

## Good Cop, Good Cop



### *Faculty-Staff Collaboration for Institutional Effectiveness*

### **Annual Institutional Research & Assessment Council Joint Retreat**

Friday, June 10, 2016

School of Public Health | 55 West 125th Street | New York, NY 10027

#### **Program**

##### ***Registration & Breakfast***

9:00-9:45

##### ***Welcome Remarks***

9:45-10:00

##### ***Opening Session***

10:00-10:45

#### **Building Institutional Effectiveness & Assessment of Administrative, Educational, and Student Support (AES) Units**

Assessment in higher education has traditionally focused on examining student learning within the classroom. However, attention has shifted to include assessing student learning outside the classroom setting as well as assessing the whole environment for student learning. This increasing focus on assessment of administrative, educational, and student support (AES) units in addition to academic programs is a part of the foundation for institutional effectiveness. Institutional effectiveness is about documenting how a college or university is progressing towards achievement of its mission. This requires goals that are derived from the mission; these goals act as proxies for the achievement of the mission. Assessment serves as the primary tool for gathering and analyzing information necessary for achieving these goals. It is also key for improving student learning, the environment for student learning, and documenting institutional effectiveness. As calls for accountability grow from internal and external constituents, it is essential that colleges develop strong institutional effectiveness models and organized, systematic, and structured institutional effectiveness and assessment plans for academic and AES units.

At the Borough of Manhattan Community College (BMCC), institutional effectiveness is defined as: "BMCC's commitment to delivering upon its mission to ensure, enhance, and fully support student success. The College engages in comprehensive and systematic assessment, evaluation, and

planning processes aligned with the institutional goals and, more specifically, with the strategic planning outcomes and strategic objectives that emerged through the strategic planning process. Through annual assessments, periodic evaluations, and planning within all academic programs and administrative, educational, and student support (AES), units, the College tracks progress and ensures continuous improvement.”

To ensure the College meets its goals, the Office of Institutional Effectiveness and Analytics (IEA) in collaboration with faculty and administrators developed an institutional effectiveness model and institutional effectiveness and assessment plan that provides a systematic and structured approach to institutional effectiveness and assessment.

This session will offer attendees an opportunity to better understand institutional effectiveness, its relationship to assessment, and examine an existing model that includes the assessment of AES units.

Participants will leave the session and be able to:

- Discuss institutional effectiveness and its relationship to assessment
- Describe the AES assessment process
- Differentiate AES assessment from academic assessment
- Develop a draft plan for AES assessment at their respective institutions

### **Concurrent Sessions**

11:00-11:45

#### **Being SAGE about Institutional Effectiveness**

Institutional effectiveness plans provide frameworks for answering the question: How well are we collectively meeting our goals? The Systematic Approach for Guttman Effectiveness (SAGE) is an institutional effectiveness framework that guides college areas through the assessment process of identifying goals and practices, compiling evidence to review performance, and determining ways to improve. Using SAGE as a model, presenters share successful strategies for engaging units in institutional effectiveness practices and for using the information to support strategic planning and accreditation efforts.

#### **Assessment: Can we just talk about Learning?**

This work describes an assessment story from a General Chemistry class at a New York community college. Specifically, this practice aimed to develop student quantitative reasoning (QR) skills and disciplinary knowledge. Exam questions linked to concrete learning outcomes and lab reports were used to evaluate intervention impact. Indeed, science major classes at community colleges are critical venues for developing scientific skills. In this regard, laboratory reports require students to draw meaningful conclusions from scientific experiments through the use of critical thinking, mathematical reasoning, and the thoughtful use of language. This presentation will specifically share the implementation of laboratory report revision to strengthen QR and how this revision intervention was assessed. To this end, we evaluated changes in QR by tracking the progress of students' laboratory reports based on ten hands-on laboratory experiences. At the beginning of the semester, students received guidelines and evaluation rubrics for writing laboratory reports. Each week, students submitted a report from the previous week's laboratory experience and received a graded report from the prior week's submission. For three of the reports, students submitted a revised report and corresponding reflective piece one week after receipt of the initial graded report. As part of the intervention, students received guiding questions to frame their revision and reflection processes, with oral critiques and recommendations additionally provided by the instructor. The guided revision was found to help students make more informed judgments based on QR and to scrutinize their mistakes, indicating improved quantitative skills in scientific writing over the course of the semester. However, we discovered the assessment metrics themselves needed improvement, as the findings varied when multiple evaluators were involved in the assessment. In the subsequent semester, we altered the assessment procedure, utilizing a modified AAC&U VALUE Rubric. Here, we measured student progress using five distinct aspects of QR: Calculation, Representation, Interpretation, Assumptions,

and Application/Analysis. The rubric assigns a ranked 0-4 score for each category with clearly defined criteria for each ranking, facilitating assessment accuracy and inter-rater reliability. Using the revised analysis method, we found that students made a modest but significant gain in the Assumptions category as a direct result of the intervention, and that over the semester students made a significant gain in Application/Analysis. The differences were observed as transitions from 0 to 1 scores, indicating a shift from complete absence of QR to low-level reasoning skills. Looking to the future, we aim to replicate the intervention using an increased sample size and multiple independent evaluators, which is greatly facilitated by the ease and clarity afforded by the modified rubric as an assessment tool. Importantly, the rubric revealed that the guided intervention requires modification to target more aspects of QR and elicit higher scores among each category. We are currently revising the guidelines to address these deficiencies. In sum, this story is about faculty members developing effective methods to help students with their learning. We hope that our continued efforts will enhance our students' quantitative reasoning skills and disciplinary knowledge.

### **Using Predictive Modelling to Assess Retention Intervention Success**

While the Institutional Research & Assessment office developed a series of retention-predicting statistical models to help advisors find at-risk students, we adapted the technique to be a program assessment tool. The model allows us to predict the retention rate of any group of students, and then compare these predictions against actual results. If the group of students happen to have participated in a particular intervention program, then we can compare their actual retention rate against predicted to assess the impact of the intervention.

### **Lunch**

12:00-1:00

### **Concurrent Sessions**

1:15-2:00

### **Illuminating the Dark Side: Non-Academic Program Review at Hostos Community College**

Ensuring institutional effectiveness necessitates an understanding of what takes place beyond the classroom. Our revised and streamlined Non-Academic Program Review process is designed to succinctly assess Hostos' multiple support programs and offices. We will discuss Hostos' recent move away from a static and elaborate report structure to a more dynamic, team-based approach to non-academic assessment. Participants will gain a deeper understanding of how non-APR helps our college build a solid foundation for deriving insights for programmatic renewal and institutional effectiveness.

### **Using Mastery-Based Technology to support student success in math and Statistics at CCNY**

In Summer 2014, Mathematics professor, Jay Jorgenson piloted a hybrid statistics course, integrating a mastery learning homework management software system as a tool to improve student success. Encouraged by 90% pass rates and student engagement, as demonstrated by homework completion rates, as well other data analytics available to instructors utilizing the software system, Professor Jorgenson extended the pilot, implementing the courseware and pedagogy in calculus courses, and other gateway math courses on the CCNY campus. Professor Jorgenson partnered with the Office of Assessment and a Senior Data Analyst in the Senior Associate Provost's office to examine (1) if there were any significant differences in pass rates in the courses-with or without the integration of the courseware and suggested pedagogical practices; (2) if students were able maintain their academic success in subsequent quantitative coursework. The presentation will highlight our findings and the discussion will include the potential implications for decreasing instructional costs to the college while simultaneously increasing the breath of content covered, pass rates, and student success in math and statistics courses.

## **Interdepartmental Collaboration to Promote Effective Faculty Development and Programmatic Assessment**

This session will provide a brief history of the current general education assessment protocol at Queensborough Community College, highlighting the ways in which the protocol has evolved based on the successes and challenges of the protocol's initial iterations. The presenters will also share how this protocol is being adapted to facilitate the assessment of high-impact practices at the college.

This session will also allow participants the opportunity to discuss best practices and challenges with conducting the assessment of college-wide programs.

### **Concurrent Sessions**

2:15-3:00

#### **Data Support for Improving Outcomes on the CUNY Elementary Algebra Final Exam**

The CUNY Elementary Algebra Final Exam (CEAFE) is a CUNY created exam required in all remedial Elementary Algebra courses. Passing this exam is a major stumbling block for many associate degree students. To offer insight into opportunities to improve the outcomes, OIRA has developed several reports over the last several years. We will detail their content and opportunities to use the data to improve institutional effectiveness. We will also discuss additional data that is available upon request for local analyses.

#### **Use of Starfish Early Alert at Queensborough Community College (Queensborough) and Predicting Student Drop Out Risk**

Queensborough invested in Starfish Retention Solutions in fall 2013 after using an internal early-alert system that showed promise in effectively reaching out to struggling students. The use of the early-alert intervention operates through a campus-wide collaboration of Academic Affairs, Student Affairs, Information Technology (IT), and Institutional Research (IR). Strategic planning, execution, and assessment are coordinated through this collaboration embodied in a Starfish Leadership Team. The objective of timely and efficient communication, to address academic problems early in the semester and to provide resources to students, relies heavily on the participation of faculty, advisers, tutoring centers, and students. The faculty are at the forefront teaching and interacting with a sometimes vulnerable student population and are a crucial partner in this endeavor.

Our findings show that struggling students can benefit from the combination of early-alert and tutoring. Tutoring had a positive effect on course persistence for the most vulnerable student group – high-risk students who were also flagged through the system. Student feedback tells us that students appreciate the additional support and are happy in particular to receive Kudos. However, struggling students are often the ones who do not respond to the outreach. In our current use of Starfish, IR is now partnering with advising to enable advisers to reach out to high-risk students more strategically.

With predictive analytics developed in IR, we are able to identify students at a higher risk of leaving based on student demographics, academic performance, and early alert data drawn from CUNYfirst 805 extract tables and Starfish data. Students are assigned a “high risk”, “medium risk” or “low risk indicator” in the adviser environment of Starfish. This enables advisers to reach out to students more strategically. We are encouraged that this will enable the College to respond to more students in need.

#### **Developing a collaborative, human, realistic and meaningful assessment process.**

A five-member faculty team in the discipline of psychology at Hostos Community College has designed an assessment process for their course in Introduction to Psychology which emphasizes making the assessment process collaborative, human, realistic and meaningful to all of the faculty members involved. Highlights of this collaborative approach are the use of a Mentor-Mentee liaison system, which distributes responsibility and promotes connection and communication. Moreover, the process has been designed to assure that all faculty teaching Introduction to Psychology have input into the assessment procedures which will be used.

## Keynote

3:15-4:00

### Tech, Data, and the New Middle States Standards

We will describe some aspects of the evolution of our campus (Queens College) into an assessment-oriented culture, and the role that tech and data are playing in this process. We define an effective institution as one which carries out its mission well, documenting that it is doing so in transparently verifiable ways. Our story, about how we strive to meet this definition, includes the development of solutions to archiving assessment documentation, complexified by an unplanned transition from paper to online storage. We will also describe how the task of writing our Middle States self-study (under the new standards) has been mediated by tech and data, leading to reshaping efforts related to assessment of student learning. We have learned that institutional data repositories are powerful tools to facilitate such work, though they are but the tip of the iceberg.

The presenters are a Professor of Computer Science, who is also the Director of General Education and Assessment, and the Acting Assistant Provost, who is also a Professor of Linguistics.



### Getting to the retreat

*School of Public Health*  
**55 West 125th Street**  
New York, NY 10027

There are several commute options:

**Subway lines:** 2/3/4/5/6

**Metro North**

Parking Garage in basement of building for a fee  
Street Parking is Limited

[MAP](#)

