communicators may also use Google Glass's messaging feature to send short messages to the home office or to a client during such activities. This feature may be particularly helpful should the members of a project team wish to ask questions privately (i.e., without a user knowing). Additionally, with current efforts to add streaming sign language interpreters into Google Glass, technical communicators could soon use Glass to improve communication with hearing- or speech-impaired colleagues or clients.

## Collaboration

Wearable technologies like Google Glass may take conference calls and meetings to a new level. Using the

video calling function, technical communicators and clients may join meetings from virtually anywhere in the world. Locally, individuals may move around the office and across meetings to gather applicable information to share with different teams. To further enable collaboration, technical communicators may create a group social profile on Google+ and let project team members share their documents and other materials there. A shared Google Drive may also be set up for similar function.

## Notification

As developers continue to explore new applications to add to wearable technology, technical communicators should consider new ways to use such technology to revolutionize workflow and project management. Using Glass's Notification Glance feature, technical communicators could set up special notifications for due dates and specifi-

cations for projects and team activities. To be more creative, technical communicators may use these notifications to set a timer for specific group meetings or project activities. The feature also allows individuals to pair different Glasses with personalized notifications that instruct individual team members on what to do in relation to a particular phase of the product development process. This approach has the benefit of inviting new interactions or ideas that may not be possible in traditional technologies like the email or chats or other project management systems.

## (Re)Searching

Using wearable computers such as Google Glass, technical communicators can also look up real-time information from the Web during a particular meeting, user test, or focus group session. The Glass Search feature allows technical communica-

## Applications and Online Resources Noted in this Entry:

**ANVIL** (<http://www.anvil-software.org>)—A software that allows in-video color-coded annotations and sharing.

**Evernote** (<http://evernote.com>)—A suite of services designed for note-taking, bookmarking, and archiving documents and Web pages.

**Glass Notification Glance** (<http://support.google.com/glass/answer/3086048?hl=en>)—A feature built into Google Glass's setting that allows users to respond to notifications by tilting their head up.

**Glass Search** (<http://support.google.com/glass/answer/3081924?hl=en>)—A feature on Google Glass that allows users to do a Google search on the moment.

**World Lens** ([http://en.wikipedia.org/wiki/Word\\_Lens](http://en.wikipedia.org/wiki/Word_Lens))—A translation service app that uses Google Glass's camera to scan and identify texts in foreign languages, and translate and display them on the Glass's lens.

**Connected Learning Model** (<http://connectedlearning.tv/what-is-connected-learning>)—A social learning theory that builds on past learning approaches and values that utilizes new technology to enhance the learning experience and make connections.

**Personal Learning Networks** ([http://en.wikipedia.org/wiki/Personal\\_learning\\_network](http://en.wikipedia.org/wiki/Personal_learning_network))—An informal learning network that consists of the sources a learner interacts with and derives knowledge from in a personal learning environment.

More Glassware can be browsed and downloaded from <http://glass.google.com/glassware>.

tors to quickly access Google Search without having to pull out their phones or computers. Through Glass's World Lens app, technical communicators may also translate printed words from one language to another in real time. This feature could drastically change the way non-native speaking individuals participate in different kinds of user testing and focus group activities.

The Google Glass Navigation feature can help technical communicators to navigate themselves in an unfamiliar location by looking up routes to different places with turn-by-turn navigation. Technical communicators may also use this feature to get a bird-eye view of a city's traffic report and road condition—information that might be crucial for planning a meeting later in the day or a business trip to Minneapolis next week.

### Personalized Learning

Finally, wearable technology such as Google Glass should be used for their potential in expanding technical communication opportunities in personalized ways. Through a connected learning model, technical communicators may create and maintain personal learning networks (PLNs) and plans—mapping out their project goals and ways to achieve them—using the various production and documentation features afforded by Glass. By using Evernote on Glass, technical communicators may design different project plans by “writing” through on-the-go voice commands. Current Glassware also offers access to meet-up events, where technical communicators can gather to learn about topics relevant to their jobs. These affordances can motivate individuals to increasingly engage with, re-think, and participate in enrichment projects.

While many remain skeptical about walking around with a head-mounted computer, I believe more energy should be channeled toward designing and experimenting innovative ways to use wearable technology in technical communication activities. As technical communicators, we should be positioning ourselves at the forefront of exploring wearable devices such as Google Glass from the perspective of the user, with an eye toward their potential for reframing documentation, user testing, and project management processes. **i**

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