Introduction

The purpose of TCC’s Instructional Assessment process is to assess student learning upon program completion. Instructional programs are defined for this purpose as: 1) professional-technical programs; 2) distribution requirements for transfer degrees; 3) support programs with significant teaching components (library, counseling); and 4) programs serving special student populations (English for Academic Purposes, Student Learning Centers). Each instructional program has developed Program Learning Outcomes, defining the major competencies program completers can be expected to demonstrate “out there” as they transition to work or baccalaureate education.

Each program assesses at least one Program Learning Outcome each year, and all outcomes are assessed in a given five year period, as identified in the program’s Five Year Assessment Plan. The assessments may occur in capstone courses for programs that include such courses. Other programs may assess program outcomes in courses in which the respective outcomes are taught and learned. While instructional assessment strategies and methods vary, the purpose of instructional assessment is to determine whether specific learning outcomes are achieved by the aggregate of a program’s students in order to identify areas for program improvement, as opposed to student grading, which assesses the learning of individual students.

TCC’s instructional assessment results are documented in an online database that includes, along with other information, recommended changes to courses and/or programs changes identified through assessment projects and documented improvements in student learning as a result of making these changes. The “assessment loop” is “closed” when programs have
analyzed and documented assessment results, implemented recommended changes, and reassessed to determine if student learning has improved.

For the purpose of this brief, we will examine four examples of TCC programs that have closed instructional assessment loops.

**Health Information Management (HIM) Program**

Between 2004 and 2007 the college’s Health Information Management program migrated from a traditional instructional mode first to web-enhanced, then to hybrid, and, ultimately, to full online course delivery. By June 2008 the faculty felt something was wrong with either the content of the online courses or how they were being taught. Various assessment strategies revealed that the program’s course level learning objectives were often unnecessarily broad in scope and disconnected from course content. Student exam scores were not as solid and consistent as in the earlier, traditionally taught classes. Pre-exams in 200 level courses indicated that most students had not acquired knowledge needed to enter final quarter capstone courses.

Because the Program Learning Objectives were tied to the American Health Information Management Association (AHIMA) HIM Entry Level Competency Domains and Knowledge Clusters (Blooms Taxonomy), course curriculum was revised to more specifically conform to this standard. Course content, assignments, quizzes, exams, and projects were reviewed for adherence to Knowledge Cluster guidelines. Student assessments were reviewed and updated to ensure cognitive difficulty consistent with positioning of courses in the program curriculum. As a result, required program credits were reduced from 102 to 91; course sequencing is now orderly and compact; student quarterly course loads are more manageable; and the courses are easier to teach.

The revisions were implemented in fall 2008. Program faculty is now in the process of tagging all student assessments with corresponding learning objectives, Blooms levels, and AHIMA Domains, so future program faculty will be able to quickly adjust content and improve delivery to assure desired student outcomes. The program is also developing a test bank from a Year 1 comprehensive review, drawn from the content of the program’s 100 level courses. A Year 2
Program Graduation Exit Exam—the RHIT (Registered Health Information Technician) Mock Accreditation Exam—will also be administered.

**College Library**

The college library worked with a variety of academic and professional/technical program instructors to assess students’ “information literacy” learning. Among other project results, it became clear that while many students could find credible resources, they did not know how to incorporate information from these resources into their papers, and, in some instances, students did not even recognize that the two activities—research and writing a paper—were connected. The librarians shared this information with the larger college faculty, made changes to many print and online handouts, and changed content in many of the 75+ library sessions they teach each quarter as guest instructors in courses across the college curriculum. The librarians are currently developing a series of tutorials students will be asked to complete before a classroom visit, so librarians and discipline faculty can spend less time teaching the nuts and bolts of information retrieval and more time teaching synthesis.

**Math Department**

The math department assessed the Program Learning Outcome, “Upon successful completion of a prerequisite course, students will have the skills and knowledge necessary to complete the subsequent math course.” The program looked at completion rates in Math 90, Beginning Algebra, which was selected because of its historically low completion rates. The completion rate of Math 90 students who had recently completed the prerequisite course, Math 85, was compared to the overall Math 90 completion rate. The assessment project revealed that while the overall Math 90 completion rate was 53%, the completion rate for students who had recently taken Math 85 was only 49%. As a result the department:

- Added one credit hour to Math 85, making it a five credit course. The additional time is used to introduce the concept of graphing, a relatively abstract topic extensively emphasized in Math 90.
- Developed a two credit course (MARC 90) offered through the Math Advising and Resource Center (MARC). The class is taught by a faculty member assisted by a student tutor and integrates study skills, group problem-solving and tutoring for Math 90 students.
• Implemented a Math 90 Supplemental Instruction (SI) program, in which a tutor attends a particular section of Math 90 daily and leads supplementary tutoring sessions.

Subsequent tracking of student success rates indicates that students who completed Math 85 before entering Math 90 improved after the changes were made. The success rate for students going from Math 85 to Math 90 in 2007-08 was 55%, compared to the 49% success rate identified in original assessment project. The overall success rate for Math 90 has steadily increased to 60% for the 2007-08 academic year, compared to the 53% success rate identified in the original project.

Nursing Program
The nursing program assessed the Program Learning Outcome, “Use critical thinking skills to apply the nursing process in caring for patients and their families by identifying, developing, implementing evaluating and documenting plan of care, utilizing appropriate technology.” The assessment committee chose to use the TCC Concept Map (CM), a tool already used to assess students in all six quarters of the Nursing Program. Project results revealed that the CM was not the best tool to assess sixth quarter student learning, so a Critical Thinking Assessment Tool (CTAT) was developed by nursing faculty, using the American Nurses Association (ANA) Standards of Nursing Care. The CTAT categories reflect the same ANA standards categories referenced in the CMs. It was piloted in spring 2007 on a group of twelve sixth quarter students and was completed for each student by both a Preceptor and an Instructor using inquiry, preceptor feedback, and records review. The tool was found to be effective both in identifying areas of weakness and in facilitating communication between students and preceptors, which promotes student learning. The CTAT was then incorporated into the sixth quarter evaluation process. Students who score below 79% on the CTAT do not meet course and program learning outcomes.