

PROGRAM REVIEW AND LEARNING OUTCOMES ASSESSMENT UPDATE

A periodic report on work and activities from the Office of Academic and Institutional Effectiveness – Ellen Wentland, Associate Dean

December 2011

EIGHTH EDITION

This is the eighth edition of what is planned as a periodic newsletter. As noted in the first April 2008 edition:

The major goal is to share with the entire campus community the significant work – significant in terms of the commitment of time and effort as well as in the results - that is being done by NECC faculty and administrators on program review and outcomes assessment activities.

For a detailed list of other purposes, see the first edition at: <http://facstaff.necc.mass.edu/wp-content/uploads/2009/07/fs-pr-0804-newsletter.pdf>

SPECIAL ANNOUNCEMENT: IN JULY 2011, SUZANNE VAN WERT, PROFESSOR OF ENGLISH, WAS NAMED A FACULTY ASSESSMENT FELLOW! WELCOME SUZANNE!

HIGHLIGHTS: INSIDE THIS ISSUE

- ❖ **FALL 2011 ASSESSMENT SUMMIT - FACULTY PRESENTERS AND PRESENTATION SUMMARIES**
- ❖ **REPORT ON THE 2010-11 INSTITUTIONAL LEVEL ASSESSMENT OF GLOBAL AWARENESS AND QUANTITATIVE REASONING**
- ❖ **PLANS FOR THE 2011-12 INSTITUTIONAL ASSESSMENT**
- ❖ **THE MASSACHUSETTS DHE'S AMCOA INITIATIVE – NECC'S INVOLVEMENT AND CONTRIBUTIONS**
- ❖ **CALL FOR PROPOSALS FOR THE FEBRUARY AMCOA STATE-WIDE ASSESSMENT CONFERENCE AT U-MASS LOWELL - DEADLINE FOR SUBMISSIONS DECEMBER 23, 2011**

The Program Review & Outcomes Assessment website (<http://facstaff.necc.mass.edu/faculty-resources/program-review-outcomes-assessment/>) has two major goals:

- To provide guidance and resources to those working on reviews, assessment plans, and assessment activities, and
- To serve as a “public” space for the display of work being done at the college on these important processes.

OUTCOMES ASSESSMENT

Program Level Outcomes Assessment

The program review process implemented at NECC in AY 2005-06 calls for programs to develop outcomes assessment plans. These plans include:

- a detailing of program learning outcomes, and
- an identification of possible methods that could be used to assess the extent to which students in the program have achieved those outcomes.

By approximately the end of the 2011 calendar year, 32 degree programs and 10 certificate programs will have developed outcomes assessment plans using the NECC process.

Once a plan is developed, program faculty select certain outcomes on which to focus each year, and then implement assessment activities around these outcomes. Methods of assessment vary and may include collecting student products related to outcomes-associated assignments, or rating students' skills demonstrations. Assessments are typically analyzed and evaluated by faculty members with the assistance of this Office.

Activities and resulting action plans are documented and maintained in hard copy format. Sample reports are also available on the website, along with many of the tools developed by faculty for assessment work. (See: <http://facstaff.necc.mass.edu/faculty-resources/program-review-outcomes-assessment/outcomes-assessment/program-level/>)

Outcomes Assessment Summits

The fall Assessment Summits provide an opportunity for faculty who have completed assessment work in the previous academic year to share their methods and results. The first annual Assessment Summit was held in the fall of 2007. **Agendas, handouts, and PowerPoint presentations related to each of the five summits held to date are available at:**

<http://facstaff.necc.mass.edu/faculty-resources/program-review-outcomes-assessment/outcomes-assessment/program-level/>.

Fall 2011 Presentations

Human Services – Jane Gagliardi

Liberal Arts: Philosophy Option – Meredith Gunning

Liberal Arts: Theater Option – Susan Sanders

Nursing – Francine Pappalardo

Paramedic Technology – Ralph Wade

Fall 2011 Presentation Highlights

Assessment work in AY 2010-2011 included the following methods:

- Embedding questions in tests
- Rating products using rubrics
- Qualitatively analyzing students' skill demonstrations
- Organizing results of internally administered comprehensive standardized examinations

Specific highlights from the five presentations and assessment reports are as follows.

Human Services

The focus of the work reported was on the following program objective and associated learning outcomes.

Objective: *To assist students in the development of the ability to integrate multiple perspectives and interdisciplinary knowledge as they respond to human services problems at a system level.*

Outcomes: *The graduating students will be able to:*

1. *differentiate between a macro system perspective on human service problems and a micro system perspective.*
2. *differentiate between primary prevention strategies and a treatment plan.*
3. *demonstrate the ability to apply primary prevention strategies to specific human service problems.*

To assess outcome 1, student responses to objective test questions included in four different course sections of Introduction to Human Services were examined. For outcomes 2 and 3, a case vignette and rubric were developed, with individual instructors using the rubric to rate the responses of their students.

For outcome 1, the percentage of correct scores for questions regarding micro and macro perspectives easily met the program standard of 85%, with students achieving 89 % and 91% accuracy. For outcomes 2 and 3, students were successful in 3 of the 4 criteria. Students were least successful in applying a primary prevention strategy to a problem within the case vignette and explaining their understanding of primary prevention, with only 43% of the students showing clear understanding.

Results suggest that program instructors need to work with students to deepen their understanding of primary prevention.

Liberal Arts: Philosophy Option

By definition, program outcomes are achieved after exposure to the program offerings, and an ideal situation is when assessments can be conducted with a large number of program majors who are well along in the program while they are together in a specific course, such as a capstone. Programs such as the Liberal Arts: Philosophy Option whose majors with a sufficient number of credit hours for evaluation are scattered during any particular term over a number of different courses pose an assessment challenge.

For this assessment of oral communication skills, four students who were Philosophy majors in a particular class were assessed qualitatively, through observations and summarizing impressions. The students' assignment was to give a 15 minute oral presentation on an existentialist theme.



Results reported by the program coordinator include:

- *While the content of the presentations was generally satisfying, the public speaking aspect of the assignment was disappointing.*
- *Students often acted as if the chosen medium spoke for itself rather than linking it clearly with existentialist themes of a thinker.*
- *Students lacked the language to express the complex ideas being communicated.*

The program coordinator indicated an intention to focus more on oral communication skills when working with students, because the ability to engage in discussions and to express ideas is critical for Philosophy students. One resource that may be tapped is the services of an NECC faculty member with oral communication expertise.

Liberal Arts: Theater Option

Challenges similar to those faced by the Liberal Arts: Philosophy Option also exist for the Theater Option – namely, few theater majors who had sufficient credits to warrant assessment were enrolled in any one class. However, in the fall 2011, seven majors, who all had taken at least three theater classes, were cast in or worked on the fall 2011 production of *A Funny Thing Happened on the Way to the Forum*. This provided an opportunity for the coordinator, who was present at all of the rehearsals and performances, to, with the assistance of another faculty member, conduct observations of the students with respect to the identified outcomes.

Assessments were conducted on four outcomes associated with two program objectives – Communication Skills and Knowledge of Theater: Theory and Practice. For each of these outcomes, a list of relevant criteria was created. For example, the learning outcome - *Work cooperatively with other members of the cast and crew to produce a unified program and complete it on time* - had the following associated criteria:

- Listen
- Take direction
- Participate in group activities
- Work with cast and crew to achieve a common goal
- Complete all facets of the project on time



Overall, assessment results were positive, with perhaps some weakness exhibited in certain of the criteria associated with basic technical theater skills - including sewing, ironing, and applying make-up.

Nursing

The Associate's Degree in Nursing Program has a set of nine overarching program objectives. The subscales of a standardized comprehensive knowledge test (ATI) administered annually in the program to students approaching graduation, map onto these objectives. Detailed test results are reported back to the program.

In order to make these results maximally useful to faculty, a template was developed to summarize and display information concerning students' performance on the various subscales, but with particular attention to specific item content to which low numbers of students responded correctly. Further, this information was displayed in a way as to allow for comparisons over time, so that faculty could see areas in which students do well or tend to make errors. Having this information summarized facilitates interpretation and also allows for discussions as to curricular or pedagogical changes that might lead to or have resulted in improvements in student performance.

As an example, the new display of test information allowed faculty to clearly see that after the recent introduction to the program of a course on pharmacology, student performance on items in that ATI subscale improved.

Paramedic Technology

The Paramedic Technology program maintains information concerning student pass rates on state administered practical examinations. These examinations focus on skills demonstrations performed at a series of six different "stations" as follows:

Station 1 (Pt Assess.)

Station 2 (Ventilatory Management)

Station 3 (Random Basics)

Station 4 (Short Spineboard)

Station 5 (IV/IV Meds)

Station 6 (Cardiac Arrest)



Prior to the fall of 2010, data reported included information on the particular stations “failed” by one or more students on their first attempt. The template used, however, did not include more specific information such as the exact number of students failing each of the stations, and the number of students failing by number of stations failed. Knowing the particular stations most frequently failed as well as how many students were involved in these failed attempts could enhance the usefulness of this organized data, and allow for better targeting of follow-up efforts.

In the fall of 2011, the template was revised to allow for the recording of this more specific data. During the summit presentation, the program coordinator displayed the new template, and reported a particular action being taken to address a weakness in students’ demonstration of basic EMT skills (Random Basic Skills). Further, the coordinator reported that examiners from the program’s state accrediting body, the office of Emergency Medical Services – Massachusetts Department of Public Health - were very impressed with the detailed and systematic approach being used by the program to record and analyze the data.

Participant and Audience Feedback to Summit

I have been looking forward to today’s assessment summit, and I wasn’t disappointed! ... What a nice range of methodologies that were highlighted

I was delighted with the turnout and the responsiveness of the audience. The down and dirty tedious task of compiling data and by trial and error making some sense of it, was made a true delight (thanks to the support I received). I am grateful for ...the opportunity to become involved in a project that has broadened my perspective and insight. It’s a lot of hard work but ahh, the fruits of the labor.

Assessment work, I have discovered in short order, takes lots of planning, thought and many hours to try to get it right. It is an ongoing effort. But, in the end it is well worth it!! It certainly opened my eyes to what a program needs to do to improve itself, or continue to do its good work and attract students.

... thanks ... to Jane, Meredith, Susan, Francine, and Ralph for their interesting presentations and (more important) the work that those presentations described. Present company excepted, of course, there are those that complain that assessment is too hard, too boring, or unable to capture the deep process of student learning. I believe that the practical value of assessment results always help to answer the first two charges and the lessons you all learned from your work that you described today certainly provide evidence of that! As for the third charge, I loved the variety of assessment methods described today. I thought Francine showed us that a traditional testing instrument could provide very useful assessment results AND measure higher levels of learning. Ralph and Jane both showed the value of using multiple types of assessment strategies. Finally, Susan and Meredith proved that those supposedly unassessible Liberal Arts skills and concepts can in fact be measured and the results fed back into our curriculum and pedagogy.

Institutional Level Outcomes Assessment

The institutional level outcomes assessment conducted in the 2010-11 academic year focused on the core academic skills of Global Awareness and Quantitative Reasoning. The institutional assessment co-chairs created a uniform assignment that would tap into the abilities represented in those skills, as defined at NECC. The assignment created was a scenario which presented a real-world problem faced by the United States; a graphical display of information relevant to solving the problem; and brief descriptions of situations in six fictional countries including information on political, economic, and cultural factors.

The method used involved identifying students and their classes and enlisting the assistance of the class instructors who were asked to administer the assessment to all students in their classes.

The students assessed whose products were ultimately rated were those who had earned between 45 – 59 credit hours at NECC, exclusive of developmental coursework, prior to the beginning of the spring 2011 term. In all, ten instructors administered the assessment in their classes, resulting in a total student yield of 43.

Three faculty members with backgrounds in social studies or mathematics were recruited to assist with the ratings of the collected student products by applying a nine-category rubric specifically developed for this assignment. Multiple sources of information used to construct this rubric included skills descriptions provided in three relevant AAC&U VALUE rubrics.

Concerning the percentage of products rated as either “Competent” or “Skilled”, and using at least 80% as the standard, findings include that:

- The standard was not met for any of the nine criteria.
- The criterion with the highest percentage of students (62.8) rated in the “Competent” or “Skilled” categories was, “Interprets quantitative information presented in graphs”.
- For two of the criteria, only about half of the students were rated as “Competent” or “Skilled”, and for a third criterion, the percentage was 44.2.
- Five criteria had percentages ranging from just 14.0 to 25.6 for these two rating categories combined.

Based on the ratings, the conclusion was that student skills in the two core skill areas assessed fall short – often far short – of demonstrating a satisfactory level.

Observations shared by the faculty raters include:

- There is a lot of work to be done with students on basic skills, including grammar, writing mechanics, and spelling.
- Critical thinking is a missing component.
- With respect to global awareness, students were “ignorant” and “naive”.
- Students appear to lack understanding of cultures and government.
- Students may have produced better work if the assignment had been graded.
- Although motivation may have played a part in the quality of the responses, English skills are still lacking.
- Overall, raters expressed that they were “discouraged”, “disheartened”, “saddened” and “disappointed” in the results.
- The rubric didn’t allow for scoring creativity or thoughtful/critical thinking. However, there were likely only one or two cases where this was exhibited.

Recommendations include that information on the project – the process and results – should be shared with faculty in the context of perhaps a general meeting. Faculty – both those who submitted samples and those who did not - would no doubt provide opinions and insights which may be very helpful in any interpretations, conclusions, and decisions about this assessment, and also with respect to work on this and other topics in the future. Action plans could then be developed based on this input.

The complete summary report, in which the process and results are more fully discussed, is available on the Institutional Level Assessment web page through the following link:

<http://facstaff.necc.mass.edu/wp-content/uploads/2011/08/Spring-2011-institutional-assessment-report-7-29-11.pdf>

Future Institutional Assessment Work

Having a uniform assignment was beneficial in that students were all responding to the same stimulus which was tailored to address the specific outcomes being assessed. However, implementing this assessment proved problematic in many ways, including that instructors were asked to take class time to administer the assignment, students identified to be included in the assessment analyses were sometimes absent when the assignment was distributed, and students may have not been motivated to perform at their best when the assignment was not relevant to their course and not being evaluated as part of their course grade.

In AY 2011-12, the institutional assessment will focus on Information Literacy, using a method similar to that used for the assessment of Writing. Faculty will be asked if they are planning to or can plan to include an assignment related to Information Literacy in their classes. Products will be collected for identified students from all faculty who agree to participate.

Members of the HOAP (Help for Outcomes Assessment) Committee have worked to develop the process and have also constructed the rubric to evaluate student products. The final rubric is a slightly modified version of the AAC&U VALUE rubric for the same skill.

All faculty were notified in the fall as to the assessment plan, and the more targeted emails will go out early in the spring term.

VISION PROJECT - AMCOA

The Massachusetts Department of Higher Education’s Vision Project is described as, “A unified effort of Massachusetts Public Higher Education to promote the well-being and ensure the future prosperity of our state.” One major focus is system-wide and campus-level assessment of student learning.

To support these efforts, the AMCOA (Advancing a Massachusetts Culture of Assessment) team was formed, consisting of assessment leaders from each of the Massachusetts public undergraduate campuses. The team meets on a regular basis to share assessment practices, discuss assessment issues, and organize state-wide conferences for professional development related to

learning outcomes assessment. For more information on the Vision Project and AMCOA, see:

<http://www.mass.edu/currentinit/visionproject.asp>

NECC's AMCOA representatives are Ellen Wentland and Suzanne Van Wert. The first meeting was held in May, and the group has met approximately monthly since then, with the June meeting taking place at NECC. Two statewide conferences have also been held, with NECC represented through session presentations at each one.

**AMCOA STATEWIDE CONFERENCE ON
ASSESSMENT IN HIGHER EDUCATION**
Worcester State University - September 30, 2011

ASSESSMENT OF SUPPLEMENTAL INSTRUCTION

NORTHERN ESSEX COMMUNITY COLLEGE

Presenters:

Eve Lopez - Adjunct Faculty, Department of Mathematics

Karletty Medina - Supplemental Instruction Coordinator

Linda Shea - Assistant Dean, Library and Academic Support Services

Ellen Wentland - Assistant Dean, Assessment and Educational Effectiveness

Facilitator:

Suzanne Van Wert - Professor of English

**AMCOA STATEWIDE CONFERENCE ON ASSESSING
LEARNING OUTCOMES**

Greenfield Community College – November 17, 2011

**ASSESSING LEARNING OUTCOMES IN NURSING
PROGRAMS**

NORTHERN ESSEX COMMUNITY COLLEGE

Presenters:

Patricia Demers – Assistant Dean, Division of Health Professions

Francine Pappalardo – Nursing Curriculum Coordinator

Ellen Wentland - Assistant Dean, Assessment and Educational Effectiveness

Facilitator:

Suzanne Van Wert – Assessment Fellow; Professor of English

Next State-wide AMCOA Conference – Call for Proposals

The next statewide conference, entitled **Assessing Student Learning Outcomes Within and Across Disciplines** is scheduled for February 9 at UMass-Lowell Inn and Conference Center, with December 23 set as the deadline for session proposals. *If any member of the NECC community wishes to propose a session presentation related to work done on learning outcomes assessment, please contact Ellen Wentland by December 21 for assistance.*

PROGRAM REVIEWS

Completed To Date

By the end of the 2011, 42 programs will have completed first reviews, with 4 of these being reviewed for the second time, following the schedule which sets about 6 years between reviews.

Program Reviews in Process

The programs being reviewed in 2011 and the team leaders are:

Accounting – Kristen Quinn

Early Childhood Education – Gail Feigenbaum

General Studies: Dance Option – Michelle Deane

General Studies: Music Option – Ken Langer

General Studies: Visual Arts Option – Rachel Hellman

Nursing (ADN) – Patricia Demers/ Francine Pappalardo

Practical Nursing Certificate – Patricia Demers/ Francine Pappalardo

Phlebotomy – Brenda Salines

Polysomnography Certificate – John Murray

Respiratory Care – Jennifer Jackson Stevens

IMPORTANT - If you are able to help your colleagues by participating on their review teams, please let them know! The schedule is posted at:

<http://facstaff.necc.mass.edu/wp-content/uploads/2009/07/NECC-program-review-schedule-Revised-6-27-11.pdf>

Or contact ewentland@necc.mass.edu.