Challenge
Arapahoe has a wide range of students currently enrolled in business courses. ACC students vary in age, level of education and work experience. The accounting department has over 500 students taking Principles of Accounting each year. These classes, which are offered on campus and online, are supported by full-time and adjunct instructors.

Faculty wanted to provide more one-on-one attention tailored to the individual learning needs of students without increasing costs or staffing. Arapahoe also wanted to provide help to students outside of the tutoring lab after hours to better accommodate busy student schedules.

Solution
Faculty applied for Perkins funding and were able to subsidize the cost of Quantum’s intelligent adaptive learning and assessment software at no cost to the school or students.

The solution allowed students to receive step-by-step feedback on their own work, view “How Am I Doing?” student self-assessment reports to identify areas mastered and concepts requiring more practice, and ask questions at times when the instructor was not available or the tutoring lab was closed.

Instructors have access to real-time assessment reports measuring improvement, mastery and common errors for remediation during class lectures or to identify and provide personal help to struggling students.

Result
- 50% of students achieved “High Mastery”, improving problem-solving skills 26% for Transaction Analysis and 43% for Adjusting Entries.
- 88% of “High Mastery” students scored 90% or better on the exam.
- Students who used Quantum as required by the instructor improved test scores by 12.8 points (more than a full letter grade) over students who spent less time with Quantum and did not achieve “High Mastery”.

We have required Quantum for over two years and found that the software improves analytic skills and builds a strong foundation for beginning students, which is key to successfully completing the course.