

## Expanding Access to Education

**Commonwealth of Learning Education Specialist Wayne Mackintosh advocates free and open source software to help learners in the developing world**

MySpace, YouTube and Wikis—social networking Web services that allow people to easily create and share information, photos and videos online—can also help learners, especially in the developing world, according to Wayne Mackintosh, e-learning education specialist for the Commonwealth of Learning (COL), an intergovernmental organization that aids developing nations improve access to quality education and training. These tools can expand access to education and enable teachers to localize Web content. During a visit to Penn State, Mackintosh spoke with Outreach magazine about such tools, as well as the internationalization of education and Penn State's involvement with the COL.

**Q. The Commonwealth Computer Navigator's Certificate is a new free content project of the COL to improve access to computer skills training. Why is this important?**

**Mackintosh:** It's an international project that addresses two issues in the developing world: lack of information and communication technology skills—word processing, spreadsheet and Web navigation—and software piracy. According to the Global Software Piracy Study [commissioned by the Business Software Alliance], 35 percent of software running on personal computers worldwide is illegal. In developing countries, that rate is around 80 percent. The Computer Navigator's Certificate will use free content and free software to help people widen their knowledge without incurring the costs of purchasing software.

Fred Weber—Campus Photography

**Wayne Mackintosh champions free and open source software for education.**

**Q. What is Penn State's role in the project?**

**Mackintosh:** Penn State is contributing its instructional design expertise to the project. This is a pioneering initiative. Not many projects have used social software for education and training. Social software, also called Web 2.0 technology, enables us to participate collaboratively on the Web. With this technology, anyone can publish content on the Web. The Navigator's Certificate will use WikiEducator, a COL-supported Web resource, for the development of free educational content.

**Q. Whom will the project benefit?**

**Mackintosh:** One primary group is Commonwealth nations with populations below 5 million. These small states face challenges sustaining a cost-effective higher education system with so few people. Through the project's collaborative sharing model, we can enhance the quality of education by reducing costs. Learners who want to enhance their information and

communication technology skills and educators in these small states and others in developing countries will benefit from the project.

**Q. A company has been awarded patents for online learning technology. How will this affect the project?**

**Mackintosh:** The Navigator's Certificate uses a free content share-alike license [a "copyleft" license that protects the freedoms of the content] and isn't affected by this development, but I'm concerned, as are others in the free software community. My passion is rooted in the principle of freedom of choice. Every educator should have the freedom to use the tools of their choice and the right to teach in ways they feel are appropriate. Free software and free content enable educators to realize these freedoms.

**Q. How is the field of distance education evolving?**

**Mackintosh:** American distance education scholar Charles Wedemeyer believed that every adult had the right to access to education

and that technology could help widen this access. This philosophy underpins the development of open and distance education. For the first time, with the advent of social software and the Web, we're in a position to realize this vision of open learning. This democratic process will empower teachers and learners in ways not possible before.

**Q. Do you have any advice for Penn State?**

**Mackintosh:** The skill set that resides at Penn State offers a wonderful opportunity to start working on a number of free software projects to help realize the next generation of learning technology. A good example is Penn State's work with the LionShare project [see box]. Penn State should continue building on the solid foundations and the unique pedagogies that will be required in asynchronous learning environments of the future. Penn State's knowledge about distance education and e-learning will be important as we move to greater levels of customization in education. ▀

## Collaborative Tool

The LionShare project is enabling academics to easily organize and share files and learning resources, and collaborate with others. Created by a team of Penn State researchers, the secure peer-to-peer networking technology is a partnership effort of Penn State, Internet2, Simon Fraser University of Canada and the Massachusetts Institute of Technology. For more information about the project, go to <http://lionshare.its.psu.edu/>.