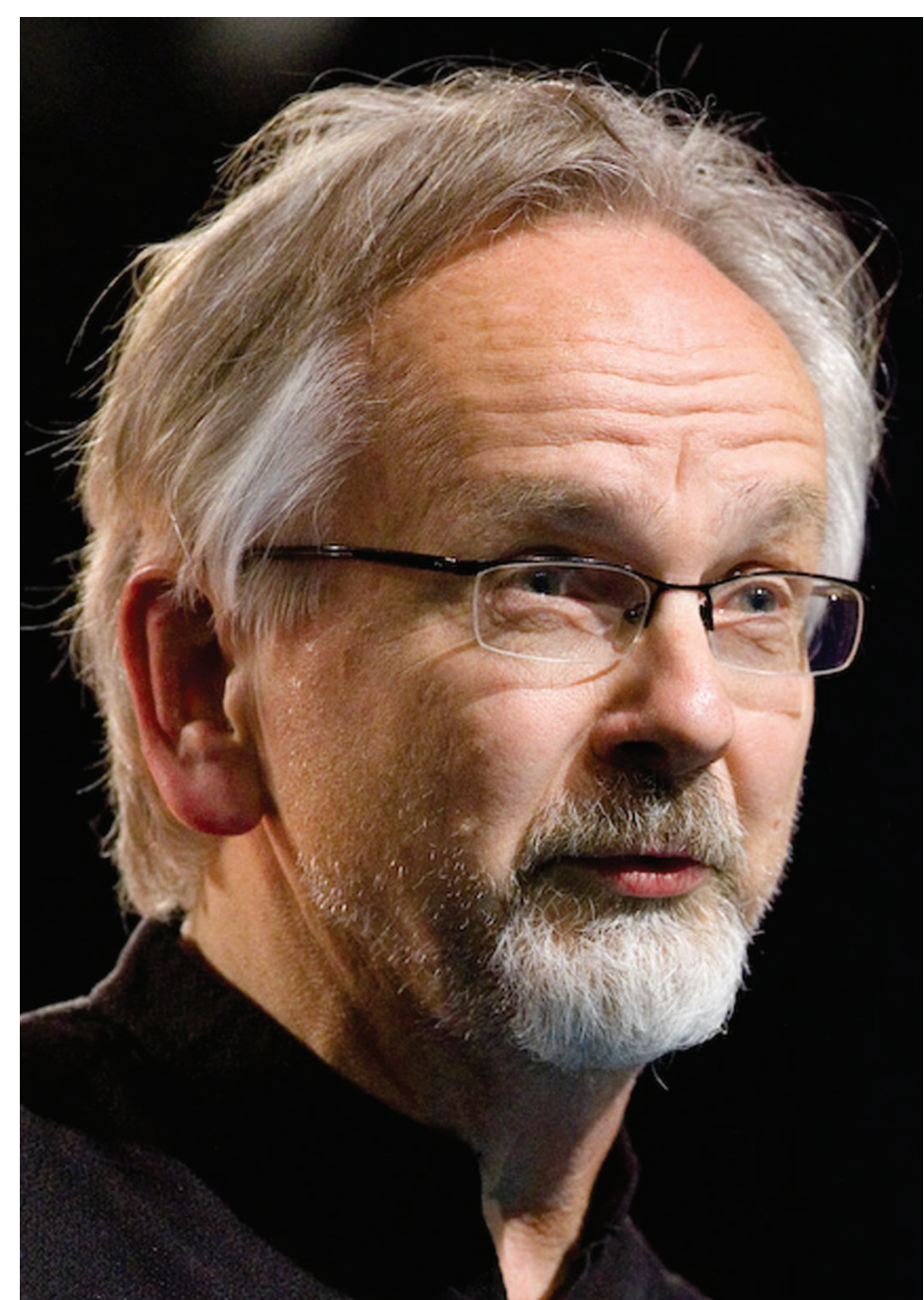




University of Michigan Teaching Innovation Prize

2009 WINNER



PERRY SAMSON
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Sponsors:

Office of the Provost

Center for Research on Learning and Teaching (CRLT)

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Innovations for Larger Classes: LectureTools and Online Textbooks (XamPREP)

Innovation Description

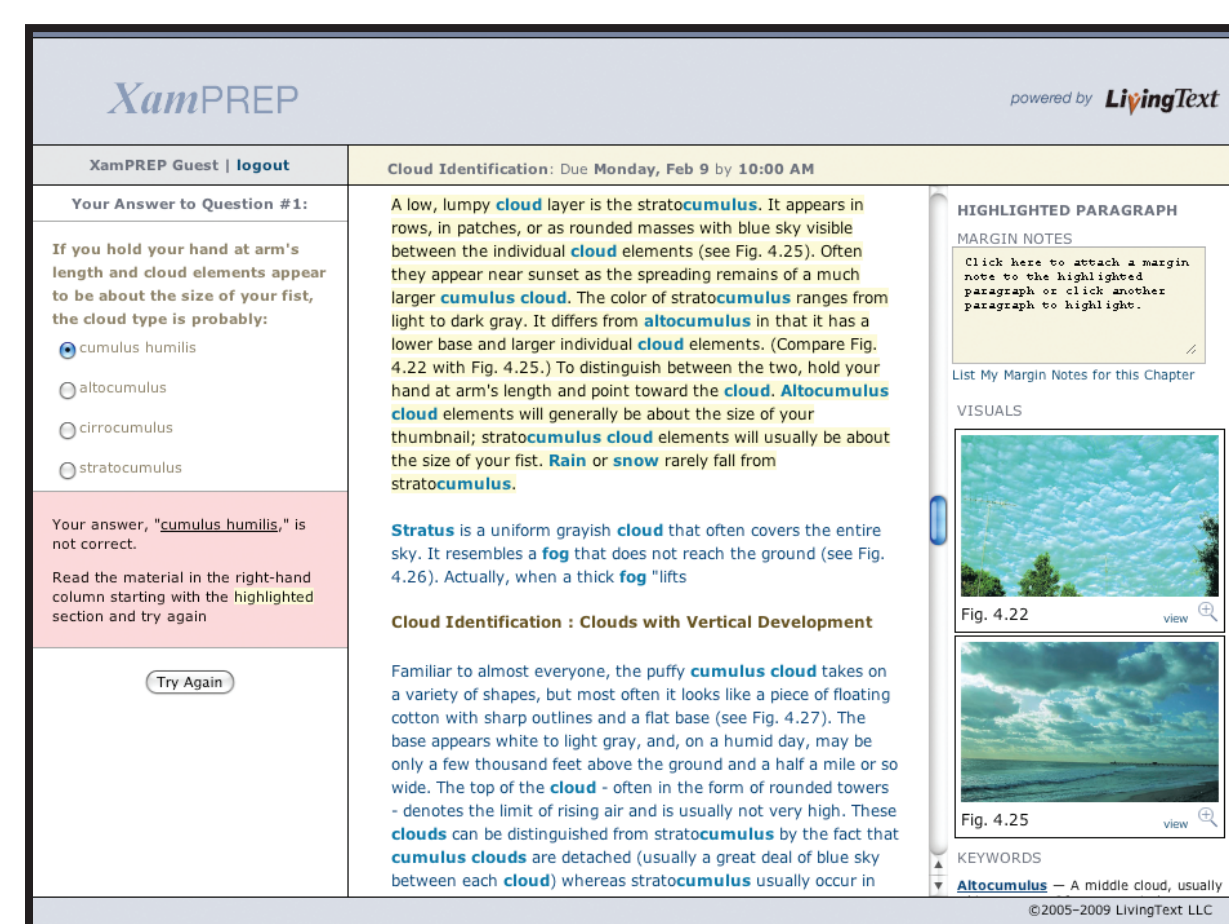
LectureTools is designed as an alternative to ‘clickers’ and provides a wider range of question types for instructors. Additionally, LectureTools allows students to pose questions during lecture, and GSIs in the room can answer their questions for them in real time. Students can also type their notes synchronized to the instructor’s slides and even draw on the slides with a Mac or PC. The tool originated from Samson’s desire to expand the use of student discussion in large lecture classes and the realization that clickers could not accommodate the kinds of questions he wished to pose, including free response, lists to reorder, and image-based questions.

XamPREP redesigns textbook content (in collaboration with publishers) to promote inquiry and timely reading. Students log in to answer questions posed by the instructor in preparation for each class, and they rate their confidence in each answer. Whether right or wrong, each response takes the student directly to the content germane to the question. At the very least, students are exposed to key concepts before lecture, and are able to search the textbook, view animations and quiz themselves on concepts prior to exams.

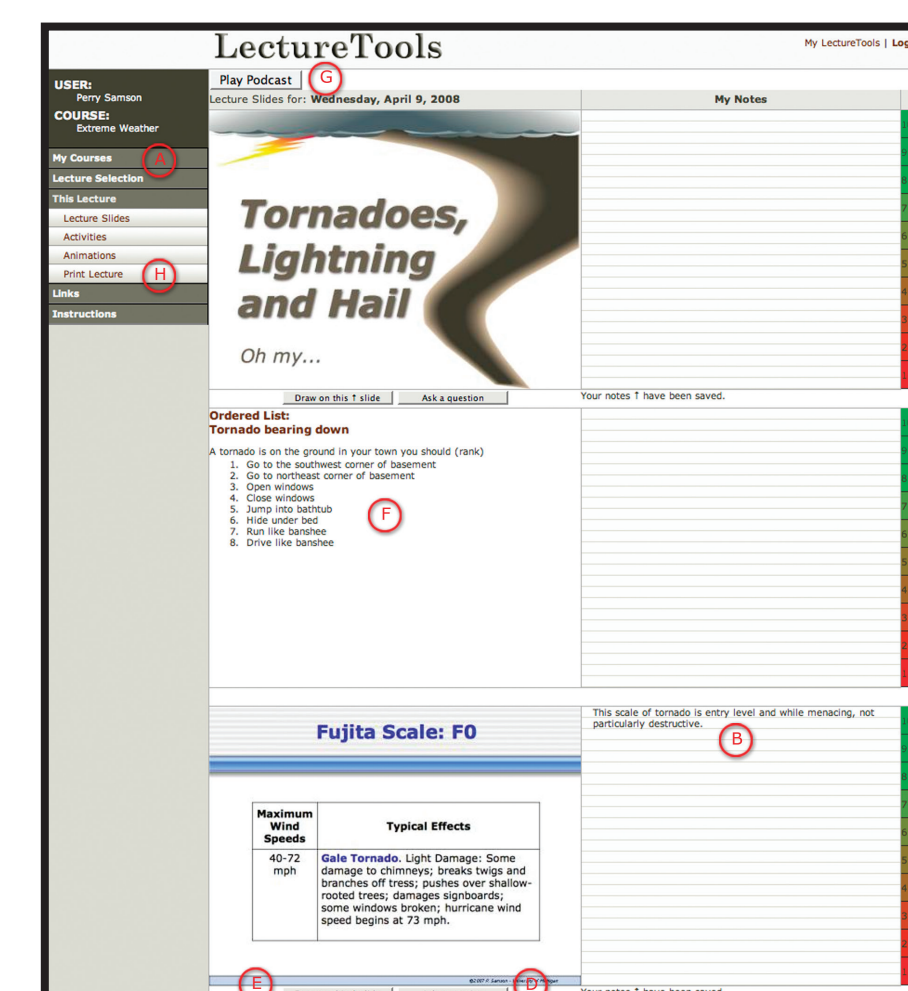
<https://www.lecturetools.org>

<http://www.xamprep.com>

Examples of Teaching Innovation



Before lecture, students respond to questions that are linked to relevant textbook content.



Notes taken via laptop are synched with lecture slides. The bar on the right indicates students’ confidence in their grasp of the material.

Student Comments

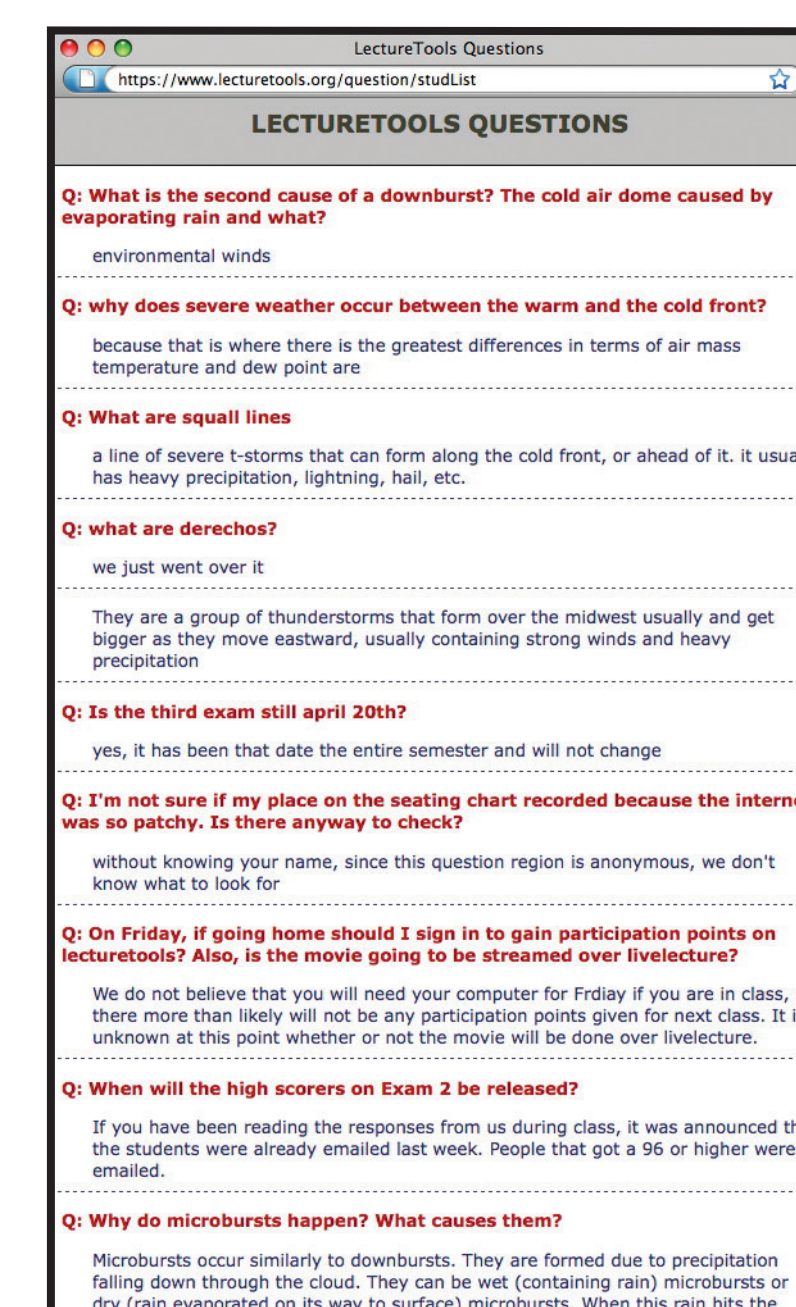
“Students can also rank their understanding slide-to-slide, so that Professor Samson notices immediately if people are getting lost. A student who is uncomfortable asking questions can type it in, and it will be answered publicly (maintaining anonymity) by the GSIs. This is a particularly nice feature because it encourages questions, and the questions do not disrupt the class.”

“I completely forgot that I was in a large lecture. I felt like everyone interacted with each other and I could see what others were thinking through LectureTools.”

“I rarely encounter a student who completes all of their assigned reading. However, in Professor Samson’s class, students do.”

“By completing the practice questions [in XamPREP] I am able to assess my knowledge of the subject, and also to follow up on the material with the exact page containing the particular concept being brought to the screen upon my missing a question.”

“Each of us finds ourselves wishing we had LectureTools, XamPREP Live Lecture and interactive learning tools in other courses. We would love to be able to jot notes next to the images our Art History professor flies through or read our 500 page chemistry books on our laptops, instead of killing trees and our backs.”



Instructor and/or assistants answer students’ questions during lecture. Everyone can see these exchanges.