

1046-F1-921

**Cyrill Oseledets** (coseledets@ccc.edu), 7500 S. Pulaski Road, Chicago, IL 60652, **Vali Siadat** (vsiadat@ccc.edu), 7500 S. Pulaski Road, Chicago, IL 60652, and **Ming-Jer Wang\*** (mwang@ccc.edu), 7500 S. Pulaski Road, Chicago, IL 60652. *Integration of the Keystone Methodology with Computer Technology.*

The Keystone method is a synergistic system of assessing students' learning and adjusting of teaching practices. It provides a medium for dialogue between the teacher and the students. This medium is represented by carefully designed quizzes which are frequent, cumulative, time restricted, and homework based. The daily quizzes are performance based and address students' learning difficulties. They are followed by the teacher providing immediate and constructive feedback on all the problems. The difficult topics are re-taught until an appropriate level of mastery is attained. Statistical analysis of the quizzes, such as item analysis on each question, average time spent on each question, as well as the mean and standard deviation of the entire quiz, provide valuable information about the class performance. This in turn helps the teacher to plan the next lesson and construct the next quiz. We are now incorporating the Keystone methodology with state of the art computer technology to perform in-class computer quizzing and assessment, providing instant diagnostics and feed back to all students. Technological support will reduce the time spent on construction of quizzes and tests and will also provide assistance to students with their homework and other related assignments. (Received September 12, 2008)