1067-97-1571 **Dave Barker-Plummer*** (dbp@stanford.edu), CSLI, 210 Panama Street, Stanford University, Stanford, CA 94305. Technology in Logic Education: Courseware, Automated Assessment and Data Mining.

For the past twenty-five years, our project has been producing high-quality courseware for teaching the undergraduate logic curriculum. These courseware packages consist of textbooks, desktop applications and an Internet-based assessment service which acts as an always-available teaching assistant for students. Our applications provide learning environments allowing students to explore truth-tables, proofs, first-order and modal structures, and notions of heterogeneous reasoning. Our courseware is used in more than twenty-five countries at approximately four hundred institutions including high schools, community colleges, state and highly selective private universities.

In this talk I will describe the courseware packages that we have developed and demonstrate several of our applications, including a couple that not yet published, and indicate ways in which our courseware may be used in the undergraduate logic curriculum.

As a result of our Internet-based assessment service we have a large corpus of student work (containing in excess of 1.8 million items) produced while learning introductory logic. I will briefly describe preliminary work data mining this corpus for insights into student learning trajectories. (Received September 21, 2010)