

# Online lab lessons

**APA is developing a Web site of interactive experiments to help instructors show students what psychology's all about.**

**BY LEA WINERMAN**  
*Monitor staff*

To truly understand core psychological concepts—from facial recognition to right-left brain hemisphere differences—students need to participate in experiments, and also see and analyze data from large groups of participants. But gathering and analyzing experimental data can be a time-consuming and computer-intensive task.

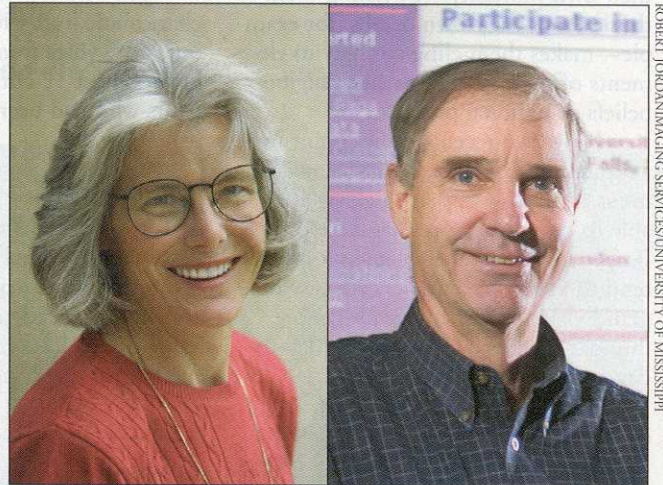
Now, APA's Education Directorate plans to develop a Web site that will make that task easier. The directorate will use a \$375,000 National Science Foundation (NSF) grant to build a Web-based library of interactive psychology experiments called the Online Psychology Laboratory (OPL). The site will allow high school and college psychology teachers who are short on lab space and computer equipment to use the Web to introduce their students to empirically based psychology research, says Maureen McCarthy, PhD, APA's director for precollege and undergraduate programs. McCarthy will be co-heading the project along with University of Mississippi psychology professor Ken McGraw, PhD.

The site will also be the first psychology-related, NSF-funded addition to the National Science Digital Library ([www.nsdlib.org](http://www.nsdlib.org)), an NSF resource for science, math and technology education.

The online laboratory will expand on and incorporate elements of the Web site PsychExperiments (<http://psychexperiments.olemiss.edu>), run by McGraw and colleagues Mark Tew, PhD, and John Williams, PhD, at the University of Mississippi. They began PsychExperiments in 1998 with a grant from the U.S. Department of Education's Fund for the Improvement of Post-Secondary Education. The site now includes more than 30 classic psychology experiments.

Via the PsychExperiments site, students can now complete the experiments on any personal or school computer. They can then download and analyze data from their classmates or from every person who's ever completed the experiment, and teachers can discuss the results in class.

The site has been a boon to teachers at small colleges, says psychology professor Karen Brakke, PhD, of Spelman College in Atlanta. "I first started using it in my cognitive psychology class," she says. "It's considered a lab course, but because we had a limited number of computers available, we weren't able to do many labs in class. So I needed to find a



**Dr. Maureen McCarthy and Dr. Ken McGraw are developing a Web-based library of basic, interactive psychology experiments for classroom use.**

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way to create independent labs that students could do on their own—and this has worked really well."

Others agree with Brakke. Over the past six years, more than 1,200 faculty have registered to use the site, and students have conducted more than 100,000 experimental sessions.

But, McGraw says, for the past few years the site has had no stable funding source and so has remained static—no new experiments have been added.

"It's always been clear that if a site like this is going to continue to grow, it has to be maintained by some stable professional organization like APA," McGraw says. "We're just three guys."

The new library will eventually include many more experiments than are now available on PsychExperiments, says McCarthy. An advisory board—like a journal's advisory board—will determine what experiments are appropriate, she says, and will do quality-control checks and usability reviews.

McCarthy and McGraw also plan to give OPL a unique look and its own organizational setup. Users will be able to look up experiments by research design (like within-subjects or between-subjects designs) or by psychology topic (like cognitive or developmental). The goal, McCarthy says, is to include experiments that represent many of the major areas covered in an introductory psychology curriculum. The site, she says, will also include supplemental materials for teachers about how to use the experiments in their lessons, as well as demonstrations of psychological and statistical concepts for students.

The advisory board will convene for the first time this spring, McCarthy says, and the site should be up and running in time for the fall 2005 semester.  $\Psi$