TWELFTH EDITION

This is the twelfth 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.

HIGHLIGHTS: INSIDE THIS ISSUE

❖ FALL 2013 ASSESSMENT SUMMIT - FACULTY PRESENTERS AND PRESENTATION SUMMARIES
❖ REPORT ON THE 2012-13 INSTITUTIONAL LEVEL ASSESSMENT OF QUANTITATIVE REASONING
❖ PLANS FOR THE 2013-14 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 2014

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 in the context of the reviews outcomes assessment plans. Currently, there are 43 associate degree programs at NECC, and by approximately the end of the 2013 calendar year, 34 will have completed at least one program review. Three programs will be scheduled for reviews in the near future, and six are new programs, also to be woven into the schedule.

While not all certificate programs are required to complete program reviews, the 10 that were included all completed reviews.

Once a plan is developed, program faculty select certain outcomes on which to focus each year, and then, using a variety of methods, implement assessment activities around these outcomes. Assessments are typically analyzed and evaluated by faculty members with the assistance of this Office.
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 seven summits held to date are available at: http://facstaff.necc.mass.edu/faculty-resources/program-review-outcomes-assessment/program-level/assessment-summits/

Fall 2013 Summit – December 2, 2013

Presentations
Kerin Hamidiani Dental Assisting
Jennifer Jackson-Stevens Respiratory Care
John Murray Sleep Technology
Brenda Salines Phlebotomy

Fall 2013 Presentations - Highlights

The 2013 assessment summit took place in a round table format, with all presenters being from the Health Division. Presenters and audience members alike voiced strong interest in their colleagues’ work, and much discussion revolved around comparing assessment approaches and accreditor requirements across programs. Each presenter focused on a different assessment method.

In the Dental Assisting Certificate Program, the focus was on professionalism using data obtained from graduate surveys and students’ Practicum Evaluation Forms, completed by supervising dentists.

Kerin Hamidiani reported that one use of the data collected from the practicum forms was that aggregated results were shared with future classes, with students challenged to perform at a higher level. Other assessment methods used in the past involved the use of rubrics to evaluate students’ writing, computer and internet search skills.

In the Respiratory Care Associate Degree Program, students take a practice examination to prepare for taking the national certification examination.

The organization sponsoring that national examination makes available to students disclosed examinations which serve as practice experiences. Outcomes assessment work focused on analyzing the data obtained from these practice tests, where items were reviewed in terms of the percentage of students who answered correctly. This review led to an identification of some skill commonalities across low pass items, leading to increased faculty attention to those identified skills.

One of the Sleep Technology Certificate Program assessments involves having students score a polysomnogram after which their responses are compared to a “correct” or “gold standard scorer”.

For the past two years, students’ scores were “…very good as seasoned technologists working in a sleep center yield the same results.” Another method used in this program required students to analyze a case study, assess the patient information provided, and develop a care plan. Students provide a written report of their work, which is evaluated using a rubric that includes attention to writing skills.
In the Phlebotomy Certificate Program, one important learning objective is that students acquire a basic understanding of medical language. To assess learning outcomes, an objective test was developed which will be administered to students on several occasions. Another assessment method involves the observations by instructors and peers of students as they complete the 21 steps involved in a successful venipuncture.

Results can highlight any steps that might be problematic for students. In the fall 2012 analyses, all students demonstrated desired skill levels. Other assessment methods used in the program include the Externship Evaluation.

**Institutional Level Outcomes Assessment – AY 12-13**

In NECC’s fourth year of institution-level assessment, The HOAP (Help for Outcomes Assessment Plans) Committee, comprised of faculty and administrators, decided to assess Quantitative Reasoning (QR).

The method chosen was to collect in spring term 2013 student work prepared in response to classroom assignments and to evaluate this work using AAC&U’s Quantitative Literacy (QL) VALUE rubric. The students whose products were collected were those who had earned between 45 – 60 credit hours at NECC, exclusive of developmental coursework, prior to the beginning of the spring 2013 term. Three faculty raters were recruited, each having expertise in QR, and experience working with the QL VALUE rubric.

**Ratings results** - For the purposes of analyses, students received the benefit of the doubt; that is, if the student’s average score fell between two categories, it is represented in the higher category in the graph below. Average ratings of 1 were categorized as “Unsatisfactory”; 1.5 and 2 as “Developing”; 2.5 and 3 as “Satisfactory”; 3.5 and 4 as “Superior”; and 4.5 and 5 as “Exceptional”.

<table>
<thead>
<tr>
<th>Percentage of Students Receiving &quot;2.5 , 3&quot; (Satisfactory) or Above</th>
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<tbody>
<tr>
<td>Interpretation</td>
<td>95.6</td>
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<tr>
<td>Representation</td>
<td>86.3</td>
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<tr>
<td>Calculation</td>
<td>95</td>
</tr>
<tr>
<td>Application / Analysis</td>
<td>86.9</td>
</tr>
<tr>
<td>Assumptions</td>
<td>69.5</td>
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<tr>
<td>Communication</td>
<td>91.3</td>
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</tbody>
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**Limitations** - One of the problems encountered was the mismatch between the rubric and the assignments, so that raters were sometimes not able to rate a product on each of the rubric criteria. Although the rubric was distributed to faculty, we did not ask or expect instructors to substantially change their assignments. In addition, faculty participation was severely limited, resulting in a low number of product submissions, and a final extremely small student sample size.

In this assessment, just:
- 9, or 3.9% of the 231 instructors initially identified participated.
- 2.8% of the 464 classes identified were represented.
- 8.2% of the 341 unduplicated students identified were represented in the final sample of 28.

Overall summary points include that:
- The extensive faculty non-participation severely limits the ability to generalize across all students.
- The instances of assignment-rubric mismatch resulted in an inability to rate all products on each of the criteria, which further reduced the effective sample size.
This low number of samples rated per criterion combined with the finding that just 8.2% of the identified students were included in the final sample results in the conclusion that it is highly unlikely that the students whose products were rated are representative of the NECC students identified for this project. Therefore, it is not possible with any level of confidence to draw any institutional-level conclusions concerning students’ QR skills.

Recommendations going forward include increasing faculty familiarity with the rubrics through professional development activities. In the long run, this may increase:

- **Faculty participation** because they now have a suitable product,
- By extension, the number of students **represented** in the sample collected, and
- The number of products that can be **successfully evaluated** because more rubric criteria will be addressed.


### Future Institutional Assessment Work

In AY 2013-14, the institutional assessment will focus on **Public Presentation**. This is a skill which was formerly referred to as Oral Communication.

The process decided on by the HOAP Committee includes attempting to encourage instructors to include a Public Presentation assignment in their spring 2014 classes, and then encouraging them to participate in the spring assessment. This would involve their using a VALUE rubric based tool to evaluate students within their classes and then submitting the completed rubric rating forms for institutional level analyses.

### 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.
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 most recent AMCOA initiative involved dividing the state into regions, with each region asked to work as a “mini-AMCOA”, in discussing assessment practices, developing and implementing assessment related projects, and perhaps even planning regional conferences. NECC is in Region 3, which includes Bunker Hill Community College, North Shore Community College, the Massachusetts College of Art and Design, Roxbury Community College, Salem State University, and the University of Massachusetts-Boston. The region Chair is Ellen Wentland of NECC with Saradha Ramesh of North Shore Community College serving as co-chair.

A project being worked on has as its goal assisting faculty in creating assignments which align with criteria in the AAC&U’s Critical Thinking, Quantitative Literacy, and Written Communication VALUE rubrics - the tools that will be used by the state to evaluate collected student products. Better alignment will result in an increased ability to assess students’ skill development.

**System Wide Assessment**

Work at the system level includes moving forward on plans for statewide assessment. The pilot study conducted in the spring of 2013, in which NECC participated, highlighted areas that need work to ensure a successful state level effort. At this time, planning efforts include discussions at AMCOA meetings, and at meetings of the State Task Force Team, chaired by Lane Glenn with Suzanne Van Wert as a member.

**Program Reviews in Process and Scheduled**

**Program Reviews currently in process include:**

- General Studies: Physical Education, Exercise Science, and Sport Studies – Rob Parker
- Laboratory Science – Marguerite White
- Liberal Arts: Biology Option – Ken Thomas

**Program Reviews Scheduled for 2014**

- Business Management: Healthcare Practice Management Option - Kathy Hudson
- Electronic Technology - Paul Chanley
- Electronic Technology: Computer Systems Option – Paul Chanley
- Liberal Arts: History Option - Andrew Morse
- Liberal Arts: Journalism/ Communication Option – Amy Callahan
- Medical Assistant Certificate - Kathy Hudson
- Paralegal Studies: Career Option, Transfer Option, and Certificate - Judi Ciampi

**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.**