

UPDATES: PROGRAM REVIEW, LEARNING OUTCOMES ASSESSMENT AND CORE ACADEMIC SKILLS INTENSIVE COURSE INITIATIVE

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

December 2012

TENTH EDITION

This is the tenth edition of what is planned as a periodic newsletter. The initial goal was noted in the first April 2008 edition as follows:

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.

Over the years, the purpose and content has expanded to include other associated activities. This edition comes with a change in the name of the Newsletter to accommodate other current foci of the Office.

HIGHLIGHTS: INSIDE THIS ISSUE

- ❖ **FALL 2012 ASSESSMENT SUMMIT - FACULTY PRESENTERS, PANELISTS, AND PRESENTATION SUMMARIES**
- ❖ **REPORT ON THE 2011-12 INSTITUTIONAL LEVEL ASSESSMENT OF INFORMATION LITERACY**
- ❖ **PLANS FOR THE 2012-13 INSTITUTIONAL ASSESSMENT**
- ❖ **UPDATE ON THE STATUS OF NECC'S INTENSIVE CORE ACADEMIC SKILLS COURSE INITIATIVE**
- ❖ **THE MASSACHUSETTS DHE'S VISION PROJECT - NECC'S INVOLVEMENT AND CONTRIBUTIONS**
- ❖ **PROGRAM REVIEWS IN PROCESS AND SCHEDULED FOR 2013**

ACADEMIC AND INSTITUTIONAL EFFECTIVENESS WEBSITE

The Academic and Institutional Effectiveness website (<http://facstaff.necc.mass.edu/faculty-resources/program-review-outcomes-assessment/>) has three major goals:

- To provide guidance and resources to those working on program reviews, assessment plans, and assessment activities,
- To serve as a public space for the display of work being done at the college on these important processes, and
- To provide information and updates on other major activities in the Office, including related to state-level assessment and the NECC Core Academic Skills intensive course initiative.

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. **By approximately the end of the 2012 calendar year - with the exception of five programs, three of which are newly created - all degree programs at NECC will have developed outcomes assessment plans using the NECC process. In addition, with one exception, all certificate programs included in the program review schedule will have completed plans.**

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 to share their assessment methods and results.

Agendas, handouts, and PowerPoint presentations related to each of the six summits held to date are available at: <http://facstaff.necc.mass.edu/faculty-resources/program-review-outcomes-assessment/program-level/assessment-summits/>

Fall 2012 Summit – November 14, 2012

Presentations

General Studies: Multi-Media Option – Kathleen Andler
Liberal Arts: Philosophy Option – Meredith Gunning
Accounting – Kristen Quinn
Laboratory Science – Noemi Custodia-Lora and Kimberly Waligora

Panelists

Topic: NECC Programs' Outcomes Assessment Work and the Requirements of External Accreditors: What's the Relationship?

Judi Ciampi
Gail Feigenbaum
Jane Gagliardi
Ralph Wade

Fall 2012 Presentations' and Panel Highlights

General Studies – Multi Media Option

The learning outcome assessed was, “*Create original computer graphics using Adobe Illustrator.*” The associated student project was, “*Illustrate a classic bowl of fruit using a realistic ‘photo-illustrative’ style.*”



Findings include:

One of the most difficult aspects of assessing outcomes for creative projects is how to quantify a subjective result... Creative projects by their very nature offer widely differing results and present challenges to assess but by carefully considering and clarifying the objectives of a particular project one can minimize the impact of factors such as personal preference and subjectivity. Utilizing a skill-based point system on a Rubric eliminates confusion and need to defend/explain project grades.

Liberal Arts: Philosophy Option

Students prepared papers in response to an assignment requiring that they focus on a particular philosopher's position. Using qualitative analysis, these papers were evaluated with respect to a number of outcomes including writing and critical thinking skills, creative thinking, and knowledge and skills related to philosophy.

Philosophy continues to be a source of eternal truths



"Buy low, sell high. Aren't there any other eternal truths?"

Among the findings reported were

- *Sometimes students lacked clear writing skills, but showed that they understood the central concepts.*
- *Students sometimes lacked the language to express the complex ideas being communicated.*
- *Many students showed a good command of the philosophical concepts and terminology.*

Accounting

Information related to the assessment during the AY 11-12 of 14 outcomes associated with 6 objectives was presented. Outcomes assessed include:

Objective:

Basic accounting skills to insure that students have a solid foundation in accounting

Outcomes assessed:

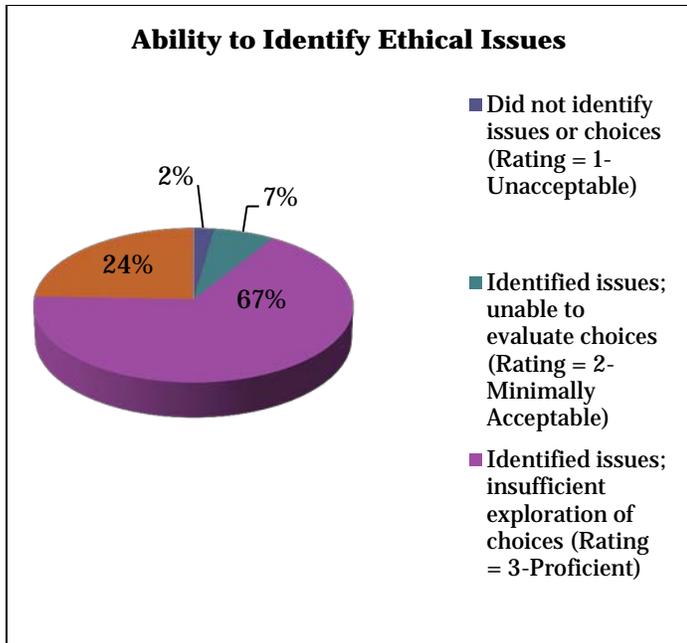
- Present data in published formats, for example, income statements and balance sheets
- Analyze and record journal entries

Objective:

Knowledge concerning the ethics of the accounting profession

Outcome assessed:

- Exhibit the ability to identify ethical issues related to performances of accounting tasks and to evaluate available choices.



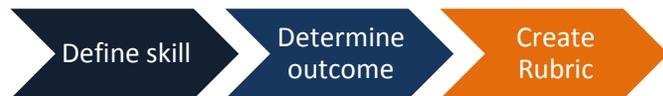
91% fell into the "Proficient" or "Advanced" category

The program considered the learning outcome successfully achieved if at least 80% of the students rated fell into one of the two top categories. **In 15 of the 17 criteria examined, the standard was met.** In one of the 2 remaining, the standard was approached (76%). With respect to the criterion, *Use of Research and Documentation of Sources*, the percentage was quite low with just 16% of students rated as "Proficient" or "Advanced". In sum,

- Major weakness is that English Composition is not required to be taken before accounting so many students have not had to write formal papers and use documentation before taking this course
- Until English Composition is required, the program needs to include more of these types of written assignments so that the students have more experience with research and documentation.

Laboratory Science

Program faculty identified a number of skills essential for success in the program and in later employment situations. These included oral, writing, and listening skills. Next steps involved ensuring that identified skills were incorporated into program courses, creating a rubric to evaluate the skills, and then assessing students' demonstrations of these skills in the relevant courses.



With respect to oral communication skills, post-assessment changes include:

- Presentation assignments now in every course
- Working with a faculty 'communication coach'
- Gradually increasing spoken lab directions in upper level courses

Panel Highlights

Although each of the panelists' programs has recognition from an external body, for which they prepare extensive reports on a regular basis, just one – Paramedic Technology – is required to have this external recognition in order for its program graduates to be able to practice. Currently, this accreditation is given by Massachusetts, and therefore is valid only for practicing in Massachusetts. Because some program attendees live and wish to work in New Hampshire, the program is seeking accreditation through a national organization.

Though approval by the external organizations for the other three programs is voluntary, the panelists said that seeking and having this approval supports perceptions of program quality, and is an important asset in recruiting students.

Outcomes assessment work is required by many external organizations, and all panelists agreed that the assessment work conducted at NECC is viewed favorably by their organizations and has positively influenced recognition decisions.

Institutional Level Outcomes Assessment – AY 11-12

The institutional level outcomes assessment conducted in the 2011-12 academic year focused on the core academic skill of Information Literacy.

Future Institutional Assessment Work

Members of the Help for Outcomes Assessment Plans Committee (HOAP) served as consultants in all stages of the planning and implementation of this third institutional-level assessment. Current members include **Judi Ciampi, Joanna Fortna, Nancy Garcia, Kerin Hamidiani, Rick Lizotte, Habib Maagoul, Gail Stuart, Jim Sullivan, and Suzanne VanWert.**

In AY 2012-13, the institutional assessment will focus on **Quantitative Reasoning**. Members of the HOAP Committee will work to develop the process and the method of evaluation which will rely heavily on the AAC&U Quantitative Literacy VALUE Rubric.

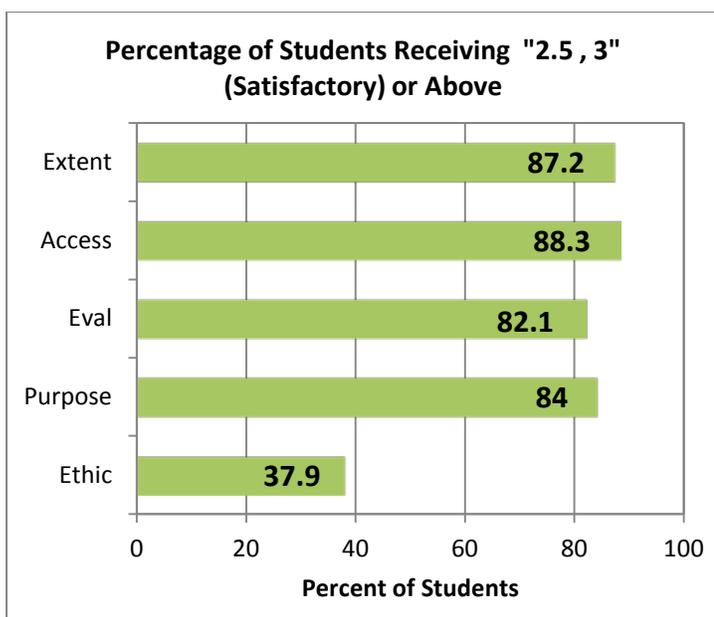
The method chosen was to collect student research projects prepared in response to classroom assignments, using AAC&U's Information Literacy VALUE rubric for product evaluation.

CORE ACADEMIC SKILLS

The students whose products were collected were those who prior to the beginning of the spring 2012 term had earned between 45 – 59 credit hours at NECC, exclusive of developmental coursework. Seven raters were recruited; three librarians, and four faculty members.

Where We Stand

Ratings results:



NECC's Core Academic Skills include Global Awareness, Information Literacy, Oral Communication, Quantitative Reasoning, Science and Technology, and Written Communication. NECC's goal for the fall of 2014 is to have in each degree program at least one course intensive in each of the six Core Academic Skills. As of the fall 2012, 111 courses have been approved as intensive in one or more of these skills, with some programs now meeting the goal.

Activities Planned This Year

In AY 2012-13, with the assistance of resources supplied through a DHE Performance Incentive Fund grant, a variety of activities are planned towards the goal of having each program meet the core skills intensive course goal and to assist faculty in infusing elements of the skills into their classes so as to support the intensive courses. Coaches for each of the skills have been identified and will meet with faculty to provide guidance and assistance. In addition, a number of workshops are planned throughout the year to provide focused attention and support work towards creating intensive classes.

Limitations - In this assessment, one limitation was that just 17.5% of the 428 unduplicated students identified were represented in the final sample. This lack of representativeness greatly affects the ability to draw any institutional-level conclusions concerning students' Information Literacy skills.

General information on the Core Skill Intensive Course Initiative can be found at:

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

In order for processing to be complete in time for fall 2014 course offerings, applications for intensive course status must be received by September 2013.

Applications can be found at:

<http://facstaff.necc.mass.edu/faculty-resources/program-review-outcomes-assessment/core-academic-skills/intensivecourse-applications/>

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>

MASS DHE VISION PROJECT

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.

AMCOA

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. NECC's representation at the 2012 state-wide conferences includes:

Assessing Student Learning Outcomes Within and Across Disciplines

Thursday, February 9, 2012, UMass Lowell Inn & Conference Center

Using Observational Methods to Assess Learning Outcomes in a Liberal Arts – Theater Program: Overcoming Assessment Challenges

Presenter: **Susan Sanders** - Professor; Coordinator of Theater and Technical Director for the Top Notch Players – Departments of English and Theater.

Programs such as Northern Essex Community College's Liberal Arts: Theater Option pose an assessment challenge because theater majors with a sufficient number of credits to warrant assessment are scattered during any particular term over a number of different courses. However, in the fall of 2011, seven majors, who all had taken at least three theater classes, were involved in the NECC production of *A Funny Thing Happened on the Way to the Forum*. This production provided an opportunity for faculty to: (a) use developed criteria to assess students with respect to four learning outcomes associated with two program objectives – Communication Skills and Knowledge of Theater: Theory and Practice and (b) inform program improvements and planning through assessment results. Expected Outcomes:

Participants will be able to:

1. Use the methodology described to conduct learning outcomes assessments in programs with challenges similar to that faced by the Liberal Arts: Theater Option.
2. Use the results of the qualitative method to identify areas of strength and weakness and to use the information to strengthen the program curricula.

Improving Student learning: Gathering, Distributing and Acting on the Evidence

UMass Boston Campus Center – April 23, 2012

REDUCING THE IMPACT OF SUBJECTIVITY IN THE ASSESSMENT OF CREATIVE PROJECTS IN THE GRAPHIC DESIGN AND MULTI-MEDIA PROGRAMS

Presenter: **Kathleen Andler**, Adjunct Faculty, Art and Design

One of the most difficult aspects of assessing outcomes for creative projects is how to quantify a subjective result. Several factors can have a significant influence on the resulting outcome including personal bias/preference, Definition of project objectives and audience, and assessment of technical skills utilized. Creative projects by their very nature offer widely differing results and present challenges to assess but by carefully considering and clarifying the objectives of a particular project one can minimize the impact of factors such as personal preference and subjectivity. We will demonstrate how a combination of approaches led to concrete curricular improvement action items.

Participants will learn strategies to reduce the impact of subjectivity in the assessment of creative projects including:

1. Recognizing personal bias/preference and adjusting for it
2. Judging work for both technical skills and creative impact
3. Strategies for creating individual project objectives
4. Utilizing customized rubrics to assess objective outcomes
5. Standardizing rubrics within a program

ASSESSING SKILLS IN A TWO-YEAR LABORATORY SCIENCE PROGRAM USING INTERNAL AND EXTERNAL EXPERTISE

Presenters: **Noemi Custodia-Lora**, Acting Assistant Dean, Foundational Studies, Liberal Arts & Sciences; **Marguerite White-Jeanneau**, Coordinator, Laboratory Science Program & Natural Science Department Faculty

The Laboratory Science Program at Northern Essex Community College is a two-year degree program for training laboratory technicians in biotechnology, analytical chemistry, and environmental science. During curriculum development, faculty surveyed lab managers from a variety of facilities regarding the highest level skills needed in entry level technicians. From the survey results, six critical skills, including technical and non-technical or soft skills, were identified. These were incorporated across the program curriculum. This presentation focuses on how these skills are assessed by instructors through student coursework as well as by industry supervisors during the capstone lab externship experience. Finally, we discuss how these results continue to influence program curriculum development.

Participants will:

1. Learn to use similar process to design and/or modify program curriculum to incorporate and measure learning outcomes across disciplines and courses.
2. Learn new ideas on how to use post-assessment data to make further improvements to program curriculum.

**Quantitative Reasoning: Looking Beyond the Numbers
Worcester State University – October 19, 2012**

**INCORPORATING QUANTITATIVE REASONING IN
YOUR COURSE:**

EXAMPLES FROM ACROSS DISCIPLINES

Presenters: **Maria Carles**, Associate Professor of Natural Sciences; **Euthemia Gilman**, Coordinator and Adjunct Faculty, Elementary and Middle High School Education Programs; **Patricia Machado**, Associate Professor of Economics and Program Coordinator for Liberal Arts; **Rory Putnam**, Assistant Professor, Clinical and EMT Basic Program Coordinator and EMS/Paramedic Program Clinical Coordinator

While Quantitative Reasoning (QR) can be intentionally included in mathematics classes, inclusion in areas outside of math emphasizes its relevance to any discipline and assists in skill development. NECC faculty are working on incorporating QR on an intensive level into courses across the curriculum. Courses approved as QR intensive satisfy detailed criteria, and course syllabi include outcomes derived from the VALUE rubric. In this session, faculty associated with **Pharmacology for the Paramedic, Diversity and Multiculturalism in Education, Macro and Micro Economics**, and **Anatomy and Physiology** will describe the assignments and assessment tools used in their newly approved QR intensive courses.

Participants will be able to:

1. Describe how instructional content and assignments in various disciplines can address outcomes linked to the VALUE rubric.
2. Adapt the model of QR assignments and assessment tools to classes and curricula of their institution.

System Wide Assessment

In addition to work associated with AMCOA, the DHE formed three teams comprised of representatives from state public campuses. The overall goal of the teams' work is to develop methods for learning outcomes assessment at each campus such that student products can be collected and evaluated, with results aggregated across the system. A next step is to compare the system wide results with those obtained by other states, designated as partners in this effort.

Representatives from NECC are as follows: Lane Glenn – State Partner Team; Suzanne VanWert – State Task Force Team; and Ellen Wentland, Mass Team. Current work is focusing on moving towards piloting the assessment of three key academic skills –Critical Thinking, Quantitative Literacy and Writing – at a sample of public institutions, mainly to test the feasibility of this effort. It is hoped that this work can proceed in the spring of 2013.

PROGRAM REVIEWS

Completed To Date

By the end of 2012, 44 programs will have completed reviews; 9 of these will be second reviews.

Program Reviews in Process

In AY 2011-12, A Committee to Review the Program Review process was formed. Members included Nancy Garcia and Patricia Demers, Associate Deans in the Health Division; Linda Shea, Assistant Dean – Library and Academic Support Services; and Gene Wintner, Professor and Developmental Reading Curriculum Coordinator. Based on information from interviews of administrators and faculty members, the template was revised. Those completing reviews in AY 2012 – 13 are using this new template, with the expectation that they will provide feedback concerning its ease of use.

Programs reviews currently in process include:

Business Management – Pat Morrow
Dental Assisting Certificate – Kerin Hamidiani
Elementary Education – Euthemia Gilman
General Studies – Patricia Machado
Liberal Arts – Steve Mathis
Radiological Technology – Lynne Davis

Program Reviews Scheduled for 2013

Business Transfer – Pat Morrow
Computer Networking Systems Certificate – Paul Chanley
Deaf Studies: American Sign Language Option – Luce Aubry
Deaf Studies: Sign Language Interpreter Option – Luce Aubry
Deaf Studies: Sign Language Interpreter Certificate – Luce Aubry
Electronic Technology – Paul Chanley
Electronic Technology: Computer systems Option – Paul Chanley
Human Services – Jane Gagliardi
Laboratory Science – Marguerite White
Liberal Arts: Biology Option – Mark Reinhold
Liberal Arts: Philosophy Option – Meredith Gunning
Liberal Arts: Theater Option – Susan Sanders
Paramedic (EMT-P) Technology AD Program - Ralph Wade
Paramedic (EMT-P) Technology Certificate Program - Ralph Wade

IMPORTANT - If you are able to help your colleagues by participating on their review teams, please let them know! Or contact ewentland@necc.mass.edu.