University of Michigan Humanities students explore complex interrelationships between technology and humanities using Adobe® Creative Suite® 5 and Adobe Acrobat® Pro software. How do the different tools we use shape us? Can unfamiliar technologies foster new ideas? Professor Eric S. Rabkin and his upper-level students at the University of Michigan's Department of English explore these questions and others in Rabkin's Technology and the Humanities and Literary Research and Computers classes. Using components of Adobe Creative Suite 5 and Adobe Acrobat Pro software, students develop valuable technical and scholarly skills in researching advanced subjects in the humanities. As part of the learning process, students present their research projects using Adobe Flash® Professional CS5, Photoshop® CS5 Extended, Dreamweaver® CS5, and Acrobat 9 Pro software.

"The courses using Adobe software foster sharpened analytical skills and technical mastery of technologies for collaboration. Adobe software also helps students manipulate, analyze, and present electronic data around humanities topics," says Rabkin. "Students leave the courses with technical, highly desirable interactive communication skills that a student in a traditional humanities program might not otherwise possess."
Technology as teacher

The Department of English Language and Literature at the University of Michigan has long been recognized as one of the top English departments in the United States. Professor Rabkin joined the Michigan faculty in 1970 and he is well known for his large, popular lecture courses on science fiction and fantasy and for his many teaching innovations. Recently, Rabkin received the Golden Apple Award, given annually by students to the most outstanding teacher at the university.

Continuing his legacy of innovative teaching and educational leadership, Professor Rabkin wanted to help the students in his Technology and the Humanities and Literary Research and Computers courses develop both technical and critical reasoning skills, and understand the impact evolving tools have on the study of humanities. Rabkin’s philosophy is that technology can easily become transparent to humans, and once it does, people begin making unconscious assumptions about it.

“For instance, when viewers watch a black-and-white movie from the 1920s, they don’t wonder why it is not in color; however, when they see *Schindler’s List*, produced in 1993, many ask themselves why isn’t this in color?” he explains. “Technology blends into the background until a disconnect occurs and jars us; then it springs into our consciousness.”

The medium is the message

With this philosophy in mind, part of Rabkin’s goal is to take students out of their technological comfort zones and help them personally experience how using new tools can shape research and communication of knowledge. Instead of having his students write traditional papers, he requires them to produce multimedia presentations that require learning new software—Adobe Photoshop CS5 Extended, Dreamweaver CS5, and Flash Professional CS5— including delving into programming in ActionScript. According to Rabkin, when students use new, unfamiliar technologies, it mimics the challenges societies face when assimilating new tools.

“The medium is the message: With Adobe software, I see students creating extraordinary research projects—and honing their ability to understand the relationships between technology and the humanities.”

Professor Eric S. Rabkin
Arthur F. Thurnau Professor and Professor of English Language and Literature, Department of English, University of Michigan

Challenge
- Empower students to develop both technical and critical reasoning skills
- Enable students to create rich, interactive presentations
- Cull valuable, transferrable technical communication skills
- Help students experience challenges societies face when assimilating new technologies

Solution
- Employ Adobe Creative Suite 5 and Adobe Acrobat 9 Pro to enable students to create rich-media presentations and showcase their research

Benefits
- Brought real-life meaning to the relationships between technologies and humanities
- Enabled students to communicate complex opinions, arguments, and positions in creative, impactful ways
- Helped students develop transferrable technical skills using industry-standard software
- Fostered students to learn new technology to better understand not only how a new technology but any technology can shape thoughts, expectations, and behaviors

Toolkit
Adobe Creative Suite 5 Master Collection. Components used include:
- Adobe Dreamweaver CSS
- Adobe Photoshop CSS Extended
- Adobe Flash Professional CSS
- Adobe Acrobat 9 Pro

Humanities concepts brought to life

After an initial five-week technology introduction, students spend the remainder of the semester defining, researching, and developing multimedia projects, including websites and their associated materials. Individual projects explore the humanistic implications of some chosen technology. Group projects collaboratively tackle some major subject in the humanities. Students are required to complete both individual and group projects. These vary widely by topic and implementation.
Instead of students writing traditional papers, they produce multimedia presentations using Adobe Creative Suite 5 software components—Adobe Photoshop CS5 Extended, Adobe Dreamweaver CS5, and Adobe Flash Professional CS5. Courses using Adobe software foster sharpened analytical skills and technical mastery of technologies for collaboration.

To realize the full value and benefit of his innovative course requirements, Rabkin must provide students with software to promote collaboration and enable them to work in an integrated environment—all while preserving the integrity of originally sourced materials and subject matter. Adobe Creative Suite 5 provides the features and flexibility his students require to generate interactive presentations and explore the boundaries of their creativity and critical thinking skills. Adobe software also works seamlessly across computer platforms to help ensure that students have consistent, reliable access to advanced creative tools.

Individual student projects begin with a written proposal defining a technology and offering preliminary suggestions about how to explore its humanistic implications. Projects have dealt with technologies such as movies with sound, the cantilever, the pulley, the LED, relational databases, and other now-standard technologies. Group projects vary widely by topic, but consist of two parts: the final group product and an analysis discussing or demonstrating one or more theoretical problems encountered in producing the product.

For both project types, students use Adobe Photoshop CS5 Extended, Flash Professional CS5, and Dreamweaver CS5 to create interactive, animated assets that comprise part of their presentation. Animated and video assets created using Adobe software are published on websites to make up the final product. All source materials included in a project must be properly cited, and students have the option to select Adobe Acrobat Pro to produce PDF versions of their bibliographies.

**Breakthroughs using new tools**

The results of incorporating technology into the English curriculum at the University of Michigan have been profound. Students and groups in Rabkin’s classes have explored concepts as complex and diverse as the line between human and artificial intelligence, how Shakespeare altered history to fit his artistic purposes, and what might happen beyond the grave. One student group was awarded a Computerworld Smithsonian Award for their work.

"I am constantly impressed with what students accomplish when they overcome a lack of familiarity with new technology," says Rabkin. "Using Adobe software, students are bringing real-life meaning to the relationship between new technologies and humanity and communicating complex ideas in creative ways. At the same time, they are building transferrable skills that are invaluable in today’s technology-immersed world."