

**Middle States Review
Update**

**Student Outcomes Assessment
NTID**

February 22, 2007

Executive Summary

Student Outcomes Assessment continues to be a priority for our college. This report summarizes the results of data collected and applied to curricular, instructional, and academic support revision in Winter Quarter, AY 2005-2006, Spring Quarter, AY 2005-2006 and Fall Quarter, AY 2006-2007. We continue to improve our assessment plans and procedures with the goal of having a positive impact on curriculum design, instruction, academic support and, most importantly, student learning. The goals and process of incorporating student learning outcomes assessment in course and program design is embedded in the culture and procedures of the college. The greatest impact from our efforts to date has been to refine instructional strategies and content at the course level. These achievements are modest in scope and we continue to learn how to improve defining the critical learning outcomes and how to measure them. We have found that the major drivers of change at the program level are advancements in the technical fields; the strategic plans of the college and the university regarding the degree portfolio; changes in the general education curriculum; and changes in the interests and entrance skills of the student population.

Progress in Executing Student Outcomes Assessment Plans

College

The Associate Dean, the Curriculum Resource Associate (CRA), Department Chairs, and Program Coordinators in the departments continue to provide leadership for student

outcomes assessment at the college and department levels. This year the Associate Dean and CRA updated the information on the website, added a revised Student Outcomes Assessment Plan template, and worked with the web master to create an archival process for the Program Outcomes Assessment Plans and Reports. Current and past reports, as well as resource information, can be found on the college's VP/Dean website: <http://www.ntid.rit.edu/VPandDean/soa/pages/welcome.html>. The CRA and Department Chairs continued to work with the IT staff to improve the centralized collection and reporting of outcomes assessment data. The centralized database remains problematic and the question is whether it is more efficient to maintain data at the program level in the departments.

Courses

To align the course outlines with the philosophy and goals of Student Outcomes Assessment, course outlines were reformatted to include student learning outcomes and associated assessment methods. As part of this process, we discontinued 149 courses from the course inventory which were no longer being offered and submitted paperwork for an additional 13 courses to be discontinued

All new and modified course outlines are now required by the curriculum review process to include student learning outcomes and assessment methods. All new and modified courses submitted in the 2006-2007 academic year included appropriate outcomes and assessment methods.

Program Plans

Ongoing programs collected, reported and applied data to instructional improvement. Programs that were under revision suspended data collection and included reviewing and revising the outcomes assessment plan as part of the curriculum revision process. Finally, several new programs and major modifications of programs were completed and these

programs all included student outcomes assessment plans in the documentation of the new curriculum that will be implemented. In the new program design, course level learning outcomes and program level outcomes were aligned. (See the program summary form and Question #1 for details on each program.)

Data Collection and Use

Co-op data provided assessment of student performance on the job. These data are reported for the whole college because there are not sufficient data at the individual program level available from the new online co-op supervisor evaluation to enable any conclusion specific to a major. The job placement data are very high, at 95%; consequently, programs are monitoring this rate for changes. We continue to work on how to interpret and apply Alumni Satisfaction data. Between the time of graduation and the Alumni Survey, programs frequently change significantly. Consequently, we are often receiving feedback on a program we no longer offer. The current approach is to focus on overall alumni satisfaction with their education and look for areas of dissatisfaction.

Question #1: Do all academic programs have appropriate goals and assessment plans based on student learning outcomes?

All academic programs, general education (arts and sciences) and academic support programs in the college have Outcomes Assessment Plans. Each plan identifies critical outcomes, performance benchmarks, assessment instruments and timelines. See the attached chart for a list of programs and a summary of the progress of each program in developing and implementing assessment plans.

Since the last report, two new program plans were added: AS in Business and AAS in Applied Mechanical Technology. Three programs completed major revisions including

changes to the outcomes assessment plans and will begin data collection in AY 2007-2008: Automation Technology, Applied Optical Technology and Computer Integrated Machining Technology. Four programs suspended all or part of data collection while they undergo revision of the curriculum: American Sign Language –English Interpretation, Digital Imaging and Publishing Technology, General Education: English Literacy, and Healthcare Billing and Coding. Three more programs progressed to the collection of pilot data: Applied Computer Technology, Computer Aided Drafting Technology, and General Education: Communication Studies. Three programs and one area of General Education collected a second round of data, but have not applied it yet: Accounting, First Year Experiences, Counseling, and General Education: Critical Thinking. Finally, six programs completed a first or second round of data collection and applied it to improving instruction or services: Administrative Support Technology, Art and Computer Design, Laboratory Science Technology, Masters of Science in Secondary Education, Student Life Team, and Speech and Audiology Services. This compares favorably to last year when seven programs had started to collect data, four had completed data collection and five had applied results to improving instruction, curriculum or recruitment.

Question #2: Describe what evidence is used and how this evidence leads to continuous improvement of educational practices, advising, teaching and learning.

Since the last reporting, six of nine programs collecting data applied their outcomes assessment data to improving instruction or services. Administrative Support Technology has begun to implement an electronic portfolio in response to concerns about grade inflation and to support students' ability to see the connection between the work in different classes. Art and Computer Design (ACD) placed greater emphasis on resume preparation and written

course work in response to students' low performance in resume writing which affects securing co-op placement and permanent employment. In addition, ACD in their merger with DIPT is revising the program to provide emphasis on pre-press production processes and techniques. Laboratory Science Technology responded to concerns about safety in the labs by enhancing instruction in lab safety. Future assessment will evaluate improvement in this area. MS in Secondary Education addressed the high failure rate of students on the teacher certification exam by adding objectives to courses related to certification criteria, changing instructional materials and enhancing instruction on the preparation of Individual Educational Plans.

Student Life Team (SLT) made programmatic changes based on their assessment results. SLT created timelines for follow-up and the development of improvement plans for both the departments and individual staff plans of work when Outcomes Assessment results were not satisfactory. Outcomes Assessment will be repeated following the implementation of the plans. Speech-Language and Audiology addressed students' lack of awareness of the availability of services based on assessment feedback by increasing the dissemination of information about services.

Strengths

Student Outcomes Assessment is becoming more embedded in the way faculty and staff think about assessing curriculum, instruction and services, and is a required component of the curriculum review and approval process. This is a major accomplishment. There continues to be strong administrative support during the process. Most programs see the potential of assessment even though the follow through is difficult.

As noted last year, emphasis on embedded assessment has promoted tracking and pooling of results from assessments that were already occurring in some courses. This has

created a new way of looking at the value of Capstone experiences, portfolios, papers, presentations, tests and projects. That is, they are seen as a measure of the success of the program itself, not just of individual students.

Challenges

The major challenge remains assisting the faculty and department chairs in understanding the intrinsic value of student outcomes assessment and providing the necessary technical and intellectual support that will enable departments to engage in the assessment process in an ongoing basis. This remains a challenge because the benefits of engaging in outcomes assessment have been quite modest to date and the implementation effort significant.

Discussion needs to continue on the connection between the student learning outcomes embedded in course outlines and the outcomes assessment plans developed at the program level. Departments need to utilize selected student learning outcomes collected in the process of teaching courses for the program level assessment. This should help streamline the process and produce more authentic and robust assessment results. At the same time, outcomes assessment needs to be viewed as a continuous process with the analysis connecting data from one year to the next. Finally, we need to continue discussing the relationship between assessing student learning at the course and program levels and the scholarship of teaching and learning. Assessment done well embedded in the instructional process has the potential to contribute simultaneously to improved learning for students and scholarship for faculty that can be included in tenure and promotion portfolios.

The major challenges remain selecting and writing student learning outcomes that really matter to student learning, embedding this assessment in the instructional process and designing efficient ways to maintain and analyze that data.

Plans for Spring 20064 - Fall 20071

- Discuss frequency of data collection and reporting, move to regular reporting in June
- Discuss designing and embedding assessment in course instruction
- Discuss how often and how do you know it is time to change the outcomes you are collecting
- Provide a forum on Outcomes Assessment to discuss use of results with all chairs and provide guidance/support
- Work with faculty to follow through on the use of results and how to connect results from one year to the next
- Maintain annual reports on the Student Outcomes Assessment website

Future Plans

It is clear that for Outcomes Assessment to continue, it must remain a priority supported by the college. To date, Outcomes Assessment in our college has yielded only a few examples of exciting, useful results that would intrinsically motivate faculty and department chairs to continue.

We need to:

- Refine the Learning Outcomes so that they are truly useful to the programs and the students.
- Simplify some of the plans so there is time and energy to implement on an ongoing basis.
- Discuss whether to continue to try to centralize data or to maintain and report data at the program level.
- Facilitate further discussion on how to analyze the data and use the data to make decisions about curriculum and instruction.
- Discuss the IT support that is needed.
- Advocate for full-time leadership at the University level for Outcomes Assessment

For each program indicate the status of outcomes assessment implementation in the table below

C = Complete

IP = In progress

M = Missing

**Program Summary Table
February 21, 2007
NTID**

Program Name	Program Outcomes Defined	Methods Assessment Identified	Course Outlines have learning outcomes	Data Collection	Report shows data, decisions, results analysis	Assessment plan fully implemented with continuous review	Comments
ACADEMIC PROGRAMS							
Accounting Technology	C	C	C	C	C	IP	Data collected on 22 additional students; Faculty discussing improvement strategies for items with low score
Administrative Support Technology	C	C	C	C	C	C	Additional data collected; review of 3-years of results led to decision to change from paper to electronic portfolio for assessment of business communications
ASL-English Interpretation	C	C	C	IP	IP	IP	Data collection has begun and results will be posted beginning June 2007
Applied Computer Technology	C	C	IP*	IP	IP	IP	Pilot data collection guided subsequent assessments; Criterion met for 1 out of 3 general technical skill areas; Additional N's needed before decisions based on results can be made
Applied Mechanical Technology	C	C	C	M	M	M	New program and assessment plan approved July 2006; Students enrollment will begin Spring 20063
Applied Optical Technology	C	IP	C	M	M	M	Modified program approved July 2006; No data collected yet
Art and Computer Design	C	C	C	C	C	C	Revised data analysis revealed lower results on three measures than previously reported; faculty discussing improvement techniques for resume preparation and pre-press production
Automation Technologies	C	IP	C	M	M	M	Modified program and assessment plan approved July 2006; No data collected yet
Business (AS Degree Program)	C	IP	C	IP	M	M	New program; Assessment plan approved; Data to be collected beginning when students are in their final quarter of the program
Computer Aided Drafting Technology	C	C	C	IP	M	M	Modified program and assessment plan approved July 2006; No data collected yet

Computer Integrated Machining Technology	C	IP	C	M	M	M	Modified program and assessment plan approved July 2006; No data collected yet
Digital Imaging and Publishing Technology	C	C	C	IP	M	M	Assessment plan currently being revised as part of new curriculum development efforts within the department
Healthcare Billing and Coding Technology	C	C	M	M	M	M	Program suspended AY2006-2007; no data collected
Laboratory Science Technology	C	C	C	C	IP	IP	Data collected on 4 graduating students; all met criterion on 3 of 4 technical measures; data collection to continue
MS/Secondary Education/Deaf & Hard of Hearing	C	C	C	C	C	C	Added IEP and classroom management seminars based on alumni and employer surveys
GENERAL EDUCATION (Arts & Sciences)							
English Literacy	C	C	C	C	C	IP	Data entry problems resolved & corrected data reported for outcomes assessed in mathematics/science courses; Outcomes data have led to curriculum changes, e.g. grading policy, in Reading and Writing courses
Critical Thinking	C	C	C	C	C	C	Results led to poster at regional conference & workshop for NTID faculty to enhance awareness of critical thinking
Communication	C	C	C	IP	M	M	Instruction & assessment measures being developed, revised and/or piloted; Data collection begins AY 2007-8
ACADEMIC SUPPORT							
Counseling	C	C	N/A	C	IP	IP	Data collected for 2 quarters; results indicated need for revisions to data collection methods and/or Freshman Seminar instruction
First Year Experiences	C	C	C	C	IP	IP	Results led to increased benchmark on one measure; Discussion of other results planned
Speech-Language and Audiology	C	IP	N/A	C	IP	IP	Results led to changes in information dissemination; faculty discussing the meaning of other results
Student Life	C	C	N/A	C	IP	IP	Based on AY 2005-6 results these data were collected using revised methods and timelines; results used to enhance individual and program performance
* two courses							