# The City College of New York 

Periodic Review Report<br>to the<br>Middle States Commission on Higher Education

May 31, 2013

## The City College of New York

The City University of New York
160 Convent Avenue
New York, NY 10031

## Dr. Lisa S. Coico

Chief Executive Officer and President

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J.9. Scannell \& Kurz Report
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## A.1. The City University of New York (CUNY) Mission

## The Nation's Leading Public Urban University

The City University of New York provides high-quality, accessible education for more than 269,000 degree-credit students and 270,000 adult, continuing and professional education students at 24 campuses across New York City.

The University is an integrated system of senior and community colleges, graduate and professional schools, research centers, institutes and consortia. From certificate courses to PhD programs, CUNY offers postsecondary learning to students of all backgrounds. It provides the city with graduates trained for high-demand positions in the sciences, technology, mathematics, teaching, nursing and other fields. As CUNY has grown, the University also has strengthened its mission as a premier research institution, building an array of modern facilities, and expanding the ranks of its world-class faculty.

## http://www.cuny.edu/about.html

New York State Education Law Sec. 6201 describes the legislative intent for establishing the CUNY system and the core values that guide the university. Relevant language is excerpted below and the full text of Article 125 can be viewed here:
http://public.leginfo.state.ny.us/LAWSSEAF.cgi?QUERYTYPE=LAWS+\&QUERYDATA=@SLEDN0T7A12 $\underline{5+\& L I S T=L A W+\& B R O W S E R=E X P L O R E R+\& T O K E N=11676496+\& T A R G E T=V I E W ~}$

## Excerpt

CUNY has the "responsibility to provide post-secondary education in New York City....The University must remain responsive to the needs of its urban setting and maintain its close articulation between senior and community college units. Where possible, governance and operation of senior and community colleges should be jointly conducted or conducted by similar procedures to maintain the university as an integrated system and to facilitate articulation between units....the University will continue to maintain and expand its commitment to academic excellence and to the provision of equal access and opportunity for students, faculty and staff from all ethnic and racial groups and from both sexes....The City University is of vital importance as a vehicle for the upward mobility of the disadvantaged in the city of New York....[CUNY must have] the strongest commitment to the special needs of an urban constituency....Activities at the City University campuses must be undertaken in a spirit which recognizes and responds to the imperative need for affirmative action and the positive desire to have city university personnel reflect the diverse communities which comprise the people of the city and state of New York."

## B.1. The City College of New York (CCNY) Mission

The City College of New York (CCNY), the flagship college of The City University of New York (CUNY), is a comprehensive teaching, research, and service institution dedicated to accessibility and excellence in undergraduate and graduate education. Requiring demonstrated potential for admission and a high level of accomplishment for graduation, the College provides a diverse student body with opportunities to achieve academically, creatively, and professionally in the liberal arts and sciences and in professional fields such as engineering, education, architecture, and biomedical education. The College is committed to fostering student-centered education and advancing knowledge through scholarly research. As a public university with public purposes, it also seeks to contribute to the cultural, social, and economic life of New York.

Since its founding in 1847, The City College of New York has provided a world-class higher education to an increasingly diverse student body - serving as one of the single most important avenues to upward mobility in the nation. Access to excellence remains the vision of the College today.

The College strives for excellence in its wide-ranging undergraduate and graduate programs (including programs in the only public schools of engineering, architecture, and biomedical education in the city) and in its 13 on-site CUNY doctoral programs - all of which are designed to prepare students for successful careers as well as for continuing graduate and post-graduate education. The College's commitment to excellence is further exemplified by its emphasis on scholarly research and the integration of this research with teaching at both undergraduate and graduate levels.

City College's commitment to access is two-fold. It strives to offer an affordable education and to recruit and support a diverse student population, reflective of both New York City and the global society in which we live. This commitment to access stems not only from a belief that every student prepared for a rigorous college education deserves access to and support for it, but also that excellence itself requires the broad inclusion of, in the words of Townsend Harris, "the children of the whole people." Finally, the College will strive always to use its most valuable resources - a talented and dedicated faculty and staff and an inclusive and ambitious student body - to take a leadership role in the immediate community and across the nation.
http://www.ccny.cuny.edu/about/mission.cfm

## C.3. The City College of New York (CCNY) Strategic Plan (2014-2018)

Concurrent with the work of the PRR, CCNY has begun a process for developing a new strategic plan, led by the President, the Senior Leaders Advisory Committee, and the Strategic Planning Steering Committee, which includes internal and external stakeholders who can provide guidance to the project and actively support the resulting changes. The Strategic Planning Steering Committee is cognizant of the need to establish linkages among budget, planning, and strategic goals that can be clearly documented and assessed.

The following "Comprehensive Strategic Planning Framework" presents an overview of the program management structure, project roles and responsibilities, committee goals and objectives, timelines and high-level project plans, an explanation of the three-phase strategic planning methodology, and immediate next steps. To date, significant progress has been made by the four subcommittees:

- The Academic Prosperity Subcommittee is identifying the challenges and opportunities associated with academic excellence. After examining existing curricula, academic structures, institutional values and practices, the subcommittee will recommend a framework for the next academic plan for the College.
- The Student Success Subcommittee is evaluating the level of student success currently and will develop plans to enhance and support institutional efforts, programs, and services that facilitate student performance and success.
- The Financial Health Subcommittee is currently assessing the challenges and impediments to CCNY's financial performance and stability. Next, the members will offer recommendations to enhance revenues and support both CCNY's and CUNY's key strategies and objectives in a resource-constrained environment.
- The Culture of Excellence Subcommittee is analyzing the cultural climate on campus, as experienced by all constituencies-students, faculty, and staff. The members intend to outline a cohesive plan for cultivating and maintaining a positive and productive culture across CCNY.

The new strategic plan will be structured to ensure that the measurable goals are more intentionally linked to the budgeting process and that the ideas are accessible and inspiring to students, faculty, and staff.

The composition of the Senior Leaders Advisory Committee and the Strategic Planning Steering Committee and its subcommittees also follows.

## Senior Leader Advisory Committee

Ira Krawitz, Acting Vice President for Communications and Marketing
Praveen Panchal, Vice President for Information Technology and Chief Information Officer
Jerald Posman, Vice President for Finance and Administration
Juana Reina, Vice President for Student Affairs
Robert Santos, Vice President for Campus Planning and Facilities Management
John Siderakis, Assistant Vice President for Human Resources
Elena Sturman, Executive Director of The City College Fund
Maurizio Trevisan, Senior Vice President for Academic Affairs and Provost
Jeffrey F. Machi, Vice President of Development and Institutional Advancement
Karen Witherspoon, Vice President for Government and Community Affairs

Deans
Joseph Barba, Grove School of Engineering
Mary Driscoll, School of Education
Christine Li (Acting), Division of Science
Juan Carlos Mercado, Division of Interdisciplinary Studies
George Ranalli, Spitzer School of Architecture
Jeffrey Rosen (Acting), Division of Social Sciences
Maurizio Trevisan, Sophie Davis School of Biomedical Education
Eric Weitz, Division of Humanities

## Strategic Planning Steering Committee

Academic Prosperity Subcommittee
Myrah Brown-Green (Urban Affairs, Government and Community Affairs)
Doris Cintrón (Provost)
Julio Davalos (Engineering)
Jodi Garner (Development and Institutional Advancement)
Eitan Friedman (Sophie Davis School of Biomedical Education)
Ellen Handy (Art)
Anu Janakiraman (Biology)
Mark Kam (Information Technology)
Sandy Kim (Student Affairs)
Elizabeth Matthews (Interdisciplinary Studies)
Rajan Menon (Political Science), Chair
Carlos Riobo (Foreign Languages and Literatures)
Mark Schaffler (Engineering)
John Siderakis (Human Resources)
Yael Wyner (Education)

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Culture of Excellence Subcommittee
    Sarah Damsky (Student Affairs)
    Joseph Fantozzi (Admissions)
    Vicki Garavuso (Interdisciplinary Studies)
    Rita Gregory (Library)
    David Jeruzalmi (Chemistry)
    Ian Matthew (Human Resources)
    Renata Miller (English)
    Fred Moshary (Engineering), Chair
    Catherine Seavitt (Architecture)
    Gregory Shanck (Urban Affairs, Government and Community Affairs)
    Christine Sheffer (Sophie Davis School of Biomedical Education)
    Nancy Stern (Education)
    Nancy Tag (Media and Communication Arts)
    June Williamson (Architecture)
Financial Health Subcommittee
    Adeyinka Akinsulure (Psychology)
    Marta Bengoa (Economics), Chair
    Marco Castaldi (Engineering)
    Catherine Franklin (Education)
    Marta Gutman (Architecture)
    Ravi Kalia (History)
    Felix Lam (Finance)
    Otto Marte (Information Technology)
    Lauren Mendelsohn (Library)
    Susanna Schaller (Interdisciplinary Studies)
    Gordon Thompson (English, Black Studies Program)
    Leslie Timothy (Development and Institutional Advancement)
    Kenneth Waldhof (Student Affairs)
Student Success Subcommittee
    Anthony Achille (Urban Affairs, Government and Community Affairs)
    Vera Ballard (Information Technology)
    Maudette Brownlee (SEEK)
    O'Lanso Gabbidon (Student Affairs)
    William Gibbons (Library)
    Paul Gottlieb (Sophie Davis School of Biomedical Education)
    Celia Lloyd (Enrollment Management, Finance)
    Annette Pineda (Development and Institutional Advancement)
    Mark Shattuck (Physics)
    Richard Steinberg (Education, Physics)
    Mary Ruth Strzeszewski (Provost), Chair
    Leon Tachauer (Scheduling, Provost)
    Joshua Wilner (English, General Education)
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## D.2. Verification of Student Identity

Students in online instruction offered by CUNY must log in through a system that uses IDs and passwords to invoke an authentication triangulated against name, date of birth, and Social Security Number. (These are inaccessible but generate a unique access number. It is this access number that, invoked by the user ID/password combination, permits admission to the system.) This secure login is a student's only means of access to the online learning management system (LMS). All courses-not only online courses-use this same system of authentication for registration. Enrollments are imported directly into the LMS without any action on the part of students, faculty, and staff. In addition, every action within a course site is recorded by the extensive tracking features of the LMS, which monitor each user in terms of time and duration of any action, as well as the section of the site involved. This occurs even if there is no posting by the student.

Such mechanical means of verifying student identity and activity in online courses are supplemented by high levels of interaction in small classes. Students introduce themselves, demonstrating knowledge of course subject, writing posts, and responding to comments from their peers. Many students also maintain blogs and/or wikis individually or in groups. Such interactivity creates a high degree of familiarity among the online course participants and faculty. The quality of these "dialogues" has improved as online courses move beyond pilot to program-wide application and students display more sophisticated forms of self-presentation and engagement. Contributing to these advancements are cross-course portfolios, learning communities, and synchronous conferencing-including voice and video.

Faculty teaching online courses make extensive use of performance-based assessment and active learning in online instruction. Through these endeavors, faculty are able to identify patterns in writing styles, levels of achievement, content knowledge, and types of interaction that are unique to each student. As a result, faculty are prepared to make informed judgments regarding atypical assignments or examinations that do not match established student performance patterns.

Every online course syllabus contains a statement of expectations and describes the preventatives measure to ensure academic integrity. Assessments include, but are not limited to, papers, projects, group discussions, and/or online chats. Faculty can check any written work-from discussion posts to submitted papers—with anti-plagiarism software, e.g., Turnitin ${ }^{\text {TM }}$, SafeAssign ${ }^{\text {TM }}$.

For more information about Academic Technology at CUNY, visit http://www.cuny.edu/academics/initiatives/academictechnology.html
(source: CUNY Director of Academic Technology)

## F.17. CCNY Academic Program Review Schedule




## F.18. CLAS Assessment Summary Report

In 2010, the Office of Assessment developed and piloted a process of planning, summarizing, and feedback to all academic departments and programs. The following Assessment Progress Rubric addresses the nine traits recommended by MSCHE for organizing Standard 14 documentation: (A) Assessment Plans, (B) Policies and Guidelines, (C) Recognition and Rewards, (D) Learning Outcomes, (E) Syllabi, (F) Professional Development, (G) Assessment Tools, (H) Use of Assessment Results, and (I) Course and Teacher Surveys. To ensure continuity, the nine MSCHE areas also are used to organize the evidence for learning outcomes assessment on CCNY's Middle States website and in the CCNY Middle States Resource Room. Tables F18.1 through F18.4 are for departments and programs in the College of Liberal Arts and Sciences (CLAS).

The rubric serves multiple purposes for the Office of Assessment and the academic departments and programs.

1. It provides definitions and clarifies the nine traits for departmental and divisional coordinators and faculty members.
2. The rubric "scores" encourage reflection and discussion of the assessment process, especially when departments are asked to respond to baseline information and provide corrections.
3. The ongoing use of the rubric allows departments and programs to track, over time, their progress in learning outcomes assessment.
4. The collection of scores (See Tables F18.1 and F18.2), generate an organized overview of the strengths and weaknesses in the undergraduate and graduate levels as well as at the institutional level.

As in 2010, the scored rubrics were distributed to the assessment coordinators in preparation for the Periodic Review Report. The "scores" were based on assessment information available in the Middle States room and on the CCNY Middle States website. The departments and programs were asked to review baseline scores and provide corrections, if necessary. Each department and program was asked to support changes in scores with evidence. Tables F18.1 and F18.2 show the current status for each trait for the undergraduate and graduate department and programs.

The scores should be interpreted in the context of the individual department or program. With the tables, one can determine which assessment activities are relatively weak and which are relatively strong. By adding and averaging the scores over all departments and programs, one can determine and which of the nine elements are relatively well implemented throughout CLAS and which traits may need more attention.

Institutional level assessment is not only an aggregate over departments and programs, but also consists of centralized activities and support an institution provides, so there are two independent sets of scores for the institutional level.

Table F18.1: Progress in Learning Outcomes by Undergraduate Departments and Programs

| Department or Program Element | A | B | C | D | E | F | G | H | 1 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| BA Art, BFA Electronic Design \& Multimedia | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.5 | 4.0 | 2.0 |
| BA Area Studies: Asian Studies | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 2.0 |
| BA Area Studies: Black Studies* | 1 | 2.0 | 3.0 | 3.0 | 1.0 | 3.0 | 2.0 | 1 | 2.0 |
| BA Communications, MCA Ad-PR | 4.0 | 4.0 | 3.0 | 4.0 | 4.0 | 3.75 | 3.75 | 4.0 | 3.75 |
| BA Comparative Literature | 2 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 1.0 | 2.0 |
| BA English | 4.0 | 3.5 | 3.0 | 4.0 | 3.0 | 3.0 | 4.0 | 4.0 | 2.0 |
| BFA Film \& Video | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 4.0 | 4.0 | 4.0 | 2.0 |
| BA History | 3.5 | 3.0 | 3.0 | 4.0 | 4.0 | 3.0 | 3.5 | 4.0 | 2.0 |
| BA Romance Languages | 3.0 | 3.5 | 3.0 | 3.0 | 4.0 | 3.5 | 4.0 | 3.5 | 3.0 |
| Basic Language Sequence | 3.0 | 3.0 | 3.0 | 3.0 | - | 3.0 | 3.0 | 2.0 | 2.0 |
| BA Area Studies: Jewish Studies | 3.0 | 3.0 | 3.0 | 3.0 | 2.5 | 3.0 | 4.0 | 4.0 | 2.0 |
| BA, BFA Music | 3.0 | 2.0 | 2.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 |
| BA Philosophy | 4.0 | 4.0 | 2 | 3.0 | 3.0 | 3.0 | 4.0 | 3.0 | 3.0 |
| BA Theater and Speech | 3.0 | 3.0 | 3.0 | 3.5 | 2.5 | 3.5 | 3.0 | 3.0 | 2.0 |
| Division of Humanities \& Arts | 3.0 | 2.8 | 2.9 | 3.0 | 2.7 | 3.0 | 3.3 | 2.8 | 2.3 |
| BS Biology | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 |
| BS Chemistry | 3.5 | 4.0 | 3.0 | 3.5 | 3.5 | 3.5 | 4.0 | 2.5 | 3.0 |
| BA, BS, Earth \& Atmospheric Science | 3.5 | 4.0 | 3.0 | 3.5 | 3.5 | 3.5 | 4.0 | 3.5 | 3.5 |
| BA, BS, BA/MA Math | 3.5 | 3.5 | 3.0 | 3.5 | 3.5 | 3.0 | 4.0 | 3.5 | 4.0 |
| BS Physics | 4.0 | 4.0 | 3.0 | 4.0 | 3.5 | 3.5 | 3.5 | 3.0 | 3.0 |
| Division of Science | 3.5 | 3.7 | 3.0 | 3.5 | 3.4 | 3.3 | 3.7 | 3.1 | 3.3 |
| BA Anthropology | 2.0 | 2.5 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 2.0 | 2.0 |
| BA BA/MA Economics | 2.0 | 3.0 | 2.0 | 3.0 | 3.0 | 2.0 | 3.0 | 3.0 | 1.5 |
| BA International Studies | 3.0 | 3.0 | 3.0 | 4.0 | 3.5 | 3.0 | 4.0 | 4.0 | 3.0 |
| BA Area Studies: Latin American \& Latino Studies | 3.0 | 3.0 | 3.0 | 3.0 | 1.0 | 3.0 | 3.0 | 2.5 | 3.0 |
| BA Political Science (BA in Pre-law) | 3.5 | 4.0 | 3.0 | 4.0 | 3.5 | 3.0 | 4.0 | 4.0 | 3.0 |
| BA, BS, BA/MA Psychology | 2.0 | 4.0 | 3.0 | 4.0 | 3.5 | 3.0 | 3.0 | 3.0 | 2.0 |
| BA Sociology | 4.0 | 4.0 | 3.0 | 3.0 | 3.0 | 3.0 | 4.0 | 3.0 | 2.0 |
| Division of Social Science | 2.8 | 3.4 | 2.9 | 3.4 | 2.9 | 2.9 | 3.4 | 3.1 | 2.4 |
| General Education Requirement | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 3.0 |
| General Education | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 3.0 |
| BS Interdisciplinary Studies | 3.0 | 3.0 | 3.0 | 2.5 | 3.0 | 4.0 | 3.0 | 3.0 | 3.0 |
| Division of Interdisciplinary Studies at CWE | 3.0 | 3.0 | 3.0 | 2.5 | 3.0 | 4.0 | 3.0 | 3.0 | 3.0 |
| Institution Aggregated over Divisions (undergraduate) | 3.3 | 3.4 | 3.2 | 3.3 | 3.2 | 3.4 | 3.5 | 3.2 | 2.8 |
| Institution, Institution Level Activities \& Support <br> (see following section outlining institutional benchmarking) | 3.3 | 3.4 | 3.0 | 3.3 | 3.3 | 3.5 | 3.5 | 3.3 | 2.8 |

A) Assessment Plans, B) Policies \& Guidelines, C) Recognition and Rewards, D) Learning Outcomes, E) Syllabi, F)

Professional Development, G) Assessment Tools, H) Use of Assessment Results, I) Course \& Teacher Surveys.
Score: 1=Initial/Needs Work. 2=Emerging/In Progress. 3=Developed. 4= Highly Developed/Good Practice

Table F18.2: Progress in Learning Outcomes Assessment by Graduate Programs

| Department or Program Element | A | B | C | D | E | F | G | H | I |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| MFA, MA Art | 3.0 | 3.0 | 3.0 | 3.0 | 4.0 | 3.0 | 3.0 | 3.0 | 2.0 |
| MA English, MFA Creative Writing | 4.0 | 3.5 | 3.0 | 4.0 | 3.0 | 3.0 | 4.0 | 4.0 | 2.0 |
| MA Language \& Literacy | 3.0 | 2.0 | 3.0 | 4.0 | 4.0 | 3.0 | 4.0 | 3.0 | 2.0 |
| MFA Film \& Video | 3.0 | 3.0 | 2.5 | 4.0 | 4.0 | 3.0 | 4.0 | 4.0 | 3.0 |
| MA History | 3.0 | 4.0 | 3.0 | 3.0 | 4.0 | 3.0 | 2.5 | 2.5 | 2.0 |
| MA Music | 2.5 | 2.0 | 3.0 | 3.0 | 2.5 | 2.5 | - | - | 2.0 |
| MA Spanish | 3.0 | 3.0 | 3.0 | 4.0 | 4.0 | 3.0 | 4.0 | 3.0 | 3.0 |
| Division of Humanities \& Arts | 3.1 | 2.9 | 2.9 | 3.6 | 3.6 | 2.9 | 3.6 | 3.3 | 2.3 |
| MA Biology | 3.5 | 3.5 | 3.0 | 3.5 | 3.5 | 3.5 | 3.0 | 3.0 | 3.5 |
| MA Chemistry | 3.0 | 4.0 | 3.0 | 3.0 | 3.5 | 3.5 | 4.0 | 2.5 | 3.0 |
| MA, Earth \& Atmospheric Science (Geology) | 3.0 | 4.0 | 3.0 | 3.0 | 3.5 | 3.5 | 4.0 | 3.5 | 3.5 |
| MA Math | 3.0 | 3.5 | 3.0 | 3.0 | 3.0 | 3.0 | 4.0 | 3.0 | 4.0 |
| MA Physics | 4.0 | 4.0 | 3.0 | 4.0 | 3.5 | 4.0 | 3.5 | 3.5 | 3.0 |
| Division of Science | 3.3 | 3.8 | 3.0 | 3.3 | 3.4 | 3.5 | 3.7 | 3.1 | 3.4 |
| MA Economics | 2.0 | 3.0 | 2.0 | 3.0 | 3.0 | 2.0 | 3.0 | 3.0 | 1.5 |
| MA International Relations | 2.0 | 2.0 | 3.0 | 3.0 | 1.0 | 3.0 | 1.0 | 1.0 | 2.0 |
| MA Psychology | 2.0 | 3.0 | 3.0 | 4.0 | 3.0 | 3.0 | 3.0 | 2.0 | 2.0 |
| MA Public Service Management | 3.0 | 3.5 | 3.0 | 3.0 | 2.0 | 3.0 | 4.0 | 4.0 | 2.0 |
| MA Sociology | 3.0 | 3.5 | 3.5 | 3.0 | 3.5 | 3.0 | 4.0 | 3.0 | 3.0 |
| Division of Social Science | 3.0 | 3.0 | 2.9 | 3.2 | 2.5 | 2.8 | 3.0 | 2.6 | 2.1 |
| MA in the Study of the Americas | 3.5 | 3.5 | 3.0 | 3.5 | 3.5 | 3.0 | 3.0 | 4.0 | 2.0 |
| Division of Interdisciplinary Studies at CWE | 3.5 | 3.5 | 3.0 | 3.5 | 3.5 | 3.0 | 3.0 | 4.0 | 2.0 |
| Institution Aggregated over Divisions for Graduate Programs (CLAS) | 3.2 | 3.3 | 2.9 | 3.4 | 3.3 | 3.1 | 3.3 | 3.3 | 2.5 |
| Institution, Institution Level Activities \& Support (see following section outlining institutional benchmarks) | 3.2 | 3.4 | 3.0 | 3.4 | 3.3 | 3.2 | 3.4 | 3.3 | 2.5 |

A) Assessment Plans, B) Policies \& Guidelines, C) Recognition and Rewards, D) Learning Outcomes, E) Syllabi, F)

Professional Development, G) Assessment Tools, H) Use of Assessment Results, I) Course \& Teacher Surveys.
Score: 1=Initial/Needs Work. 2=Emerging/In Progress. 3=Developed. 4= Highly Developed/Good Practice

Institutional Benchmarks for Progress Report

Assessment planning (A) for learning outcomes assessment is incorporated into CUNY's and CCNY's performance management process. Learning outcomes assessment is integrated into CCNY's existing strategic plan (2009-2013) and integral to the current strategic planning process as an important tool to measure and foster achievement of educational goals.

Institutional policies and guidelines (B) are in place for CLAS. At the institutional level, the divisional coordinators inform departments and programs about the reporting requirements such as the frequency and deadlines. The progress rubric outlines the alignment between assessment information that is being
collected and what Middle States requires. Learning outcomes assessment is also required in the templates for requesting a new course of changes in existing courses and programs.

The development of a recognition and rewards system (C) is in progress. At the institutional level, it contains the following elements, some of which are subject to financial availability:

- Small stipends for extra work by contingent faculty (i.e., General Education);
- Course releases for substantial coordinating responsibilities
- Funds for assistance with incidental work (updating websites, collecting data)
- Letters and certificates of recognition signed by the Provost and/or President for individual faculty
- Celebratory events upon achieving a particular milestone
- Funds for attending professional development opportunities \& conferences
- Awards to recognize scholarship of teaching and learning
- Seed grant for assessment (under discussion)

Institutional level learning objectives (D) are addressed in CCNY's mission statement and the general education outcomes and department and program outcomes are aligned with institutional objectives

All departments and programs reviewed, and some refined their learning outcomes as part of the development of new, multi-year assessment plans that was initiated in 2010. Program learning outcomes and curriculum grids can be found on the CCNY Middle States website: http://extranet.adm.ccny.cuny.edu/middlestates/learning.cfm

CCNY offers excellent professional development (link) (F) for the improvement of teaching and learning through the Center for Excellence in Teaching and Learning (CETL).

- In 2009, the Assistant Director of Assessment (currently the Learning Assessment Director) initiated an assessment series at CETL.
- Through CCNY's involvement with the CUNY-wide Assessment Council, our PD offerings have included institutional exchanges with other CUNY colleges, and participation in the Assessment Council's seminar series.
- Participation in Middle States Workshops

Institution level assessment tools (G) used or discontinued since 2010 progress letter:

- CUNY Proficiency exam (mandatory, direct, high stakes) no longer administered
- CUNY Collegiate Learning Assessment (CLA) (voluntary, direct, high stakes)
- The CCNY Course \& Teacher survey (voluntary, indirect, increased response rate)
- The CUNY CATW and COMPASS tests used for course placement
- The NSSE and FSSE last administered in 2009
- The Noel-Levitz survey (to be administered)
- The academic advising survey administered summer 2012
- The student satisfaction survey to be developed and administered to gauge effectiveness of student support services including tutoring and advising (Summer 2013)

The use of results $(H)$ on the institutional level is guaranteed through:

- Submission of annual assessment reports that document the use of
- Requirements for new course and curriculum proposals
- Incorporation of supporting evidence in external review reports and grant applications (i.e., Title V, NSF Step, HSI-STEM)

The use of Course and Teacher surveys (I) was returned to paper in 2010.

- CCNY's course and teaching survey was returned to paper in 2011 and as a result the response rate have increased from around $15.4 \%$ to $80 \%$ (last administration).
- Institutional Research is now part of the Office of the Senior Associate Provost and will work with the office to make data available and useful to departments and programs as well as the campus.
Other institutional data is now being gathered (CLA, Student Satisfaction-Noel-Levitz, \& Advising \& Tutoring) and the results will be disseminated campus-wide.


## Use of Results

Tables F18.3 and F18.4 show for each program, including general education and the institutional level, how assessment results were used. Each department was asked to indicate for each possible use listed below, "yes", "no", or "does not apply."
a. We made changes in course content
b. We made changes in course delivery/pedagogy
c. We added/deleted courses
d. We made changes in pre- and co-requisites
e. We made changes in degree requirements
f. We made changes in emphasis for new/vacant faculty positions
g. We developed and/or implemented guidelines for adjuncts, teaching assistants, and other contingent faculty
h. We included assessment results in faculty meetings, curriculum committee meetings, and faculty retreats
i. We made changes in degree programs and the development of new degree program options
j. We were able to justify past curriculum changes and show program improvement results from those changes
k. We made changes in the advising processes
I. We developed academic services for students
m . We developed new career explorations and/or career services for students
n . We made changes to student academic facilities such as computer labs, science labs, and study areas
o. We developed program-based web sites to provide students with academic and program information
p. We shared assessment information with alumni and industrial review boards
q. We further refined the assessment methods or implemented new assessment methods
r. We made changes in instructional emphasis for current faculty
s. We implemented and utilized mid-term assessments

Table F18.3 Use of Assessment Results-Undergraduate Departments and Programs

| Use of results | a | b | c | d | e | f | g | h | i | j | k | I | m | n | - | p | q | r | s |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| BA Art, BFA Electronic Design \& Multimedia |  | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |  | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |  |  | $\checkmark$ |  | $\checkmark$ |  | $\checkmark$ | $\checkmark$ | $\checkmark$ |
| BA Area Studies: Asian Studies |  |  | $\checkmark$ |  | $\checkmark$ |  |  |  |  | $\checkmark$ |  |  |  |  |  |  |  |  |  |
| BA Area Studies: Black Studies* |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| BA Communications, MCA Ad-PR | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |  | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |  | $\checkmark$ | $\checkmark$ |  | $\checkmark$ |  | $\checkmark$ | $\checkmark$ | $\checkmark$ |
| BA Comparative Literature | $\checkmark$ |  | $\checkmark$ |  |  |  |  | $\checkmark$ |  |  | $\checkmark$ |  |  |  | $\checkmark$ |  |  |  | $\checkmark$ |
| BA English | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |  | $\checkmark$ |  |  | $\checkmark$ |  |  |  |  |  |  | $\checkmark$ | $\checkmark$ |  |
| BFA Film \& Video | $\checkmark$ | $\checkmark$ |  | $\checkmark$ |  |  | $\checkmark$ | $\checkmark$ |  | $\checkmark$ | $\checkmark$ |  |  | $\checkmark$ | $\checkmark$ |  | $\checkmark$ | $\checkmark$ |  |
| BA History | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |  | $\checkmark$ | $\checkmark$ | $\checkmark$ |  | $\checkmark$ | $\checkmark$ |  |  |  |  |  | $\checkmark$ | $\checkmark$ |  |
| Romance Sequence $\quad$ Languages | $\checkmark$ | $\checkmark$ |  |  |  |  | $\checkmark$ |  |  |  |  |  |  |  |  |  |  |  |  |
| BA Romance Languages Majors | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |  | $\checkmark$ | $\checkmark$ | $\checkmark$ |  | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |  | $\checkmark$ |  | $\checkmark$ | $\checkmark$ | $\checkmark$ |
| BA Area Studies: Jewish Studies |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| BA, BFA Music | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |  |  | $\checkmark$ |  | $\checkmark$ | $\checkmark$ |  |  | $\checkmark$ | $\checkmark$ |  |  | $\checkmark$ |  |
| BA Philosophy | $\checkmark$ | $\checkmark$ |  | $\checkmark$ | $\checkmark$ |  | $\checkmark$ | $\checkmark$ |  | $\checkmark$ |  |  |  |  | $\checkmark$ |  | $\checkmark$ | $\checkmark$ |  |
| BA Theater \& Speech | $\checkmark$ | $\checkmark$ |  |  |  | $\checkmark$ |  | $\checkmark$ |  |  | $\checkmark$ |  |  |  |  |  | $\checkmark$ | $\checkmark$ | $\checkmark$ |
| Division of Humanities \& Art |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| BS Biology | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |  | $\checkmark$ |  | $\checkmark$ |  | $\checkmark$ |  | $\checkmark$ |  |  |
| BS Chemistry | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |  | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |  |  | $\checkmark$ | $\checkmark$ |  | $\checkmark$ |  |  |
| BA, BS, Earth \& Atmospheric Science | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |  | $\checkmark$ | $\checkmark$ | $\checkmark$ |  | $\checkmark$ | $\checkmark$ |  |
| BA, BS, BA/MA Math | $\checkmark$ | $\checkmark$ | $\checkmark$ |  |  | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |  |  | $\checkmark$ |  | $\checkmark$ | $\checkmark$ |  |
| BS Physics |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Division of Science |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| BA Anthropology |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| BA BA/MA Economics | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |  |  | $\checkmark$ | $\checkmark$ |  |  |  |  |  | $\checkmark$ |  |  |  |  |
| BA International Studies | $\checkmark$ |  | $\checkmark$ |  | $\checkmark$ |  |  | $\checkmark$ | $\checkmark$ |  |  |  |  |  |  |  | $\checkmark$ |  |  |
| BA Area Studies: Latin American \& Latino Studies | $\checkmark$ | $\checkmark$ |  |  | $\checkmark$ |  |  | $\checkmark$ |  | $\checkmark$ | $\checkmark$ |  |  |  | $\checkmark$ |  | $\checkmark$ | $\checkmark$ |  |
| BA Political Science | $\checkmark$ |  | $\checkmark$ |  | $\checkmark$ | $\checkmark$ |  | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |  |  | $\checkmark$ | $\checkmark$ |  |
| BA, BS, BA/MA Psychology | $\checkmark$ | $\checkmark$ |  | $\checkmark$ |  |  | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |  |  |  |  | $\checkmark$ | $\checkmark$ | $\checkmark$ |
| BA Sociology | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |  | $\checkmark$ | $\checkmark$ | $\checkmark$ |  |  | $\checkmark$ | $\checkmark$ | $\checkmark$ |  | $\checkmark$ |  | $\checkmark$ |  | $\checkmark$ |
| Division of Social Science |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| General Education <br> Requirement  |  |  | $\checkmark$ |  | $\checkmark$ |  | $\checkmark$ | $\checkmark$ |  |  | $\checkmark$ | $\checkmark$ | $\checkmark$ |  | $\checkmark$ |  | $\checkmark$ | $\checkmark$ | $\checkmark$ |
| General Education |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| BS Interdisciplinary Arts \& Sciences |  | $\checkmark$ | $\checkmark$ |  |  | $\checkmark$ |  | $\checkmark$ |  |  |  | $\checkmark$ | $\checkmark$ | $\checkmark$ |  |  | $\checkmark$ |  | $\checkmark$ |

Table F18.4 -Use of results-MA Programs

| Use of results | a | b | C | d | e | f | g | h | i | j | k | I | m | n | 0 | p | q | r | S |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| MFA, MA Art | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |  | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |  |  | $\checkmark$ |  | $\checkmark$ | $\checkmark$ | $\checkmark$ |
| MA English, MFA Creative Writing |  | $\checkmark$ |  | $\checkmark$ | $\checkmark$ |  |  |  | $\checkmark$ |  |  |  |  |  | $\checkmark$ |  | $\checkmark$ |  |  |
| MA Language \& Literacy |  | $\checkmark$ | $\checkmark$ |  |  | $\checkmark$ |  | $\checkmark$ |  |  |  |  |  |  |  |  |  |  |  |
| MFA Film \& Video | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |  | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |  | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |
| MA History | $\checkmark$ | $\checkmark$ | $\checkmark$ |  | $\checkmark$ | $\checkmark$ | $\checkmark$ |  |  | $\checkmark$ | $\checkmark$ |  |  |  |  |  | $\checkmark$ | $\checkmark$ | $\checkmark$ |
| MA Music |  | $\checkmark$ | $\checkmark$ |  |  |  |  |  |  |  | $\checkmark$ |  |  |  | $\checkmark$ |  |  |  |  |
| MA Spanish | $\checkmark$ | $\checkmark$ | $\checkmark$ |  |  |  | $\checkmark$ | $\checkmark$ |  | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |  | $\checkmark$ |  | $\checkmark$ |  | $\checkmark$ |
| Division of Humanities \& Arts |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| MA Biology | $\checkmark$ | $\checkmark$ | $\checkmark$ |  |  |  |  |  | $\checkmark$ |  | $\checkmark$ |  |  |  | $\checkmark$ |  | $\checkmark$ |  |  |
| MA Chemistry | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |  | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |  |  | $\checkmark$ | $\checkmark$ |  | $\checkmark$ |  |  |
| MA, Earth \& Atmospheric Science (Geology) | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |  | $\checkmark$ |  | $\checkmark$ |  | $\checkmark$ |  | $\checkmark$ | $\checkmark$ |  |
| MA Math | $\checkmark$ | $\checkmark$ | $\checkmark$ |  |  | $\checkmark$ |  |  |  | $\checkmark$ | $\checkmark$ |  |  |  | $\checkmark$ |  | $\checkmark$ |  |  |
| MA Physics |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Division of Science |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| MA Economics | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |  |  | $\checkmark$ | $\checkmark$ |  |  |  |  |  | $\checkmark$ |  |  |  |  |
| MA International Studies |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| MA Psychology | $\checkmark$ |  |  |  |  |  | $\checkmark$ | $\checkmark$ |  |  |  |  |  |  |  |  | $\checkmark$ | $\checkmark$ |  |
| MA Public Service Management | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |  | $\checkmark$ |  |  |  |  | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |  | $\checkmark$ | $\checkmark$ |  |
| Division of Social Science |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| MA in the Study of the Americas | $\checkmark$ | $\checkmark$ | $\checkmark$ |  | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |  | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |  | $\checkmark$ | $\checkmark$ |  |
| Division of Interdisciplinary Studies |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

## Analysis of Actions

An analysis of the actions is shown in Tables F18.3 and Figure F18.1 shows that the assessment results were used most often at the undergraduate level to (1) make changes to course content; (2) include in discussions at faculty meetings, curriculum committee meetings, and faculty retreats; (3) make changes in course delivery/pedagogy; (4) refine assessment methods of implement new methods; and (5) add and/or delete courses.

Other frequent actions as a result of assessment include (6) develop and/or implement guidelines for adjuncts, teaching assistants, and other contingent faculty (7) justify past curriculum changes and show program improvement results from those changes; (8) make changes in advising processes (9) developed program-based web sites to provide students with academic and program information; (10) make changes in instructional emphasis for current faculty; (11) make changes to pre-co requisites; and (12) make changes in degree requirements.

Other program-related uses that were mentioned fairly often include (13) make changes in degree program and the development of new degree program options; (14) make change in emphasis for new/vacant faculty positions; (15) develop new career explorations and/or career services for students; (16) implement and utilize mid-term assessments; and (17) make changes to student academic facilities such as computer labs, science labs, and study areas.

Figure F18.1-Use of assessment results-Undergraduate

## Use of Assessment Results



At the graduate level assessment results were used most often to (1) make changes in course delivery/pedagogy; (2) add or delete courses; (3) developed program-based web sites to provide students with academic and program information; (4) make changes in course content; (5) refine assessment methods of implement new methods; (6) make changes in advising processes; and (7) make changes in degree requirements

Other frequent actions at the graduate level as a result of assessment include: (8) develop and/or implement guidelines for adjuncts, teaching assistants, and other contingent faculty; (9) include in discussions at faculty meetings, curriculum committee meetings, and faculty retreats; (10) make changes to pre-co requisites; (11) make changes in degree program and the development of new degree program options; (12) justify past curriculum changes and show program improvement results from those changes; (13) make changes in instructional emphasis for current faculty; and (14) make change in emphasis for new/vacant faculty positions.

Other program-related uses that were mentioned less frequently at the graduate level include; (15) develop new career explorations and/or career services for students; (16) develop new academic services for students; (17) make changes to student academic facilities such as computer labs, science labs, and study areas; (18) implement and utilize mid-term assessments; and (19) share assessment information with alumni and industrial review boards.

Figure F18.2--Use of Assessment Results at the Graduate Level


## 1. Major institutional challenges in outcomes assessment

- Sustaining and streamlining student learning outcomes processes;
- Making assessment findings useful to departments, programs, divisions, and the college;
- Developing a "big picture" of recommendations from the multiple CCNY accrediting bodies (i.e., Middle States, NCATE, ABET, etc.);
- Connecting the CCNY data "silos" to use resources efficiently to improve student success.
- 2. A major institutional opportunity
- Pathways Initiative has provided college community with an opportunity to revisit and review general education requirements, learning outcomes, and assessments;
- Collegiate Learning Assessment data will provide departments and programs with useful information about students' higher order skills and competencies;
- Changes in Senior Administrative Leadership provided the opportunities to define and benchmark CCNY initiatives, especially in regards to student success.
- 3. A major UNIT initiative to be planned and implemented in the last three or coming three years
- Continued use of assessment progress matrix and rubric (9 traits aligned with Middle States reporting requirements);
- Develop data dashboards for departments and programs including outcomes assessment findings. Use of learning outcomes data for annual reporting; program review; grant proposals; and Middle States decennial review.
- The means of assessing the initiative
- Undergraduate, graduate, and Ph.D. programs progress on assessment learning outcomes;
- Use of assessment findings to strengthen programs resulting in increased student success;
- Success with Middle States accreditation processes


## F.20. Division of Interdisciplinary Studies at the Center for Worker Education (CWE)

The Division of Interdisciplinary Studies continuously assesses its progress in fulfilling its mission. The faculty and staff support the division's interdisciplinary framework and student-centered environment, and facilitate student learning by designing and implementing curricula and support services.

Housed within the Center for Worker Education, the division has the capacity to enroll approximately 650 students, and its enrollment figures have been reasonably stable. Any fluctuation in undergraduate enrollment has been—and continues to be—balanced by enrollment in a relatively new graduate program in the Study of the Americas (MA), for which the division's undergraduate program serves as a feeder program. Consequently, the division has been able to plan and meet its enrollment projections with a high degree of accuracy.

Introduced in 2010, the Master of Arts in the Study of the Americas deliberately breaks apart notions about what the "Americas" are; how they are connected historically, politically, and culturally across national and transnational boundaries; and why certain areas continue to be disenfranchised and marginalization. Other curricular initiatives include efforts to integrate the BA and MA programs and to create more online degree opportunities, particularly at the graduate level. To this end, the division has offered faculty development workshops to promote expertise in online and hybrid teaching strategies that ensure student learning and academic success.

Serious discussions about student learning assessment have led to specific innovations that support student success. Understanding the specific challenges of the division's students as they work toward academic excellence has led to significant expansions of services at the Division of Interdisciplinary Studies Writing Center, which provides both one-on-one tutoring for writing assignments, as well as specifically targeted workshops. Additionally, the division appreciates that many students require supplemental assistance and training in the use of computer technology from the on-site technology advisor. This support becomes especially crucial as a growing number of students are enrolling in hybrid and online courses. Tutoring in Spanish and mathematics helps students successfully complete these requirements, and students have had access to free, confidential psychological counseling services since 2007.

The Division of Interdisciplinary Studies measures faculty success by assessing the Course and Teacher Surveys, teaching observations, and annual evaluations by the department chair. Junior faculty members in the division also are assigned a senior faculty mentor. Additionally, through faculty discussions, the division has identified specific areas of desired professional development, such as online- and hybrid-teaching training, Blackboard ${ }^{\top \mathrm{M}}$ training, and workshops in interdisciplinary pedagogy, e.g., Film Learning in the Classroom.

The great majority of courses offered at the Center of Worker Education are taught by adjunct faculty, e.g., 72 percent in spring 2013, who have expressed an interest in participating in faculty development workshops. In response, the division is planning to offer a series of meetings to help faculty examine and
share their pedagogical practices. The goal is to enhance student-learning outcomes through a focus on enhanced pedagogical support for faculty.

The division has built on its success through the active collaboration of its full-time staff in planning processes that are related to curricular development and assessment, teaching, and advising, as well as strategic mission-oriented discussions. In terms of evaluation of their success, full-time staff members receive annual evaluations and hold monthly staff meetings at which larger CWE-wide issues are discussed and addressed. Part-time employees receive immediate verbal feedback. Additionally, the monthly meetings serve as a way to raise and address more general issues that might arise.

The division maintains a rigorous academic standard for its students and engages in a careful assessment process. In fall 2012, the division created a curriculum grid to identify courses that incorporate research skills in their learning outcomes and assignments. In the last few years, the division has been engaged in a careful assessment of a specific divisional learning outcome: "Produce an in depth work of original research and writing using an interdisciplinary approach." To ensure that students learn to conduct academic research across the disciplines, the division created a curriculum grid to identify courses that incorporate research skills in learning outcomes and assignments in fall 2012. The division asked the faculty to assemble a portfolio of assignments and samples of student work corresponding to those assignments:

- a copy of the assignment and any scaffolding exercises that were assigned
- the rubric or other criteria for evaluating the assignment
- samples of three different students' work at different levels of performance on the assignment, labeled as "accomplished," "adequate/competent," and "needs work"
- any notes or comments about their process

In 2012, the division received and reviewed portfolios from the following courses: The Literature of Immigration (English 31801), Introduction to Interdisciplinary Studies (IAS 31334), Cognitive Psychology: Thinking, Knowing, and Remembering (PSY 25304), Introduction to Urban Studies and Planning (IAS 31292), and Grassroots Power: Local Economic Development/Service Learning Workshop (IAS 31295). A committee comprised of three faculty members and the Divisional Assessment Coordinator met in February 2013 to share and discuss findings and to develop recommendations to achieve the researchfocused learning outcome: to "produce an in depth work of original research and writing using an interdisciplinary approach." The review focused on the following questions:

1. What research activities is the division asking its students to engage in as they move through the curriculum?
2. What research-related skills are they building during these activities?
3. How might the division progressively build research skills into different level courses?

The group's discussion focused on research activities, acquisition of competencies, as well as the identification of programmatic gaps in teaching these skills. Subsequently, the division developed a matrix that outlines how students build research skills across the curriculum and articulates some of the gaps as well as potential strategies for bridging those gaps. At the same time, the division acknowledges that its students enter the program at different academic levels, often having completed an associate degree, which means they may bypass the introductory level courses or those courses that may become part of the Pathways "core." The division also appreciates that it is an interdisciplinary department and values the flexibility that its students have in choosing a personalized course of study. Consequently, distinguishing course levels through corresponding course numbers would be a useful way of alerting students to course expectations rather than establishing a set of prerequisites or required course sequence.

Table F20.1: Division of Interdisciplinary Studies Assessment Matrix

| Course Level | Skills | Sample Assignments | Gaps in Curriculum |
| :---: | :---: | :---: | :---: |
| Introductory (1000 level) | Demonstrate a general familiarity with library research and the use of the CCNY ID to find on-line journal articles and/or books in the library <br> Identify different citation styles and demonstrate consistent use of one style in a paper. <br> Introduce the concept of "position-ality" to examine "where I stand in the world in relation to how I read, what questions I ask, how I ask the questions, and how that might influence my interpretation." <br> Generate a list for research topics rooted in the course content, i.e., from course readings. <br> Summarize theoretical arguments and apply to the analysis of a problem or text, i.e., Core Humanities 1 and 2. | Use the CCNY ID to find and recognize academic articles. <br> Begin an annotated bibliography with 3-5 sources. <br> Essays applying specific theoretical texts to a work of fiction (e.g. Core Humanities 1 \& 2) <br> Review of 2 to 3 articles related to a related set of research questions. | Deliberate introduction to the different paradigms, theories and debates that undergird the production of knowledge so that students can build a foundation of knowledge that they are able to access in the higher level courses |
| Intermediate (2000 level) | Create a targeted list of academic articles, book chapters, books, reports, etc. related to a specific research topic. <br> Summarize and evaluate a source and write a concise annotation. <br> Review academic articles and explain research design, methods and use of evidence / data. | Annotated bibliographies <br> Literature reviews <br> Develop a research proposal with an annotated bibliography. | Student capacity to write up their research; organization and structure of writing; grammar |
| Upper Division (3000 level) | Scholarship and applied research applying different research methods to a specific project. |  | Students need more exposure and incentive to ruleinventing, as distinct from rule-following, i.e., Create your own question to research |

The group's principal findings were as follows:

1. The division expects a few courses to accomplish too many things at once. Therefore, pedagogical and intellectual goals need to be re-distributed across the curriculum.
2. Re-create the Core Social Science sequence.

- Core Social Science 1 will serve as an introduction to theories and major schools of interpretation, e.g., Marxism, post-colonialism, that students will be exposed to in the curriculum. This course also will strengthen the ability of students to construct persuasive arguments and will reinforce what is taught in the Core Humanities sequence.
- Core Social Science 2 will become a more "content-based" world historical/cultural survey course.

3. Within introductory-level courses, incorporate more assignments that use personal experiences as the starting point, e.g., a self-examination essay in Introduction to Interdisciplinary Studies that asks students to reflect on their own educational pasts. This provides a way to convince students that they already know something that will help them generate their own research questions for investigation.
4. Fund and program more Writing Center workshops on the following topics:

- sentence and paragraph anatomy
- use of evidence/citation using three formats (MLA, APA, Chicago styles)
- essay structure
- research paper structure

5. Create an upper division course, Interdisciplinary Thesis, for students who want to conduct and write original research.
6. Develop spaces separate from service for faculty to share and discuss their pedagogy, research, and scholarship. Also sponsor forums, including public ones, for faculty to share their scholarship with students, such as an Interdisciplinary Thesis Colloquium.

The Division for Interdisciplinary Studies (Center for Worker Education) is a contained and completely integrated unit. Over the past few years, the Other Than Personnel Services (OTPS) budget has been reduced. Yet, the OTPS budget remains important in so far as it helps the division maintain the facilities-classrooms and common areas-that shape the academic environment. The Temporary Services budget has remained steady, and the adjunct budget also has increased, largely due to required contract-based rate increases. Given that the division's enrollment has remained stable, the need for adjunct faculty has not fluctuated significantly.

## F.21. Division of Science

The Division of Science—Biology, Chemistry, Earth and Atmospheric Sciences, Mathematics, and Physics-is dedicated to maintaining high-level research and to advancing teaching and learning, which are both complementary and co-dependent. Since 2008, the Division has launched numerous teaching and learning activities with the understanding that it must preserve the research-education balance.

Through the defined assessment process, each department has identified opportunities and challenges in conveying essential course learning and program outcomes, and has determined the measures that contribute to student success. For details, see Division of Science Long Term Assessment Plan.

## Biology

The Department of Biology has the largest enrollment of all the departments in the division, with over 300 undergraduates and over 25 master-level graduate students. The last academic year summary identified the need to more efficiently and accurately advise this large student body without a further burden to the department and faculty. To address this concern, biology assigned advising to all full-time faculty, each assigned the same caseload. This guarantees that the faculty "know" the curriculum and engage with its majors.

The second important improvement was the need to modify the biology curriculum to provide better connections and preparation for students who intend to pursue non-medical professions. Initially, most biology majors 'think' they will become medical doctors or practitioners. However, many students need to be introduced to career alternatives, hence the creation a new major in Biotechnology at both undergraduate and graduate levels.

Another needed improvement addresses curricular modifications in the foundation biology courses needed to meet national—and 2011-2012—standards. The department addressed this concern by hiring a 'super-lecturer' who revamped the lecture and lab content in both Biology 101 and 102. Regarding career options, the Pre-Med office continues to provide quality workshops once per month. For details, see Department of Biology 5 Year Assessment Plan.

## Chemistry

The Department of Chemistry currently serves approximately 80 undergraduate majors and 29 master-level ones, including biochemistry. The chemistry chair is dedicated to improving student learning, and in 2012, he created and executed two major forms of assessment that evaluate student learning in the department: an exit survey for graduating chemistry seniors and Faculty Direct ${ }^{1}$ for the Chemistry capstone courses. To improve pass rates in general chemistry, the department co-authored a National Science Foundation (STEP-STEM Talent Expansion Program) to support a modified workshop

[^0]intervention in Chemistry 10301 and 10401, and notification is expected in June 2013. For details, see Department of Chemistry 5 Year Assessment Plan.

## Earth and Atmospheric Sciences (EAS)

The Department of Earth and Atmospheric Sciences (EAS) has been actively updating its curriculum since the migration away from classical geology and towards systems science and environmental science and engineering. Revising and aligning the curriculum to ensure that students acquire all the needed competencies have been addressed, in part through Department of Education funding in Environmental Science and Engineering, which EAS shares with the Grove School of Engineering. Through this multimillion dollar grant, EAS will be able to renovate approximately 2,500 square feet of space from lecture rooms to a flexible, interchangeable learning environment with moveable partitions and necessary technology. Architects are currently designing the space.

Curriculum alignment with community colleges is in process. The curriculum in the introductory courses, EAS 10600 and 21700, are being tightened and standardized to assure that all students-whether first-time freshmen or transfer students-have the necessary academic foundation in the major.

The last curricular challenge designated for update-expanding field experiences-was addressed in spring 2012. All capstone sections of EAS 47200 were merged into one multi-faceted field project. For example, a group of EAS faculty and students traveled to Idaho to explored hydrothermal capacity of the western bedrock and solved real world energy questions. The students worked together as a team in the map generation and historical background phases, but separately on parallel yet related projects. For details, see Department of Earth \& Atmospheric Sciences 5 Year Assessment Plan.

## Mathematics

Currently, the Department of Mathematics serves over 100 undergraduate majors and more than 60 master-level students, including those in the graduate program in Math and Technology.

Undergraduate math courses are geared towards several audiences. Math 150 is a non-technical course that fulfills the quantitative General Education requirement for BFA and BA candidates. Upperdivision courses, i.e., series 300 or higher, are dedicated to Math majors, although a few courses serve as electives in some Engineering disciplines. Highest enrollments are in the calculus sequence: Math 195 (pre-calculus), and Math 201, 202, and 203 (first- through third-semester calculus), as well as Math 391 (differential equations) and Math 392 (vector calculus and linear algebra). In addition, Math 205 and 209 offer an alternative, two-semester calculus sequence designed primarily for biology majors. Underprepared entering students who hope to pursue science majors must enroll in Math 190, a college algebra course that serves as the prerequisite to Math 195.

Pre-calculus and calculus courses are the critical gateway sequence for students intent on pursuing careers in science, technology, engineering, or mathematics-the STEM disciplines. Unfortunately, the gateway courses often become barriers at CCNY, and across the nation, there is an urgent need to
identify curricula and strategies that remove the barriers and promote student success. At CCNY, the difficulty of achieving this goal and the consequences of failing to do so are magnified by several factors. CCNY is CUNY's "flagship" for engineering and science, hence all CUNY students determined to pursue an engineering program must transfer to CCNY to earn their degrees. As a result, effective delivery of the STEM mathematics sequence is essential to the mission of CCNY and the entire CUNY system.

To achieve this goal, CCNY's Department of Mathematics is engaged in a multi-pronged effort to improve student learning outcomes in the common math prerequisite requirements for science and engineering majors. The current unsatisfactory rate of student progress has many causes. Principal among these is the substantial gap between high school graduation requirements and any meaningful definition of readiness for college-level mathematics. The department's work towards addressing this gap includes the following:

- The STEM math component of an ongoing (2010-2015) US Department of Education Title V grant focuses on improving outcomes in the critical gateway courses-Math 195 and 201. Grant participants are developing an extensive, integrated web-based platform that includes an online homework system, instructional videos, and interactive Flash movies. These sophisticated electronic resources not only will help students at all levels but also support those students with deficiencies in math readiness. The resources will be tested in several course formats, e.g., traditional, supplemental, and hybrid. CUNY is providing additional funding in support of a redesign of Math 195.
- In a parallel effort, the Math faculty are developing instructional videos with support from a CCNY Provost's Technology Grant, which proposes to increase the number and quality of hybrid courses at CCNY. This award has provided support for instructors who teach the entire STEM prerequisite sequence, beginning with Math 195 (pre-calculus) and continuing with three semesters of calculus. The department will test and evaluate these videos as they are completed, with the goal of making them available to all instructors by fall 2014.

In addition to the aforementioned innovations in course delivery, the department is addressing the concerns that arise from the increasingly large proportions of introductory, elementary, and mid-level course that are taught by adjunct faculty. As a result, it has become increasingly important to ensure standardization of course delivery and resources in the four, large multi-section courses (Math 195, 201, 202, and 203). The distribution of online resources described above will contribute to this. Indeed, in spring 2013, all sections of Math 195 and 201 began using a uniform set of online WebAssign homework assignments. Furthermore, the department has instituted uniform grading of final examinations, a procedure that was introduced two years ago in those two courses. This is being extended to include Math 202 and 203, as well.

For details, see Department of Mathematics 5 Year Assessment Plan.

## Physics

The Department of Physics is the only unit in the Division of Science that conducts its own assessment process, and in academic year 2011-2012, it focused on the master's program in Physics. A consistent challenge in the undergraduate program is with pass rates in the foundation Physics courses, PHYS 20300/20400 and 20700/20800. A preliminary examination of pass-rate change is being used as a baseline for future improvements. For details, see Department of Physics 5 Year Assessment Plan.

## "Closing the Loop"

Academic departments in the Division of Science report on results from the following efforts to improve student learning. It is committed to exploring ways to modify courses and curricula for the purpose of improving student learning. The division will:

- encourage timely graduation, mandatory graduation checks for undergraduate at 60 credits will be required. Master-level students will be kept on track through advising interventions.
- pilot a Graduating Senior Survey for undergraduate and graduate students.
- increase post-baccalaureate acceptances to professional schools, e.g., medical, dental, veterinary, osteopathic medicine, doctoral, MD-PhD.
- create and support special positions, internships, and fellowships.
- promote lab research, participation in conferences, and co-authoring of research articles among students. (See Access Research@City, vol. 2.)
- continue to evaluate the results of the direct assessment instrument, i.e., Faculty Direct, which was fully implemented in spring 2012.


## Timely Graduation

The six-year graduation rate for students in the Division of Science is 26 percent, several percentage points lower than last year's value of 29 percent. This value is 15 percentage points lower than the CCNY average and 20 points lower than CUNY average for senior colleges. To facilitate the graduation of outstanding matriculants, CCNY initiated a project in 2011 to study the 2004 and 2005 cohorts. The Science Advising Center meets each semester with all generic science majors coded 001, i.e., 'waiting for science', who must seek advisement before registering. At 60 credits, students will lose financial aid unless they specify a permanent major. Therefore, the science advisors urge students to declare majors, beginning at 45 credits or earlier. Earlier declaration of major ensures that students begin following major curricular paths, which may ultimately improve six-year graduation rates. The division also will consider alternate methods for improving graduation rates. Proposals will be included in the 2012-2013 report.

At the master-level, the program advisors review current matriculants at the beginning of each semester to verify that all students are on course, and all students who apply for graduation are contacted regularly until the certification date to keep the degree on track.

## Graduating Senior Surveys (Undergraduate and Graduate)

The Science Advising Center will analyze data from the administration of the spring 2013 surveys to both undergraduate and graduate students.

## Post Baccalaureate Acceptances to Professional Schools and Graduate Programs

The rate of post-baccalaureate acceptances is one of the best barometers of student success. The Science Advising Center Pre-Medical Program's intervention that seeks to improve student success in the verbal reasoning section of the MCAT was been reassessed in 2012. Since its inception, there has been a marked improvement in accept rate into medical, veterinary, dental, and osteopathic medicine schools, particularly for our undergraduates. See section 2.12, Table 2.3.

## Special Positions, Fellowships, and Internships

In 2011-2012, five students majoring in the Division of Science won prestigious National Science Foundation Graduate Fellowships; two biology majors earned the prestigious Palefsky Fellowships; and two students were awarded internships at the US Geological Survey (USGS). These awards confirm the outstanding academic achievement and exceptional research ability of CCNY's students.

## Research, Conferences, and Co-Authorship Articles

Science students, including undergraduates, are prolific researchers who are invited to prestigious regional, national, and international conferences. In 2012, eight EAS students were invited to the Geological Association of America's annual conference, where they presented the results of their summer field experience in Idaho. Twenty students presented at the 2012 Annual Biomedical Research Conference for Minority Students at San Jose California; five of the students earned awards.

During the 2011-2012 academic year, twelve students—six biology majors, two EAS majors, two Mathematics majors, and one each majoring in chemistry or physics-were invited to write research articles for the Science Division's publication AccessResearch@CITY. Their topics range from rain forest organisms to spring (slinky) dynamics.

To assess and celebrate the success of Science students in this category, the division has collected data on research participation, including the conference, type of presentation, awards or commendations, and references, as part of the exiting senior survey.

## Faculty Direct: The New Direct Assessment Instrument for Science Courses

The division has had great improvement in the reporting of student learning through the new direct instrument, Faculty Direct. This instrument contains faculty ratings for student achievement of learning outcomes based on exams, reports, and assignments. Faculty Direct also provides vital closing-the-loop data derived from past offerings that inform future decisions.

## Changes to the Assessment Process

- Syllabi

Syllabi submission and posting remains a challenge in the division. Approximately, 60 percent of all Science course offerings are posted by the Departments of Biology, Chemistry, EAS, and Mathematics; only the Department of Physics has achieved 100 percent compliance.

- Departmental Four-Year Course Sequences

Each department in the Division of Science has constructed four-year course sequences, i.e., eight-semester degree completion plans. These schemes facilitate course scheduling, enable students to track their academic progress, and assist in data collection for departmental five-year assessment plans. These degree completion plans were first utilized in 2011-2012.

- Learning Outcomes

All Science departments have constructed—or are in the process of constructing-master-level learning outcomes. Masters Programs Assessment binders have been created and are being filled. In fall 2013, all departments will begin to modify Program Outcomes (PO) in preparation for the second five-year assessment plan construction.

- Direct Data

The collection of grade-book information proposed in Science's 2008-2009 report has been uneven, and in some cases, has been met with heavy resistance. However, the new instrument Faculty Direct, coupled with exam results, has caught on, and the collection rate is approximately 65 percent.

- Multi-Year Plan Modifications

Beginning in fall 2013, all departments will create new five-year plans, which will be based on streamlined program outcomes and any new curricular developments. Each plan will include a separate plan for graduate program assessment.

- Indirect Assessment

The use of Scantron's Class Climate and ParScore software to facilitate survey administration and data collection has been problematic. The Division of Science continues to collect survey data constructed from Course Learning Outcomes, which is manually recorded. The Offices of Evaluation and Testing and Institutional Research have agreed to teach a Science administrator to use Remark ${ }^{\text {TM }}$, a user-friendly software for automated data entry and analysis.

## Improving Teaching and Learning

- New Faculty Orientation and New Faculty Handbook

The handbook is posted on the Division Forum website. Science orientations are conducted in the fall, and activities and outcomes are summarized in the annual Division of Science reports.

- Teaching and Learning Advisory Committee (TLAC)

Established in January 2009, the Teaching and Learning Advisory Committee (TLAC) is chaired by a faculty member who has a joint in Physics and the School of Education.

## The Division of Science Assessment Structure

Elizabeth Rudolph, Divisional Assessment Coordinator

Departmental Outcomes Coordinators: Undergraduate Programs
Fardad Firooznia (Biology), Christine Li (Biotechnology), Urs Jans, Sean Boson (Chemistry), Johnny Luo (Earth and Atmospheric Science), Joseph Bak (Mathematics), and Nee Pong Chang (Physics)

Departmental Outcomes Coordinators: Graduate Programs
Zimei Bu (Biochemistry), Fardad Firooznia (Biology), Jonathan Levitt (Biology), Christine Li (Biotechnology), Barbara Zajc (Chemistry), Johnny Luo (Earth and Atmospheric Science), Joseph Bak (Mathematics), Ben Steinberg (Mathematics), Nee Pong Chang (Physics), and Tim Boyer (Physics)

## F.30. Sophie Davis School of Biomedical Education (SBE) (19 March 2013)

The Sophie Davis School of Biomedical Education (SBE) offers a unique seven-year integrated academic program leading to the BS/MD degrees and a similarly structured 29-month long Physician Assistant (PA) Program leading to a BS degree in Health Sciences. The overall mission of the Sophie Davis School is to expand access to medical school and physician assistant education for talented innercity youth, many of whom are from under-represented minorities and/or from families with limited financial resources.

This mission is consistent with the definition of "under-represented groups in Medicine" by the American Association of Medical Colleges. In June 2003, the AAMC Executive Council adopted the following definition: "'Under-represented in medicine' means those racial and ethnic populations that are under-represented in the medical profession relative to their numbers in the general population [within specific geographic regions]." Consistent with this definition and the overall mission of CCNY, the Sophie Davis School educates and trains primary care physicians and physician assistants to practice in underserved communities in New York State. SBE's main goals are:

Goal I: Expand access to medical school education for talented inner-city youths many of whom are minorities and from families with limited financial resources.

Goal II: Encourage graduates to pursue careers in the primary care medical specialties of internal medicine, including geriatrics, pediatrics, obstetrics/gynecology, and family medicine.

Goal III: Increase the availability of primary care services in physician-shortage areas of New York State (Service Agreement).

In 2008, SBE established the four strategic priorities:

1. Expand teaching and learning activities:

- Create a multi-year hiring plan with increasing emphasis on research and scholarship, particularly in the areas of Physiology \& Pharmacology, Neuropsychiatry, Clinical Neuroscience, and Community Health.
- Renovate at least three research laboratories and improve startup resources in order to recruit and hire highly qualified faculty candidates and expand hands-on student training in basic science research.

2. Explore the potential affiliation with a four-year accredited Medical School (SUNY Downstate). This would increase the quality of clinical training to our students, and provide School access to federal financial resources that require accreditation by the Liaison Committee on Medical Education (LCME).
3. Enhance teaching of biomedical majors with study abroad.
4. Information Technology

- Improve websites, centralize email, increase availability of computers for faculty/staff, and students.
- Increase training in technology for students and staff.
- Increase availability of smart classrooms.

This report summarizes major developments, changes and challenges in the implementation of these priorities from 2008-2012.

## Focus on Teaching and Research: Expanding Teaching and Learning Activities

During the period of 2008-2012, the SBE faculty and staff were engaged in four major activities: (1) teaching, (2) research, (3) scholarly works, and (4) administration. Significant structural and functional changes aimed at improving the integration of faculty and maximization of resources include:

- merged the Chemistry Program with the Department of Physiology, Pharmacology, and Neuroscience;
- dissolved the Department of Behavioral Medicine and reallocated faculty to existing departments;
- hired ten new faculty members in Anatomy and Cell Biology; Physiology, Pharmacology, and Neuroscience; Community Health and Social Medicine; and the PA Program

These changes have increased SBE's control of its medical courses by reducing dependency on adjunct teachers and increasing faculty diversity. In addition, these faculty hires have strengthened SBE's teaching portfolio in the research areas of health services, trans cranial magnetic stimulation (TMS), Muscular Dystrophy, and Parkinson's disease. SBE is currently in the process of reassessing faculty and staff needs in the departments of Cell Biology \& Anatomy and Microbiology \& Immunology to prioritize future hires.

A major course offering change during the 2008-2012 period has been the development of a new Gross Anatomy course for students of the Physician Assistant Program. Previously, Biomedical and Physician Assistant students shared the same dissection-based course. Creation of the course was determined by curricular changes in the Physician Assistant Program. Yet, no new faculty hiring has occurred for this specific course.

Between 2008 and 2012, SBE's scholarly productivity—journal publications, manuscripts, books and book chapters, and presentations at professional meetings-increased by 58 percent. The new faculty hires also have contributed to SBE's research productivity and funding, with faculty research funding increasing by approximately 80 percent. Furthermore, with the increased research focus in neuroscience and clinical medicine, SBE faculty will be better positioned for future collaborative scholarly activity. With the goal of promoting student and faculty research exchanges and potential collaboration and support, the SBE established the Faculty Research Series. A minimum of one presentation per month has been planned and implemented since the fall of 2008. In addition, special sessions have been conducted by outside speakers, based on faculty interest. In addition, SBE faculty members, particularly the new hires, have made their knowledge available to the scientific community with the creation of the SBE Research Series.

In terms of metrics, SBE has used faculty mid-tenure evaluations, grants awarded, and articles published to examine faculty productivity. One of the newly-hired faculty members was granted tenure during this period, while two others have passed mid-term tenure evaluations. Two other faculty members will undergo that evaluation process this year. During the 2008-2012 period, three faculty members retired-including the Dean of SBE who served for 19 years-and one faculty member, from the Department of Physiology, Pharmacology, and Neuroscience, did not pass mid-term tenure evaluation and was dismissed.

New hires also present some challenges, such as laboratory readiness, facilitation, and availability of startup funding. In addition, they place an added burden on departmental infrastructure, e.g., administrative demands, integration of personnel. SBE departments also are challenged by the nonreappointment of research associates, with a detrimental effect on opportunities for Independent Research Study of Biomed students, and the departure of full-time college office assistants who have not been replaced. SBE has worked with the College to minimize these barriers to faculty research and teaching productivity.

Success should be credited to the valuable experience and dedication of faculty and staff who maintain and enhance teaching, engage in scholarly activities, and observe research standards while confronting decreasing budgetary and research funding and increasing needs. This is especially true in terms of teaching. Despite current restrictions, 280 students were placed in associated medical schools for the completion of their clinical medical training during 2008-2012. In addition, both Biomedical and PA students have achieved high scores in standardized examinations throughout these years.

Table F30.1: Biomedical Program Graduates by Medical School Placement, 2000-2011

|  | Year of Graduation |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Medical School | $\mathbf{2 0 0 8}$ | $\mathbf{2 0 0 9}$ | $\mathbf{2 0 1 0}$ | $\mathbf{2 0 1 1}$ | $\mathbf{2 0 1 2}$ | Total |
| Albany Medical Center | 9 | 6 | 10 | 9 | 9 | $\mathbf{4 3}$ |
| NY Medical College | 8 | 7 | 8 | 6 | 6 | $\mathbf{3 5}$ |
| New York University | 5 | 5 | 5 | 5 | 7 | $\mathbf{2 7}$ |
| SUNY Downstate | 21 | 23 | 30 | 27 | 20 | $\mathbf{1 2 1}$ |
| SUNY Stony Brook | 8 | 9 | 6 | 5 | 5 | $\mathbf{3 3}$ |
| Dartmouth Medical School | 5 | 4 | 6 | 3 | 2 | $\mathbf{2 0}$ |
| Commonwealth Medical College |  |  |  |  |  | $\mathbf{1}$ |

Note: In 2012, eight students had to delay entry to clinical training because of reduced slots at SBE's cooperating medical schools.

Chart F30.1: US Medical Licensing Examination Results for SBE, 2000-2012


Note: Individual USMLE Scores are missing for the following cohorts: 2000: 4; 2001: 2; 2002: 2; 2007: 1; 2009 : 1; 2010: 2; 2012: 6. In addition 11 students admitted in 2005 graduated in 2011. Of those, 8 were eligible to take the USMLE, Part I and 5 passed it (1st attempt). Also, one student was not eligible to take the exam in

Table F30.2: Cumulative Physician Assistant National Certifying Examination Program Performance Report for SBE PA Program

| Group | Mean Score | Standard Deviation | Percent of Candidates <br> Certified |
| :---: | :---: | :---: | :---: |
| All Programs |  |  |  |
| All Exams | 477 | 123 | $85 \%$ |
| First-time Takers | 504 | 112 | $92 \%$ |
| SBE PA Program |  |  |  |
| All Exams | 397 | 124 | $65 \%$ |
| First-time Takers | 487 | 112 | $92 \%$ |

Despite these successes, the SBE programs still faces challenges: achieving a smooth transition from senior faculty to junior faculty to meet teaching demands and pursue new directions in medical
education; and implementing a computer-based examination format, current in most medical educational schools. SBE is addressing these challenges by proposing a new structure for academic departments to facilitate and foster junior faculty mentoring and collaborative research. In the area of computerization of exams, SBE is renovating three instructional labs to allow for internet connectivity and direct access to the website of the National Board of Medical Examiners.

## Explore the Affiliation with an Accredited 4-year Medical School

SBE went through a preliminary assessment of the feasibility of becoming a regional campus of the SUNY Downstate Medical School. A group of external reviewers-professionals from nationallyrecognized medical institutions-conducted site visits, and defined the steps required to pursue accreditation by the Liaison Committee on Medical Education (LCME). These recommendations included the revision of the SBE curriculum to align with the changes taking place at national medical schools, e.g., integration of clinical and basic science education in the first years of medical studies, effective crosscourse coordination.

Following this preliminary assessment, the new Dean of SBE initiated a thorough strategic planning process in 2011. The SBE faculty assessed the current state of the School and considered ways of meeting current challenges and pursuing future opportunities. Key findings include:

1. There is a compelling case for sustaining and expanding SBE.

- The Association of American Medical Colleges predicts that the US will soon face a healthcare crisis: an overall shortage of physicians and an even greater lack of physicians from culturally and ethnically diverse backgrounds.
- Fifteen million more people will become Medicare eligible in the same time period.
- By 2015, there will be a nation-wide shortage of 63,000 physicians, which will worsen by 2025.
- One-third of current physicians will retire in the next decade.
- Increasing the number of minority medical school students and future physicians has three main benefits: improved access to health care for the under-served, increased patient satisfaction, and enhanced culturally competent care.

2. Sophie Davis is extraordinarily well positioned to leverage its mission, history, knowledge, programs, and experience to address significant societal issues:

- relieve severe shortages of primary care physicians that are projected for the region, state, and nation over the next two decades, particularly in under-served areas
- ensure access to medical education for students of limited financial resources and with backgrounds under-represented in the medical profession
" overcome the current "cooperating school model," which jeopardizes SBE and its mission
- alleviate student anxiety, which is particularly high among fourth- and fifth-year students
- enhance future recruitment and admission efforts

Thoughts of changing the current model toward becoming a fully accredited medical degree granting program have been considered in the past but have lacked the commitment and leadership necessary to do so.
3. New aspirational leadership within the CCNY and SBE are prepared to meet the societal challenges described and create a new sustainable model for the next generation of SBE students.

- To achieve a new sustainable operating model, SBE will need to challenge the status quo and address gaps in its funding, operations, curriculum, research, productivity, technology, facilities, and culture.
- To generate new sources of revenue, SBE and the College must design and implement a dedicated and focused fundraising effort.
- To achieve economies of scale and new efficiencies, SBE should consider restructuring and adding new IT products.
- To increase opportunities for students and enhance SBE's reputation, greater focus on research is needed.
- To overcome cultural barriers to progress, SBE should pursue enhanced accountability, transparency, and collaboration.

The SBE strategic planning process generated a set of recommendations from its faculty, staff, and students, as well as from external reviewers:

1. Further define and develop a model for becoming a fully accredited medical school, including:

- preserving and leveraging the Sophie Davis mission
- articulating the need and rationale for full accreditation
- determining the required costs and investments
- exploring and assessing options for affiliations and partnerships
- identifying the human resources necessary for clinical training
- ascertaining educational and research infrastructure and facility needs
- developing a comprehensive plan and timeline for achieving the model
- assessing faculty growth needs
- developing a promotion and tenure track for clinical and research faculty
- assessing the benefits and risks of the model

2. Comprehensively review the current curriculum and develop recommendations for improving medical education in the context of different models for LCME accreditation by:

- assessing curriculum content, structure, and delivery methods
- seeking an external perspective and review
- calculating future demands and reviewing emerging medical education curriculum models
- pursing trans-disciplinary integration
- considering clinical integration
- identifying options for expanding clinical training
- creating a curricular path to allow students to achieve a four-year BS degree
- designing a plan and process for evaluating academic programs
- developing a path for addressing curricular issues in the context of the contingency plans

3. In order for SBE to reach its aspirational goals, it will need to increase its financial resources from all potential sources, including:

- enhanced public support (either direct subsidy or project specific)
- increased public and private grants and contracts
- enhanced philanthropy and private gifts
- developed clinical practice plans and new revenue streams
- improved critical infrastructure to adequately pursue additional revenue streams

4. Develop effective and meaningful ways to evaluate the quality of all student services and programs:

- create effective measures of success for each student service
- develop corresponding processes for evaluating success against those measures
- assess and identify the type and quality of services and support that students need to achieve success in medicine

5. In terms of organizational culture and functioning, the strategic planning process led to the following recommendations:

- promote greater accountability, i.e., creating a formal performance planning process and reward system; providing clear job descriptions, expectations, and accountabilities for all positions
- Enhance leadership, i.e., identifying and articulating attributes and behaviors required for effective leadership; developing and implementing professional development and mentorship programs
- Increase transparency, i.e., coördinating and enhancing school-wide communications; creating opportunities, processes and structures to collect diverse opinions about significant issues affecting specific units and SBE
- Improve individual and group recognition, i.e., developing a formal rewards and recognition program
- Increase engagement and interaction, i.e., funding morale and team building activities, promoting and marketing the campus Employee Assistance Program

Furthermore, it was recommended that SBE engage an external review group to examine all functions of the School, to build support, and to gain advice and expertise as SBE moves towards the LCME accreditation as a full medical school. Among the external reviewers participating in this strategic planning process were Louise Arnold, PhD, Associate Dean for Research in Medical Education,

University of Missouri-Kansas City School of Medicine; Gary C. Butts, MD, Associate Dean for Diversity Programs And Policy, Mount Sinai School of Medicine Center for Multicultural and Community Affairs; William Galey, PhD, Program Director, Graduate and Medical Science Education, Howard Hughes Medical Institute; and Carol Storey-Johnson, MD, Senior Associate Dean for Education, Weill Cornell Medical College.

## Enhance Teaching of Biomedical Majors with Study Abroad

The Mack Lipkin Broader Horizons Fellowships were established in honor of Dr. Mack Lipkin '26, with the support from the Sergei S. Zlinkoff Fund for Medical Research and Education, the Ruth W. Dolen Foundation, and Friends and Family of Dr. Mack Lipkin. They fund international summer study and travel for several outstanding students per year. Through participation in a variety of activities sponsored by foreign institutions, students are exposed to diverse cultural and health care traditions and strategies for addressing health care problems. Approximately 90 percent of SBE students are either first- or secondgeneration immigrants, who may benefit from the knowledge and understanding of health beliefs among people within their ethnic/national groups. The main objectives of the Lipkin Fellowships at the SBE are:

- exposure to globalization in medical care among Biomedical majors
- broadening the scope of fellowship opportunities for students studying abroad
- providing student support and mentorship on research projects

Unfortunately, the Lipkin Fellowship is offered only to third- and fourth-year students, who must design a research project and submit a proposal to a panel of judges. Since funding is limited, the number of fellowships per year is dependent on the budgets of the top ranked proposals. After having completed their time abroad, students present their findings to members of the SBE faculty and students. However, the program funds the entire experience, including airfare, lodging, food, project-related costs, and incidentals. From the time of its inception, more than 120 students-approximately six to eight students per year-have benefited from the opportunity to "broaden their horizons." To date, students have traveled to every continent of the world except Antarctica, and a Sophie Davis alum has donated $\$ 5,000$ to fund one additional Lipkin Fellow since 2010.

Table F30.3: Placement of SBE Lipkin Fellows, Summer 2008-2012

| Location |  |
| :--- | :--- |
| Oaxaca, Mexico | Universidad Autónoma Metropolitana |
| Beijing, China | various Chinese hospitals (Peking University Health Science Center) |
| Gifu, Japan | Ashai University School of Dentistry |
| Hong Kong, China | Chinese University of Hong Kong |
| Barcelona, Spain | Public Health Service |
| Sydney, Australia | Cell Block Youth Health Center |
| Melbourne, Australia | Royal Melbourne Hospital |
| London, England | London School of Tropical Medicine \& Hygiene |
| Prague, Czech Republic | Institute of Chemical Technology |


| Location |  |
| :--- | :--- |
| Guateng Province, South Africa | Medical University of Southern Africa |
| Osaka, Japan | Osaka University |
| Yin Chuan City, China | People's First Hospital |
| London, England | Greater Ormond Street Hospital for Children, University Central London |
| London, England | London School of Tropical Medicine \& Hygiene |
| Prague, Czech Republic | Institute of Chemical Technology |
| Dhaka, Bangladesh | Center for Health \& Population Research |
| Guateng Province, South Africa | Medical University of Southern Africa |
| Lahore, Pakistan | Lahore General Hospital |
| London, England | Queen Mary's School of Medicine \& Dentistry |
| Visakhapatnam, India | Prema Hospital |
| New Delhi, India | Family Planning Services Project Agency |
| Taipei, Taiwan | Academia Sinica |
| Vitoria, Brazil | Vitoria State Medical School |
| Nicosia, Cyprus | The Cyprus Cardiovascular Disease Educational and Research Trust, <br> Department of Computer Science, University of Cyprus |

Funded projects have included "Development of a Method to Measure T Cell Activation in vivo," "Measuring Modified Nucleosides in Urine to Monitor Various Aspects of Metabolism," "Prevalence of Symptoms of Depression among Female Sex-Workers in Bangladesh," and participation in the Medical University of South Africa (MEDUNSA)'s public health research project, "Assessment of the Provision of HIV/AIDS Care Among Diverse Populations in Primary Care Settings."

During the next three years, SBE intends to increase student access to additional international programs and/or institutions and to strengthen faculty mentorship and advising to SBE students studying abroad.

## Additional Learning Strategies: Student and Community Co-Curricular Activities

SBE students participate in a variety of co-curricular activities, including student clubs and athletics. Within SBE, chapters of all of the major nationally affiliated organizations for medical students are available: American Medical Student Association, Latino Students' Medical Association, Student National Medical Association, American Medical Women's Association, and a local chapter of Physician's for a National Health Program. Other student organizations include Vision Latina, Biomed Asian Health Coalition, and Students Helping Out. All organizations within the program are overseen by a student government structure consisting of a president, vice-president/treasurer, secretary, and two representatives from each class.

Throughout their studies at CCNY, SBE students also are committed to sustained volunteer work with the American Red Cross, Reading for the Blind, Reach Out \& Read, volunteer ambulance corps, and area hospitals.

As medical and PA students, "Sophies" experience the common "rights-of-passage" ceremonies. The White Coat Ceremony at the beginning of a traditional medical school program is conducted prior to the beginning of the Gross Anatomy course for the SBE students, marking the beginning of medical school for SBE students. Following the anatomy course, SBE students organize the Appreciation Ceremony, an important part of the co-curricular program at SBE and traditional medical schools. The Class Day

Ceremony for the graduating students is scheduled on the afternoon of the CCNY commencement.

## Information Technology (IT)

Improve website, centralize email, increase availability of computers and "smart" classrooms for faculty, staff, and students.

To achieve its ambition of becoming a fully accredited medical school, SBE must provide state-of-theart computing services. Consistent with this goal, SBE has proposed to:

- identify the systems, hardware, and software necessary to provide outstanding academic experiences, maintain student records, etc.
- develop a model in which IT services are "cutting edge" and responsive to faculty, staff and student demands
- provide and expertise in multiple operating systems (PC and MAC)
- invest in IT skills training to leverage existing software

Since 2008, SBE has expanded the computer infrastructure throughout the SBE facility, with a particular emphasis on the Learning Resource Center (LRC) and the teaching labs. These improvements were intended to provide overall support for faculty teaching and research and to promote student success. Specifically, SBE faculty and students now have local access to academic subscriptions licensed to CCNY, expanded internet access for research purposes, and improved availability of a variety of online, course-specific learning materials and resources. Moreover, the SBE faculty are now able to access and store information through a secure server system, which includes centralized email and internet access.

## Learning Resource Center (LRC)

By 2006, the SBE had purchased new computers and software packages to its Learning Resources Center (LRC), which increased student access to computerized learning resources in the SBE facility. However, the use of technology in medical education has evolved rapidly, and SBE responded in spring 2013 by upgrading the LRC to better meet student needs. In particular, the LRC now has eighty laptops formatted to accommodate the National Board of Medical Examiners (NBME) online examinations.

In addition to the LRC computer lab upgrade and the creation of a dedicated examination rooms, SBE also has inventoried and upgraded computing and other equipment in the research laboratories at a rate commensurate with new faculty hires, thus expanding hands-on student training in basic science research.

To ensure access to learning resources for student training, course-related research, and other learning strategies, the LRC remains open, at minimum, two evenings each week.

## Conclusion

Since 2008, SBE has benefitted from both institutional- and school-level changes and from the SBE strategic planning process, which is defining the development of SBE a full-fledged medical school with integrated basic-clinical sciences education. Under the leadership of Dr. Maurizio Trevisan, a physician with extensive knowledge of national trends in medical education and expertise in course integration, SBE is well positioned to attain its goal. Its new faculty hires will contribute to SBE's future teaching programs while strengthening funded research and increasing opportunities for Biomedical and Physician Assistant students to work with full-time faculty who can bridge basic, clinical, and community perspectives in medical education and research.

Table F30.4: Sophie Davis School of Biomedical Education, Fall 2008 and Fall 2012 Comparison


Table F30.5: Physician Assistant Program, Sufficiency and Effectiveness of Faculty and Staff

| Year | 2009 | 2010 | 2011 | 2012 |
| :--- | :---: | :---: | :---: | :---: |
| Students Enrolled | 48 | 56 | 5 | 67 |
| Core Faculty | 5 | 5 | 13.80 | 6 |
| Student-Faculty Ratio | 12.00 | 11.20 | 29 | 11.17 |
| Clinical Sites | 30 | 31 | 4 | 54 |
| Staff | 3 | 3 |  |  |

## F.38. Grove School of Engineering Overview

In August 2008, Governor David A. Paterson authorized CCNY to grant doctoral (PhD) degrees in five engineering programs, effective fall 2008. This resolution had been approved by the Faculty Senate of CCNY in May 2007, followed by the CUNY Board of Trustees, the New York State Board of Regents, and the State Education Department. The affected doctoral programs are Biomedical Engineering, Chemical Engineering, Civil Engineering, Electrical Engineering, and Mechanical Engineering.

The change formalized what had been the de facto organization of engineering doctoral education at CCNY and CUNY since 1963. Although the CUNY Graduate Center follows a consortial model for its doctoral education, which involves active participation by doctoral faculty from across the CUNY colleges, the engineering program has been, from its inception, located only at CCNY.

Governor Paterson also authorized CCNY and the CUNY Graduate Center to grant jointly doctoral (PhD) degrees in four science programs-Biology, Biochemistry, Chemistry, and Physics-in August 2008. This resolution, too, was approved by the Faculty Senate of CCNY, the CUNY Board of Trustees, the New York State Board of Regents, and the State Education Department.

In contrast to engineering, joint CUNY and CCNY degree-granting authority for doctoral education in the sciences does follow the traditional consortial model, with active participation by doctoral faculty from across the CUNY colleges. However, CCNY is the only college to be granted the authority to offer joint PhD degrees in the sciences with the CUNY's Graduate School in recognition of CCNY's unique strengths in doctoral education in the sciences.

In response to a request from the Middle States Commission on Higher Education (MSCHE), CCNY submitted a Progress Report (March 2011) describing the changes and significant developments; the relevance of the two models of doctoral education in learning outcomes assessment at CCNY; and progress, as of spring 2011.

The MSCHE progress report followed the Grove School of Engineering's successful ABET accreditation visit in October 2010. For over a decade, ABET accreditation has required that each program provide a self-study, documenting educational objectives, program and course learning outcomes, program assessment, and evidence that assessment is used to improve the program. During the ABET accreditation visit, evidence-including randomly selected student transcripts and course work, was inspected by the ABET evaluation team. This process ensures that all Engineering faculty are well acquainted with learning outcomes assessment, that all undergraduate courses and syllabi have studentcentered learning outcomes aligned with program outcomes, and that the learning outcomes are assessed directly and indirectly on a regular basis. As a result, a culture of assessment was already in place when the Grove School of Engineering initiated learning outcomes assessment in the PhD programs.

Links to supporting documents, including an in-progress update for ABET, follow:

- ABET 2010 Institutional Update (2013, in progress)
- Grove School of Engineering Academic Assessment Summary and Reports (draft, 2011-2013)
- Biomedical Engineering Assessment Plan and Reports (draft, 2011-2013)
- Chemical Engineering Assessment Plan and Reports (draft, 2011-2013)
- Civil Engineering Assessment Plan and Reports (draft, 2011-2013)
- Electrical Engineering Assessment Plan and Reports (draft, 2011-2013)
- Mechanical Engineering Assessment Plan and Reports (draft, 2011-2013)


## F.43. Coördinated Undergraduate Education (CUE)

The CUNY Office of Undergraduate Studies convenes the deans and directors of undergraduate education from across CUNY's 18 undergraduate colleges to share expertise, resources and high impact practices. The goal is to better coordinate the undergraduate experience in support of student success. For information about CUE at CUNY, visit http://www.cuny.edu/about/administration/offices/ue/cue.html. CCNY's annual CUE report for 2012 follows, and conforms to CUNY's prescribed report format.

## CUE Funding Report for 2012

Note: The purposes of this report are to specify institutional priorities for CUE funding, document CUEfunded activities, and report on progress towards goals and challenges related to CUE-funded activities. This report is not intended to provide a comprehensive account of undergraduate priorities, high impact practices, or progress toward particular institutional goals, other than those established specifically for CUE-funded activities.

COLLEGE: The City College of New York (CCNY)
REPORT SUBMITTED BY: Joshua Wilner and Ana Vasović
DATE SUBMITTED: July 31, 2012
Table F43.1: ENROLLMENT DATA (source: OIRA)

|  | Fall 2009 | Fall 2010 | Fall 2011 |
| :---: | :---: | :---: | :---: |
| undergraduate enrollment (headcount) | 12,878 | 12,263 | 12,863 |
| undergraduate enrollment (FTE) | 10,082 | 9,809 | 10,089 |

Table F43.2: PERSISTENCE/BASIC SKILLS DATA (source: OIRA 2011-2012 Preliminary PMP)

| Entering Class | Fall 2008 | Fall 2009 | Fall 2010 |
| :---: | :---: | :---: | :---: |
| one-year retention rate (baccalaureate programs) | 79.5 | 83.3 | 85.7 |
| non-ESL SEEK students who pass all basic skills <br> tests within one year (baccalaureate programs) <br> Entering Class | Fall 2007 | Fall 2008 | Fall 2009 |
| ESL students who pass all basic skills tests within <br> two years (baccalaureate programs) | 92.3 | 95.2 | 87.5 |

Table F43.3: GRADUATION DATA (source: OIRA 2011-2012 Preliminary PMP)

|  | Entering Class <br> of Fall 2003 |  | Entering Class <br> of Fall 2004 |  |
| :---: | :---: | :---: | :---: | :---: |
| Entering Class <br> of Fall 2005 |  |  |  |  |
| six-year graduation rate | 35.0 | 38.9 | 40.0 |  |
| (baccalaureate programs, institution rate) |  |  |  |  |

## CUE BUDGET REPORT

Table F43.4: TOTAL 2011-2012 CUE ALLOCATION: \$593,529 (source: OAA)

| Program* | CUE allocation | Total program costs+ |
| :---: | :---: | :---: |
| Immersion (summer) | \$ 5,174 | \$ 5,174 |
| Immersion (summer enrichment) | 18,688 | 18,688 |
| Immersion (summer other costs) | 28,171 | 28,171 |
| Immersion (winter) | NA | NA |
| Immersion (winter enrichment) | 19,739 | 19,739 |
| Immersion (winter other costs) | 29,280 | 29,280 |
| Immersion-Other (fall, spring, June) | 22,941 | 22,941 |
| Immersion-Other (fall, spring, June enrichment) | 28,539 | 28,539 |
| Immersion-Other (fall, spring, June other costs) | 145,059 | 145,059 |
| Summer Programs: SEEK/CD (sponsored by Gateway Academic Center) | 25,115 | 25,115 |
| Writing Across the Curriculum (WAC) Writing in the Disciplines (WID) |  | 100,000 |
| Center for Teaching and Learning (CETL) | 80,000 | 188,000 |
| Learning Communities (other than first-year) |  |  |
| General Education Reform/Assessment | 25,000 | 25,000 |
| Undergraduate Research |  |  |
| Academic Support (learning/ writing/ math centers; other tutoring, supplemental instruction or advising not associated with specific programs) <br> SSSP/Gateway Sponsored Enrichment Courses Writing Center/Gateway Writing Center | $\begin{array}{r} 2,311 \\ 4,124 \\ 90,500 \end{array}$ | $\begin{array}{r} 2,311 \\ 4,124 \\ 236,025 \end{array}$ |
| College-Specific Programs-Other <br> (FIQWS faculty training, peer mentoring, etc.) | 38,000 | 38,000 |

* Include program costs related to faculty development (other than direct allocation to Center for Teaching and Learning), curriculum development and assessment. Do not include any CUE funding received in January 2011 for special projects. Enter "N/A" if CUE funding was not allocated to a particular program area.
+ Estimated total program costs are based on available data.


## OVERALL CUE FUNDING: INTENDED OUTCOMES AND PRIORITIES

Provide a brief overview of your priorities and intended outcomes for 2010-2011 CUE funding, as established at the beginning of the funding period:

The principal targets of CUE funding were the College's Writing Center, Gateway Academic Center (GAC), and Center for Excellence in Teaching and Learning (CETL), with a smaller amount used for General Education assessment and teacher training.

## Gateway Academic Center (GAC) Intended Outcomes

- To connect the GAC student securely to the collegiate environment
- To mentor the GAC student in determining a degree plan that is based on academic strengths but also a reflection of personal and professional aspirations


## Writing Center Intended Outcomes

- To provide tutoring services aligned with and supportive of the General Education and departmental learning outcomes and coordinated with other student support services


## Center for Excellence in Teaching and Learning (CETL) Intended Outcomes

- To provide full- and part-time faculty development in collaboration with the General Education committee, the Office of Assessment, the Office of Research Administration, the Office of Student Affairs, the Office of Enrollment Management, and the Provost's Office
- To work with faculty to convert courses to hybrid/online formats and incorporate instructional technologies into the curriculum


## General Education Intended Outcomes

- To assess the effectiveness of specific elements of the General Education curriculum in furthering broad learning objectives and share findings with departments to inform pedagogical improvements
- To assist faculty in developing materials and methods conducive to General Education outcomes


## CUE-FUNDED PROGRAMS: DETAILED REPORTING

Detailed reporting frameworks are provided for Immersion and WAC/WID programs below. For all other CUE-funded program areas as indicated in your college's specific budget report above, provide a brief description of activities/ participants, intended outcomes for the program area, evidence of progress toward outcomes and challenges.

## IMMERSION

Table F43.5: ENROLLMENT AND PERSISTENCE DATA (source: OIRA/ OAA)

| \# Seats |  | \# Headcount | Immersion <br> need* $^{*}$ | $\%$ <br> Completed | \#/ \% Enrolled <br> (fall semester) | Immersion <br> need $^{*}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| summer <br> 2010 | 260 | 254 | 32.9 | 56.9 | $227 / 89.4$ | 6.5 |
| summer <br> 2011 | 424 | 412 | 22.7 | 76.7 | $398 / 96.6$ | 7.9 |

[^1]Table F43.6: DETAILED PROGRAM COSTS

|  | Instruction |  | Tutoring | Administrative |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Summer 2011 | 23,862 | 9,071 | 16,272 | 2,828 | 52,033 |
| Fall 2011 | 18,926 | 9,834 | 22,005 | 5,130 | 55,895 |
| Winter 2012 | 19,739 | 10,083 | 17,127 | 2,070 | 49,019 |
| Spring 2012 | 21,795 | 16,559 | 33,731 | 14,351 | 86,437 |
| June 2012 | 10,758 | 9,444 | 17,580 | 16,425 | 54,207 |
| SEEK/Gateway <br> (summer 2011) | 25,115 | NA | NA | NA | 25,115 |
| Student Support <br> Services/Gateway | 2,311 | NA | NA | NA | 2,311 |
| Writing Center/Gateway | NA | NA | 4,124 | NA | 4,124 |

+ Other Than Personnel Services (OTPS)


## Intended Outcomes for Immersion

- Ready entering students for college-level work in math, reading, and/or writing, and thus prepare them not only to pass the exit exams in the workshops, but also to progress in a timely fashion throughout the entire sequence of requisite coursework.


## Evidence of Progress Towards Outcomes

- There has been an incremental increase in the pass rate in developmental math coursework from 37 percent in 2010 to 50 percent in 2011. This is a dramatic increase. CCNY attributes it to the new tutoring procedures and the Peer-Led Undergraduate Study Hall (PLUSH). PLUSH mandates student attendance at daily homework labs, which are closely supervised by a senior tutor and several subordinate tutors. Math 71 Workshop pass rates have increased from 38 percent in 2010 to 46 percent in 2011. Math 80 Workshop pass rates are inching upwards (~50 percent).
- The Reading and Writing pass rates decreased from 54 percent in 2010 to 34 percent in 2011. This may be due to a change in the reading and writing components of the CUNY Assessment Tests (CATS). CCNY is currently reviewing the workshop syllabi in order to address this issue.


## Challenges

- The poor math skills of incoming students intent on STEM careers is a perennial issue. The brevity of the immersion session is problematic in preparing students with serious deficits for careers in the sciences or engineering.
- The poor study skills of the students are a persistent issue, as are the distractions of work and/or family obligations.
- To allow students greater access, the GAC should be open evenings and weekends.


## CUE-FUNDED PROGRAM AREA: Gateway Academic Center (other than Immersion)

## Description of Activities/Participants

The Gateway Academic Center (GAC) is dedicated to serving students who have not yet decided on a major. The center provides ongoing advising and mentoring as well as an array of services, such as group advising, skills workshops, special topic sessions, and orientation seminars.

## Intended Outcomes for the Program Area

- To familiarize students, through individual and group advising, with information that facilitates timely progress towards a degree
- To connect students securely to the collegiate environment through tutoring, preparatory workshops, and special events
- To assist students in determining a degree plans that are based on academic strengths and a reflection of personal and professional aspirations
- To improve pass rates in developmental coursework offered through the GAC, including Math 71, Math 80, ESL Reading and Writing 60, and non-ESL Reading and Writing 60


## Evidence of Progress Towards Outcomes

- The GAC advises approximately 2,100 students, with more than 8,500 visits logged in year 20112012.
- Students who attended the sequential academic skills workshops from 2010 to 2011 increased their overall GPAs by 155 percent.
- The first-year persistence rate improved from 79.5 percent in 2008 to 83.3 percent in 2009; in addition, the average number of credits earned by first-time freshmen rose from 23.2 credits in 2009 to 24.1 credits in 2010.
- Approximately 900-1,000 students participated in workshops, tutoring, and special events in year 2011-2012.


## Challenges

The greatest challenge is the number of students who are determined to pursue STEM careers, even though they are below college math proficiency level and repeatedly fail to meet minimum standards to pursue those fields. The challenge of the GAC is to redirect these students to majors that they can complete successfully before they exhaust their financial aid and morale. At this juncture, the resources are lacking to do an in-depth study tracking the success of pre-engineering students who switch degree goals and undecided students who make a decision after their tenure in the GAC. The goals of the coming fiscal year are the installation of an ACCESS database tracking the GAC cohort and the securing of adequate resources adequate for an in-depth evaluation.

## WRITING ACROSS THE CURRICULUM (WAC) and WRITING IN THE DISCIPLINES (WID)

Table F43.7: WRITING INTENSIVE (WI) COURSE INFORMATION (Fall 2010 source: OAA)

|  | Fall 2010 | Fall 2011 |
| :---: | :---: | :---: |
| \# WI courses required for graduation | $4-10$ <br> (depending on degree) | $4-10$ <br> (depending on degree) |
| Faculty certified to teach WI (yes/no) | No | Yes |
| \# faculty certified to teach WI courses | N/A | 4 full-time, 14 part-time |
| Courses certified as WI (yes/no) | No | Yes |
| \# courses designated as WI | 59 | 59 designated, 11 certified |
| \# of WI courses offered | 40 | 40 |
| \# of students in WI courses | 8,934 | 8,968 |

* Data includes enrollment in FIQWS (Freshman Inquiry Writing Seminar).

Using CCNY definition of WAC certified

## Table F43.8: DETAILED PROGRAM COSTS

WAC/WID activities were not funded through CUE in 2011-2012.

| Personnel |  |  |  |
| :---: | :---: | :---: | :---: |
| fall 2011 | N/A | N/A | N/A |
| spring 2012 | N/A | N/A | N/A |
| other | N/A | N/A | N/A |
| Total | N/A | N/A | N/A |

## Intended Outcomes for WAC/WID

N/A

## Evidence of Progress Towards Intended Outcomes

N/A
Challenges
N/A

## OTHER CUE-FUNDED PROGRAMS

For all other CUE-funded program areas as indicated in your budget report above, provide a brief description of activities/ participants, intended outcomes for the program area, evidence of progress toward outcomes and challenges. Provide information only for programs funded by CUE.

## CUE-Funded Program Area: Center for Excellence in Teaching and Learning (CETL) Faculty Development Initiatives

## Description of Activities/Participants

- CETL expanded its program offerings, increased participation in its workshops, explored new technologies for teaching and learning, and continued its collaborations with departments and other college-wide initiatives.
- CETL conducts twelve program series in many areas of faculty development in collaboration with the General Education committee, the Office of Assessment, the Office of Research Administration, the Office of Student Affairs, the Office of Enrollment Management, IT, and the Provost's Office.
- In addition to these workshops, CETL offers one-on-one faculty assistance in technology implementation and Blackboard ${ }^{\text {TM }}$, screen capture software, and webinars. Faculty also may arrange appointments with CETL staff to review teaching strategies and observe their classroom teaching. CETL plans to increase its services to faculty in the next year with instruction on making digital learning objects, using Web 2.0 and social networking tools, and creating e-books for their courses.


## Intended Outcomes for the Program Area

- Outreach to faculty and departments concerning faculty training
- Increase the duration of CETL workshops and programs (semester-long)
- Expand hybrid/and online in terms of faculty trained and courses offered
- Explore new technologies for teaching and learning
- Develop a comprehensive and detailed strategic plan for CETL
- Target adjunct faculty with specific programs for their needs


## Evidence of Progress Towards Outcomes

- Over 1,300 participants attended 110 workshops
- Expanded Advisory Board membership with greater faculty participation
- Conducted and archived workshops using webinar software
- Completed technology training room for hands-on workshops
- Started second year of faculty cohorts (three cohorts of ten instructors each) exploring hybrid teaching
- Started a strategic planning process for the hybrid/online initiative


## Challenges

- Significant staffing and budgetary constraints limit what CETL can do to support faculty
- Currently CETL is largely staffed by students, who support the work of a director and one full-time instructional technologist. CETL is seeking the addition of a full-time Blackboard ${ }^{\text {TM }}$ support person and a second instructional technologist to supplement the work of student CETL technologists. CETL also is proposing a student technology mentoring program to assist faculty in and out of the classroom
- Attracting participants to CETL events remains a problem given competition with many other campus events, departmental meetings, and classes held during CETL workshop hours


## CUE-Funded Program Area: Writing Center

## Description of Activities/Participants

The Writing Center serves more than 3,000 students per year. Students visited the Center for one-onone tutoring 7,540 times in AY 2011-2012. An expanded series of writing workshops drew 541 participants during the spring 2012 semester, with more than half of the total number of students attending two or more workshops.

## Intended Outcomes for the Program Area

- Align services with, and in supportive of, the General Education and departmental learning outcomes in writing
- Certification of tutors in accordance with College Reading and Learning Association (CRLA) standards
- Offer additional tutoring during peak periods, including spring break, Fridays, and Saturdays, and the final exam period.


## Evidence of Progress Towards Outcomes

- A working group charged with revising the Writing Center's instructional and tutor training materials has inventoried and assessed all existing materials and has started reworking materials as required to align them with the General Education writing rubric.
- A working group charged with developing the tutor certification program has outlined the "Level I" tutor training curriculum and is drafting learning objectives and workshop materials. The first cohort of tutors will be trained fall 2012.
- The Center was open for tutoring: during spring break; on Fridays and Saturdays during the fall and spring semesters; and for four days beyond the last day of classes.


## Challenges

- Adequate technical support for TutorTrac ${ }^{\text {TM }}$, the newly-implemented tutoring management software.


## CUE-Funded Program Area: General Education

## Description of Activities/Participants

- Outcomes assessment in General Education courses (Participants are full- and part-time faculty.)
- FIQWS faculty development workshops (Participants are full- and part-time faculty, General Education director and coordinator.)
- Peer mentoring for new students (Participants are incoming first-time freshmen and peer leaders.)
- FIQWS enrichment activities, e.g., guest speakers, 92 Street Y events, museum visits (Participants are students and faculty.)
- Steering of CUNY Pathways planning and processing, in coordination with faculty governance bodies (Participants are General Education director and coördinator, faculty, and college office assistants.)


## Intended Outcomes for the Program Area

- Continue assessment of student progress relative to General Education learning outcomes in FIQWS and selected Perspective courses.
- Share assessment findings with departments to inform pedagogical improvements.
- Introduce FIQWS faculty to course-wide goals, structures, resources, and strategies for successful collaboration; initiate collaboration sessions for syllabus development to improve communication and coordination between FIQWS co-teachers.
- Provide peer mentoring to new freshman at orientation and during the first semester of study.
- Expand tutoring support for General Education offerings.
- Offer enrichment opportunities for FIQWS students.
- Collaborate with faculty and chairs to develop plan for submission of materials; assist faculty in form completion; submit materials to the CUNY SharePoint system.


## Evidence of Progress Towards Outcomes

- Assessment data were used to develop recommendations for course/pedagogy improvements. The latter were then approved by the General Education Committee and introduced in faculty development sessions.
- Seventy FIQWS faculty, including 86 percent of all new FIQWS faculty, have thus far participated in faculty orientation sessions. There will be one more orientation session in August.
- A handbook for FIQWS instructors was shared with instructors during the workshops in preparation for the fall semester.
- Peer mentors provided over 300 hours of mentoring during the fall semester.
- Eight FIQWS sections participated in activities, such as museum visits, 92 Street Y events, Broadway performances, and guest speakers in class.
- As of the end of June, approximately 25 percent of the College's Pathways curriculum will have been submitted to the SharePoint for approval. Most of the other submissions will be completed by late summer or early fall. The College also has prepared and submitted for approval a list of "STEM waiver courses."


## Challenges

- Maintaining a high level of full-time faculty participation in FIQWS.
- Providing the right number of seats in General Education courses, given limits on space, funding, and trained faculty, as well as variability in student demand.
- Ensuring a cohesive and effective writing intensive curriculum.
- Strengthening interactive pedagogy in science courses for non-majors.


## I.1. General Operating Budget Calendar

## Table 11.1: General Operating Budget Calendar

The fiscal year runs from July 1-June 30. The College receives its funds from New York State; its fiscal year runs from April 1-March 31. This table presents a month-by-month list of activities related to budget development. The information in italics denotes activities engaged in by the State and CUNY; the information that is in regular typeface identifies the College's activities.

| Month/Date | New York State, CUNY, and CCNY Activities |
| :---: | :--- | \left\lvert\, \(\left.\begin{array}{|l|l|}\hline April 1 is the NY State deadline for budget adoption. If the deadline for budget adoption is not <br>

met, the budget is financed through continuing resolutions until a budget is adopted. CUNY <br>
makes targeted allocations/other changes through monthly budget certifications. <br>
Reimbursements for CUNY share of PSC sabbaticals, summer chair expenses, fuel oil and other <br>
allocations and/or adjustments are included. <br>
Based on anticipated allocation, CCNY collects/reviews budget requests for next fiscal year from <br>
all departments. Budgets for philanthropic funds are developed. All requests are asked to be <br>
aligned with CCNY priorities. All requests are to be justified and include exploration of other <br>
funding options, like reallocating resources. Preliminary budgets for the next fiscal year are <br>
distributed to divisions.\end{array}\right.\right\}\)

## I.6. Office of Research Administration

The City College Office of Research Administration (ORA), an administrative unit of the Office of the Vice President for Academic Affairs, is responsible for providing the campus with professional guidance and administrative support for all sponsored research activities. Pre-award services include identifying potential external funding sources; providing advice and assistance on proposal development; preparing budgets and other sponsor forms; coordinating online proposal submission; and interpreting sponsor guidelines and CUNY and CCNY policies. Post-award services include providing guidance on Research Foundation account management; assisting with sponsor agency requirements and documentation; disseminating fiscal information; and preparing annual reports.

A brief overview of the College's external funding for FY 2008 through FY 2012 follows.
Table I6.1: External Funding, Fiscal Years 2008-2012

| Fiscal |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Year | City | Collaborative | Corporation <br> Pass- <br> Through | Federal | Private <br> Pass- <br> Through | PSC- <br> CUNY | State | Total \$ |
| 2008 | $6,337,384$ | 75,000 | $1,779,646$ | $28,117,150$ | $4,103,105$ | 414,761 | $5,081,815$ | $45,908,861$ |
| 2009 | $7,034,516$ | 20,000 | $2,068,355$ | $37,125,096$ | $4,652,448$ | 409,254 | $4,308,931$ | $55,618,600$ |
| 2010 | $9,924,891$ | 20,000 | $1,847,692$ | $48,073,269$ | $5,549,168$ | 338,560 | $3,375,472$ | $69,129,052$ |
| 2011 | $4,887,544$ | 60,000 | $1,994,672$ | $48,428,139$ | $6,411,552$ | 374,388 | $4,699,622$ | $66,855,917$ |
| 2012 | $4,039,627$ |  | $2,891,187$ | $43,023,982$ | $6,264,545$ | 362,153 | $3,758,874$ | $60,340,368$ |
| Total \$ | $32,223,962$ | 175,000 | $10,581,552$ | $204,767,636$ | $26,980,818$ | $1,899,116$ | $21,224,714$ | $297,852,798$ |

The complete Annual Report for Fiscal Year 2011-2012 is available online:
http://ora.ccny.cuny.edu/wp-content/uploads/2012/11/AnnualReport2011to2012.pdf

An archive of the Research Administration's annual reports for fiscal years 2001 through 2012 also is available online at http://ora.ccny.cuny.edu/?page id=132.

## J.10. President's Academic Roundtable Report

## Academic Roundtables Report

July 18, 2012

## Introduction

The City College of New York convened a set of Academic Roundtables on May 11, 2011, involving a broad cross-section of the faculty as well as key members of the administrative staff. The purpose of the roundtables was to recommend actions for consideration as academic priorities for the College. These sessions were conceived as a next step from initial deliberations of an Academic Working Group, which for the past academic year has focused on different aspects of the College's current circumstances and future prospects. The Academic Working Group identified the four themes that would be addressed by the roundtables. These were: (1) improving student success; (2) improving faculty satisfaction; (3) developing a more supportive research environment; and (4) achieving a clearer alignment of resources and academic responsibilities.

Roundtable participants were welcomed by President Coico, who expressed her hope that the discussions would produce open dialogue regarding the actions that the College should be considering as vital elements of its strategic planning for the next several years. Participants were asked to view the roundtable discussions as an opportunity to stress actions that are particularly important to members of the faculty. These discussions would make it possible for the administration to ensure that core elements of the strategic plan would be aligned with faculty priorities.

The City College Academic Roundtables were facilitated by the Learning Alliance for Higher Education. Robert Zemsky, Professor and Chair of the Learning Alliance, outlined the process of the four roundtable sessions, which he facilitated along with his colleagues, Ann Duffield, Joan Girgus, and Gregory Wegner. During the course of the day, the concurrent roundtables discussed each of the four themes described above. This summary document identifies broad categories of proposed initiatives within each of the four themes, accompanied by representative examples of actions that the roundtables identified as possible means of achieving particular initiatives.

## Roundtable Results

A. Improving Student Success

Retention and degree completion are important measures of educational success. One of the imperatives confronting the College is to increase the rate of persistence and degree completion among its undergraduate students. With a six-year graduation rate of approximately 35 percent in June 2009, 38.9 percent in June 2010, and 40 percent in June 2011, the College falls short of what is found both within CUNY and nationally [56 percent]. A recent analysis of undergraduate retention rates indicates that students are even less likely to persist if the College is not their first choice. Furthermore, a set of student focus groups convened prior to the roundtables indicated
that even students who have chosen the College as their first choice convey somewhat less enthusiasm about their educational experience than one might expect. The recommendations to improve student success that are described below are based upon the premise that the College will continue to be committed to its original and ongoing legacy of reaching out to those individuals who have not historically experienced the same degree of educational opportunity and advantage as other students.

Recommendations for increasing student success and representative examples of possible actions are listed below.

## 1. Develop support systems to increase the likelihood that newly admitted first-year and transfer students will persist to and earn a degree from City College

a. Create an early-warning system for students who are experiencing difficulty and implement effective intervention strategies.
STATUS: An early warning system consisting of mid-semester conferences and status reports for all students in FIQWS has been established to trigger intervention strategies as warranted for students. A resolution passed in Faculty Senate now requires faculty to give one graded assessment to students prior to the last day to request a withdrawal ("W") from the class so that students receive feedback on performance in the class.
b. Strengthen the quality of advising that students receive throughout their college careers, to help them achieve both short-term and long-term success.

STATUS: Advisors meet regularly as a college-wide group to better coordinate advising efforts and collaborate with each other as well as with the Office of Undergraduate Studies. An advising assessment committee with representatives from all units was created and charged with developing common goals for campus-wide advising and then designing an assessment project to measure the goals. A coordinator of the advising group was appointed to oversee and enhance transfer advising. An "Ask Edward" on-line advising site has been set-up.
c. Provide all full- and part-time faculty with a list of academic support resources that can be provided to students. (This is particularly important for first- and second- year students whose persistence is a significant challenge.)
STATUS: A project to compile the list of academic support services and to provide this list to students and faculty was completed. The list of academic support services is available on the City College website and has been broadcast to all faculty and chairs. This information also is handed out at new student orientation.
d. Develop improved data systems throughout the College to support the processes of advising, monitoring, and academic progress.
STATUS: A project to review, compare, and correct curriculum data in the College's degree audit software, DegreeWorks ${ }^{\text {TM }}$, with departmental curricula was completed, and a process to ensure systems are updated when curriculum changes are made has been established. A committee to improve communications to students regarding important college-wide grading dates has been developed.
e.

Initiate a process in which each department/program develops a plan for student graduation in eight semesters and then offers the courses that follow the plan.
STATUS: All departments have submitted four-year degree completion plans, which have been reviewed, reformatted for consistency, and modified to ensure that the plans all have the accurate number of credits, General Education courses, higher level courses, etc. As each department has finalized its plan, the curriculum displayed in DegreeWorks ${ }^{T M}$ has been reviewed and corrected to ensure agreement. A process has been established to guarantee that all program modifications go through a single person and that person approves the curriculum changes and updates DegreeWorks ${ }^{\text {TM }}$ at the same time. In addition, the plans will all be put on the City College web site and will be easily accessible to students. Students will be encouraged to print out the report generated by DegreeWorks ${ }^{\text {TM }}$ on an annual basis and to meet with their advisors.

## 2. Provide increased mentorship (including peer mentorship) to support students in their academic persistence and success

a. Establish and implement procedures whereby students experience dedicated support and mentoring, as needed, throughout their undergraduate careers.

STATUS: A group of City Peers were recruited and trained this past year to mentor all first-year freshmen in their FIQWS classes. A transfer student orientation was held with an introduction to various resources available. Firsttime freshmen who also have completed College Now or other CUNY pre-college courses were invited to training and group opportunities. In the coming year, advisors will be taking more of a role as mentors. Student Affairs has now designed a process by which each incoming student will be assigned to a group of 20 students led by a trained student mentor. This student mentor will stay will the student all year. All incoming students will have the common experience. In addition, the College is developing a Career Development Program for STEM students - the STEM Career Development Institute - and will open the program
to up to 100 students this fall. Support will be solicited from faculty, staff and alumni.
b. Mentoring programs suggested include the following
i. Establish a process to enable faculty, staff, and appropriate administrators to be assigned to serve as mentors/advisors for small groups of students; ensure that the process is guided by clear goals and measurable outcomes.
STATUS: A faculty member from Education and an administrator from Environmental Health and Safety are developing a program that will encourage faculty and staff to provide both mentoring support as well as financial support in the form of scholarships to individual students.
ii. Ensure that tenured faculty members mentor undergraduates on a regular basis.
STATUS: An undergraduate research coalition has been formed; one of their objectives is to establish a handbook for mentoring undergraduate research. Workload guidelines have also been established that now recognize faculty mentoring.
iii. Train and utilize student peer mentors (both undergraduate and graduate) to increase a sense of community within the classroom.
STATUS: Student peer mentors are being used in FIQWS classes and CCAPP programs. In addition, the scalability of the PLTL model is being evaluated for other courses in the Gen Ed curriculum.
iv. Help first semester freshmen and transfer students connect to support groups of peers, faculty and staff.
STATUS: Several programs have been started to help new students connect to the College including expanded freshmen orientations, new Transfer student orientations, skill training programs for athletes having GPAs below a certain point, Peer Led Team Learning (PLTL) for chemistry students and on-line programs for math students. Student Affairs has designed a process where each incoming student will be assigned to a group of twenty students led by a trained student mentor. This student mentor will stay will the student all year. All incoming students will have the common experience. In addition, through the Black Male Initiative, support groups have been established to help underrepresented minorities. Discussions are underway with the Library to develop a training program for new transfer students on how to effectively use the library for research.
v. Provide appropriate and ongoing professional development to enhance and increase the effectiveness of mentors and mentoring programs.

STATUS: Training programs have been developed to help the peer mentors and the peer leaders enhance their effectiveness. In addition, training will also be provided to faculty, staff and alumni who volunteer to serve as mentors to students.
c. Develop shared faculty/student spaces to enhance a sense of community and to support mentoring opportunities.
STATUS: The Gateway Advising Center has adopted a Peer Led Undergraduate Study Hall (PLUSH) process and other venues for PLTL are being evaluated. A "safe space" has been created for students and the College is also working on creating a $24 / 7$ room.

## 3. Develop strategies to convey CCNY's unique and distinctive strengths to prospective students.

a. Increase the College's reputation as the "College of First Choice" by:
i. Conveying a sharper set of messages to prospective students about what the College is-its unique strengths and heritage, and the range of opportunities offered to students.

STATUS: A new marketing and brand-imaging campaign is underway with a focus on prospective students. New recruitment and advertising materials have been completed and are being used for this recruitment round. In fall 2012, the top layers of the new web site containing the new messaging will be launched to support the brand marketing.
ii. Utilize the College's story, relating key elements of its history and the legacy of its students as a way to generate community pride and to attract appropriate students who will thrive at CCNY.
STATUS: The new campaign is designed to generate a sense of pride among current students and includes rebranding our students as strivers, which will again be reflected on the web site. Communication to and about students, such as the "Great Grads" program and the "CCNY Success Stories," have been created on posters and are displayed throughout campus.
iii. Work to distill and convey distinctive strengths of each of the academic programs as exemplified by successful graduates.
STATUS: A career exploration project to showcase successful graduates by major is underway. To date, over 100 students have responded and
posters have been created about the students. The Graduate Student Council organized an open event showcasing work "in-and-across" disciplines in our graduate programs. Coverage of our success with masters and PhD programs has increased.
iv. Develop a cohort of trained volunteer alumni who will serve as CCNY Ambassadors to prospective students
b. Provide funding to support a branding and marketing campaign focused on distinguishing CCNY from CUNY.

STATUS: A branding and marketing campaign with differentiation as one objective is underway. Titling for the campaign focuses on City College as "the original, still meeting NYC needs."
c. Build an admissions process that allows CCNY to be more effective in recruiting the most promising undergraduate and graduate students from New York and the surrounding areas.
STATUS: A study has shown that student persistence and success are linked to students who are more prepared academically and have higher SAT and CAA scores. A proposal to raise minimum SAT scores without impacting the ethnicity/diversity of the student population in each of the schools/divisions was developed and endorsed by CLAS. In addition, the College has increased the number of honors students in both the Honors College as well as the Honors Program.
i. Consider creating an application process that requires more of students than simply checking a box for "CCNY in t"he common CUNY application. STATUS: The common application for CUNY cannot be altered; however, an essay is required for application to the Honors College and Honors Program. The MyCITY online indication of early interest in CCNY, even before the application process, allows Admissions to target communications specifically geared to students' individual interests and backgrounds. In addition, City College has implemented a new on-line scholarship application and selection process. Selection criteria are identified in advance and various essays and information are required to be completed before a student is selected to receive a scholarship(s).

## 4. Seek to attract students who exhibit characteristics most conducive to academic success at both the undergraduate and graduate levels.

a. Evaluate the admissions process with the aim of developing a formula which will attract the types of students that have been successful at CCNY.

STATUS: A study has shown that students who are more academically prepared have a higher rate of retention and student success, and the College is increasing SAT scores (See 3.c.i. above.) in each of the schools/divisions without negatively affecting student ethnicity/diversity. In addition, the average CAA has also increased. A strategy to better utilize scholarship money is in development. This past year, the number of honors students increased, and the College has recruited an even higher number for fall 2012. A grant aimed at mentoring talented under-represented high school students interested in the STEM disciplines has been submitted. Analyses and tracking programs of students who took College Now courses and came to City College are being established.
b. Design challenging master's level programs and recruit excellent graduate students so that faculty interest in graduate programs is elevated.

STATUS: This past year, faculty have worked hard to enrich our program offerings and we have received approval for a dual BS/MS degree program in Chemistry, as well as new programs in three additional areas: an MS in Earth Systems and Environmental Engineering; an MA in Branding and Integrated Communications; and a BS and MS in Biotechnology. The College is also establishing three new multidisciplinary research groups: Media Arts; the Study of Global Change; and Urban Mathematics Education.
c. Highlight master's programs that are more career-focused (i.e., professional master's degrees) to attract more graduate students.
STATUS: A multi-disciplinary program in Sustainability has been created and is now in its third year. The College now has a new Digital Art MFA program and has also now received approval for an MA in Branding and Integrated Communications, an MS in Biotechnology and an MS in Earth Systems and Environmental Engineering.
d. Develop and apply predictive models for student success and seek out more students whose characteristics are consistent with retention and degree completion at CCNY.
STATUS: Analyses of freshman retention and success have shown that creating cohorts or linking students to "communities" having similar interests also improved student success. For example, while the overall student 2005 cohort had a 40 percent 6 -year graduation rate, the 2005 cohort that participated in athletic programs had a 49 percent 6-year graduation rate. Student Affairs is also working to help the transition for first-time, first-year freshmen by creating communities for students by assigning groups of twenty to a student mentor.
e. Consider incorporating an essay as part of the admissions process to CCNY to help faculty and staff better understand the qualities and characteristics of prospective students before they matriculate.

STATUS: An essay has been incorporated into the new on-line scholarship application process and is also part of the Honors application process.

## 5. Create an institutional climate that values effective teaching.

a. Engage in regularized sharing of best teaching practices; fully evaluate and learn from current teaching/learning pilot studies.
STATUS: CETL has started hosting a best practices series for faculty. An advising blog has been set up for tracking best practices.
b. Develop a reward system for outstanding teachers.

STATUS: A President's Award for Outstanding Faculty Service to be awarded to one member annually in each division/school was developed. In addition, the President's Award for Excellence was developed. Both awards were approved by the Faculty Senate and will be announced at a Welcome Back Reception for faculty in the fall. The awards are intended to recognize outstanding faculty members for their significant contributions to students and to the College. Processes will be identified in each school/division to nominate faculty, including adjunct faculty for the service awards. A Faculty Administrative Fellowship was created and will be introduced in the fall to provide development opportunities for faculty interested in exploring administrative careers.
c. Ensure that students encounter the most experienced faculty in their first and second years of study, for example, by assigning more tenure-line full-time faculty members to teach the Freshman Inquiry Writing Seminar (FIQWIS) Program.
STATUS: Training programs are being developed to provide more support for the faculty who teach the content part of FIQWS and the faculty who teach the writing piece of FIQWS. In addition and in conjunction with the Pathways implementation, a plan is being developed for block scheduling for first-time, firstyear freshmen.
d. Create opportunities for faculty to develop and implement honors theses and capstone courses in all majors.
STATUS: A two-year pilot program of capstone courses is underway in several Social Science departments, including assessment of their success. Additional departments are being encouraged to offer capstone or senior seminars. While feedback from students has been very positive to date, few departments have
actually agreed to participate in the pilot by offering a capstone course. In addition, one of the take-aways from this is that the seniors need to improve their writing skills.

## 6. Support students in the process of planning and developing strategies for affording and completing a college education at CCNY.

a. Provide more effective information about how to navigate the College's resources utilizing print, web, and other social media platforms.
STATUS: Our official Facebook page has about 30,000 hits monthly, up from 12,000, and many students use this to help them navigate City College. The President also communicates to students on a regular basis at the monthly round tables and through meetings with groups as needed and through written communications from the "Desk of the President."
b. Create mandatory seminars on how to navigate the CCNY system and require students to attend them before they matriculate.
STATUS: There currently is a student orientation, but discussions are underway regarding the development of an on-line or web-based student handbook as a tool for students to help them navigate CCNY. In addition, the new student seminar was re-imagined to make it more on-going and informative for students and to better meet student needs. While it used to be held at the beginning of each academic year for freshmen, new freshmen now have three semesters to accumulate an established number of "points" toward completion by attending various seminars or events, such as seminars on time management and note taking. Students select the seminars and events that meet their needs as well as their schedules.
c. Inform students about the Free Application for Federal Financial Aid (FAFSA) and implement a strategy to aid students in completing and filing the FAFSA.
STATUS: The Financial Aid Department provides information to students on the FAFSA and also provides on-going training and support to the financial aid supervisors and workers to enable them to help the students.
d. Make on-campus housing more affordable and available.

STATUS: Free housing in the Towers has been offered to the Macaulay Honors students this year. The majority have accepted this opportunity. In addition, Engineering is running a pilot program to provide subsidized housing to graduate students this year.

## 7. Strengthen the culture of service to students.

a. Impress upon staff members in departments and in central administrative offices the need to treat students with courtesy and respect.

STATUS: Customer service training has been conducted. Ensuring student friendly service has been incorporated into the goals for all senior managers. Customer service feedback cards were heavily used during the fall and the spring registration. Feedback indicated that these services were very much improved and lines were significantly shorter. Areas of concern continue to be with receiving timely responses to phone messages and timely payment of scholarship money. The results this past year from the student satisfaction survey indicated that more improvement is needed in the area of administrative services and the College is working to address this.
b. Identify and train highly capable staff members who will provide excellent face-toface service to students in every department of the College.
STATUS: Student Affairs has started to use ACPA, which outlines the professional behavior and skill levels required for Student Affairs jobs. These skills and requirements for behavior are being incorporated into professional development modules as well as expectations for Student Affairs professionals.
c. Require each department to convene an open house at least once during the academic year to familiarize students and faculty with all aspects of that department, including its offerings and its requirements.

STATUS: The Provost requested all deans have an open town hall for students and faculty last year. In addition, the president continues to hold monthly open roundtable discussions for faculty, students, graduate students, and staff. This next year, Student Affairs will be working with Undergraduate Student Government to moderate a town hall each semester.
d. Communicate more effectively with today's students by utilizing social media and other relevant platforms and technologies

STATUS: The College utilizes Facebook, its college website and Inyourclass.com, a student developed site, to communicate to students. Participation in the College's new Facebook site has increased dramatically, from 12,000 hits per month to 30,000 . The new web site will also offer an easy platform for departments and offices to easily use social media. Undergraduate Student Government is developing its own website and in addition, will be joining a college sponsored student government web site. Student Affairs is also leading an effort to design better communications for students. This would include a
screen saver that displays current student events with a goal of increasing student participation.

## B. Improving Faculty Satisfaction

A requisite step in building a culture of greater student success is to ensure that the faculty feels a high degree of satisfaction in carrying out the College's mission. If the faculty of an institution feels a significant degree of dissatisfaction with the institution, students will likely perceive that dissatisfaction, which can in turn undermine the students' own sense of the institution as a place of positive growth and development. If students are to develop a sense of pride in CCNY, members of the faculty must also convey a genuine sense of pride and fulfillment in their work. The College needs to understand the commitments it makes to newly hired faculty members, and it must deliver on the promises it has made for research and scholarly support. Part of the challenge includes creating an environment that is more welcoming of faculty initiative than has been the case in the past - an environment that signals in every way that the vitality and engagement of faculty members in teaching, scholarship and service are the lifeblood of the College. CCNY also faces the challenge of building a faculty that more closely reflects the diversity of its student body. The roundtable discussions of increasing faculty satisfaction led to the action recommendations described below.

## 1. Address disparities in the professional experience of different faculty members.

 STATUS: A faculty survey was conducted this year and one of the issues addressed was consistency in the application of tenure and promotion guidelines. A recommendation has been made and endorsed by the Review Committee to develop discipline specific guidelines that can be distributed to all faculty within each discipline.a. Appoint a "Status of Women Faculty Committee" modeled after the MIT Committee that produced the 1999 report entitled, "A Study of the Status of Women Faculty in Science at MIT."

STATUS: A group of women faculty met to share thoughts, ideas and concerns. The President formed a Council on Inclusion and Excellence. In addition to conducting a survey, the Council has been looking at best practices in academia. The Council will be issuing a series of recommendations to improve the culture and the climate of the college for all faculty, with a primary focus on women and under-represented minorities.
b. Take proactive steps to increase the diversity of the faculty and academic administrators, through a recruitment approach that looks beyond the standard markers of academic distinction to consider the broader impact a given candidate could have as a member of a department and the institution as a whole.

STATUS: Three dean searches were conducted this past year using an external search firm. The search firm was advised of the importance of having a talented and ethnically diverse pool. In addition, three senior administrative positions were filled. While one of the dean searches will be redone, the search committees recommended a diverse pool of candidates to the president. See B.1.a. about the Committee on Inclusion and Excellence.

## 2. Increase faculty diversity, recognizing the challenges for the College in terms of becoming more financially competitive.

STATUS: The President's Council on Inclusion and Excellence and the Office of Diversity, previously the Office of Affirmative Action, are developing recommendations and strategies for enhancing faculty diversity through both recruitment and retention strategies. This past academic year, approximately 30 percent of the new faculty hires were under-represented minorities.
3. Support faculty in all aspects of their careers as members of the CCNY academic community.
a. Invest more deliberate effort in faculty orientation to:
i. Acquaint new faculty with the faculty handbook.

STATUS: The Faculty Handbook is provided to new faculty. A committee will be established to update the faculty handbook.
ii. Offer strategies for navigating the organizational and cultural environment of the College
STATUS: A one-day Chair Training program was conducted by HR last year and a new training and development program for all new faculty will be implemented this year.
b. Rethink institutional policies to create a more faculty-friendly approach to family leave and/or stop the tenure clock to accommodate the birth or adoption of a child (this may have PSC contract implications).
STATUS: The Union has negotiated with the University Administration an extension of the paid-parental leave agreement and longer term arrangements are under discussion.
c. Open an on-campus day care center that is open to faculty, student and staff children.
STATUS: While there is an on-campus day care center, the center currently serves the children of students. A proposal submitted to enable 10 percent of the children served to be children of faculty was approved and the child care center will offer open spots to faculty for their children.
d. Implement a "Service Center" concept/strategy to provide technical research services to principal investigators and other faculty.

STATUS: The Office of the Provost has obtained an agreement with the RF to establish a Recharge Center for Science and Engineering core facilities. This is under development.
e. Develop a post-tenure/mid-career program that allows tenured associate professors, in particular, to reinvigorate their research programs in order to qualify for promotion to full professor.
f. Continue to improve communication regarding all aspects of faculty members' professional lives within the College.
STATUS: The Provost conducted a workshop on tenure and promotion policies and held an additional three panels for untenured faculty geared to providing practical advice and tips about preparing an academic body of work.
g. Establish a more transparent merit system for supporting faculty members one that is based on criteria clearly defined and broadly affirmed among the faculty.
STATUS: Increases in salary are governed by the PSC contract. The College has proposed a merit pool be incorporated in the new contract.
h. Design a robust faculty seminar series that draws upon the intellectual interests of the faculty, facilitates interdisciplinary participation, and draws students into a more academic dialogue across campus
STATUS: Individual departments within the various schools/divisions have discipline-specific seminars geared for their respective faculty. Seed money has been offered to departments to sponsor inter- and intra-departmental seminars in order to facilitate cross disciplinary participation. A faculty committee worked with the alumni association to sponsor an event for all faculty to recognize an outstanding retired faculty member who had significant impact on the lives of his students. A program featuring the Civil Rights documentary "The Barber of Birmingham" plus a panel to discuss the documentary and key issues is being planned for the fall. Communications have been sent to all faculty along with a classroom guide to lead discussions. In addition, the planning group is in discussions about offering informal discussions with students on key issues, laws and policies.
i. Invest in housing in the neighborhood that can be rented to the faculty. STATUS: The University is supporting a few apartments for faculty moving to the New York City area and is pursuing other housing possibilities.

## 4. Celebrate and reward faculty achievement.

a. Develop a broader and more resilient concept of the faculty role-a model that recognizes that different faculty members may have different emphases in the balance between teaching and scholarship at different stages of their careers
b. Offer professional development to help faculty members become better teachers while also building a successful research portfolio and engaging in service.

STATUS: This past year, CETL offered 109 professional development programs to faculty members; approximately 1239 faculty attended these events. In addition, a Faculty Administrative Fellowship was designed to provide experience to tenured faculty interested in getting administrative experience. Thirteen members of the faculty were publicly recognized for their accomplishments in a year-end letter to faculty and staff.
c. Recognize faculty members publicly when they accomplish noteworthy things or receive awards or honors.

STATUS: This past year, Distinguished Professor Ruth Stark was awarded the Sloan Public Service Award and a reception was held in her honor. A holiday reception was held and faculty displayed their recent scholarly and creative works for their colleagues.
d. Establish a President's initiative that recognizes the achievement of faculty members, departments, or units that significantly advance CCNY in fulfillment of its core missions.

STATUS: A President's Award for Outstanding Faculty Service to be awarded to one member annually at each division/school was developed. In addition, the President's Award for Excellence was developed. Both awards were approved by the Faculty Senate and will be announced at a Welcome Back Reception for faculty in the fall. Processes will be identified in each school/division to nominate faculty, including adjunct faculty for the service awards.

## 5. Develop common and social spaces for faculty and/or students.

a. Provide a faculty pub from $2.00 \mathrm{pm}-5.00 \mathrm{pm}$ every weekday
b. Strengthen the sense of connection among members of the academic community at every level, including the development of common venues and gathering places that are conducive to conversation.
STATUS: HR and the Inclusion and Excellence Council offered an opportunity for faculty to self-select an affiliate group and discuss issues of common
interest. There has been an increase in the number of faculty receptions and displays and colloquia in addition to faculty awards and recognition events.
c. Create incentives to increase the amount of time each week that faculty spend on campus and increase the student access to the faculty.
STATUS: The Workload Guidelines were updated and recognize student mentoring.
d. Create two or more showcase physical spaces with state-of-the-art technology. STATUS: A state-of-the-art technology cITy Tech Center was created for students.
e. Use development of space to force cooperation among the support functions responsible for creating and maintaining the space.

## 6. Develop procedures that are meaningful and supportive of faculty achievement and success.

a. Build a formal mentoring process that explicitly involves all faculty members in mentor-mentee relationships as a way of creating an academic community that is more supportive and inclusive
b. Formally institute a step in the tenure review process in which the chair meets with a faculty member before the third-year review for a conversation to review the junior faculty member's progress, make suggestions and offer support prior to the formal third-year review.
c. Provide the opportunity for the chair to serve as a mentor and advocate for untenured faculty members
d. Develop a strategy for achieving a better culture of evaluation-both the "why" and the "how" of evaluation.
STATUS: The governance plan was changed this past year to stipulate that all tenured faculty in a department review tenure and promotion cases rather than just the faculty on the departments Personnel and Budget Committee. In addition, the schools/divisions are being encouraged to develop discipline specific tenure and promotion guidelines for faculty so that expectations are transparent and specific.
e. Use outside assessors for teaching to ascertain whether a faculty member is effectively communicating what he/she wants the students to learn.

## C. Developing a more supportive research environment

There is a clear expectation within the College that faculty research/scholarship constitutes one of the pillars of its academic strength. Despite the importance of research, the College has had
difficulty in providing an environment that supports faculty research in an effective and timely manner. A delayed or unfulfilled promise of support can have significant impact on a faculty member's research agenda and timeline for tenure. It is imperative for the College to find the ways of supporting the research potential of its faculty in more effective ways. The roundtable discussions on developing a more supportive research environment led to the following recommendations.

1. Develop an infrastructure that supports progress and continued advancement in research across disciplines.
a. Develop a system of calculating workload that will provide time for research in a systematic way that gives individual faculty members the basis for planning; STATUS: New workload guidelines have been developed that enable release time for mentoring/supervision. Processes are being developed to establish an effective procedure for tracking of this release time. The Provost Office has also begun a planning process to establish metrics for research active faculty.
b. Develop faculty-sanctioned procedures for both the allocation and reallocation of research space.

STATUS: An inventory of space is underway and is about 65 percent complete. A comprehensive and transparent procedure for space allocation is being developed.
c. Invest in the library's capacity to provide online access to research materials. STATUS: The Library has an on-line database which is sponsored by both CCNY and CUNY. The Library receives significant resources related to on-line research and CCNY has a state of the art system for document retrieval and delivery. The College also has a good inter-library loan process.
d. Increase the number of staff members, such as laboratory technicians, to support the research process.
STATUS: The number of tax-levy research associates and research assistants increased in 2010/2011. A new classification of research faculty has been developed and Human Resources will be working with the Provost Office and the Schools/Divisions to develop a process and criteria for implementation.
e. Explore the use of federal work-study funds to create research assistantships in the social sciences and humanities.
f. Increase the number of College-sponsored faculty colloquia.

STATUS: All the schools and divisions are very active with respect to sponsoring faculty colloquia. The President's Office has offered seed money to the schools/divisions for inter-and intra-departmental seminars. An Urban Ecology committee was formed and sponsored a monthly seminar this past year.
g. Explore expanding the Spitzer School of Architecture's program that provides a faculty member with an editor or research assistance for one year for a book being written under contract.

STATUS: This specific goal was accomplished. In addition, the Max Bond Center in the School of Architecture was created and a director was appointed.
h. Invest in staff for research core facilities which will aid the research enterprise. STATUS: This issue is part of the Recharge Center agreement to manage activities in the core facilities. Progress is continuing.
i. Develop a program of research and travel fund accounts for faculty.

STATUS: A campus-wide competitive travel-fund program was established and has been well-received by faculty. An annual \$150,000 fund is being established and faculty can apply for grants to attend meetings, seminars, etc. The City Seed Grant Program is in its third year and a request for proposals has been sent to faculty; last year, 32 proposals were received and ten awarded. The Provost's Office is trying to increase the number of proposals received from the Humanities and Arts by expanding the criteria to include research and scholarly and creative works. The Provost 's Office has also formalized incentivizing accounts, with institutes now receiving 30 percent of their modified indirect costs and individual Pl's getting 5 percent.
j. Develop a strategy to provide bridge funding for faculty in transition from one funding source to another.
STATUS: A Faculty Research Advisory Committee (FRAC) was created to review bridge fund requests. To date, four awards have been given out to provide bridge funding. There are two established deadlines/review periods per year.
k. Provide help to faculty searching for new and different sources of funding.

STATUS: A number of CETL workshops have been held to help faculty with this issue. This year, 184 faculty attended CETL's Grants Workshops. CETL also offered individualized assistance to 145 faculty.
I. Invest in doctoral student support.

STATUS: CUNY funds five-year fellowships in Engineering (total 120-124 annually) and in the Science disciplines of Biology, Biochemistry, Chemistry, and Physics (total 400-490 annually committed by the CUNY Graduate Center CUNY-wide/approximately sixteen per year to CCNY). The Graduate Center provides seventy Graduate Teaching Fellowships (GTFs) per year to nonScience and Engineering PhD students at CCNY. CUNY funds an additional six five-year fellowships in Psychology.

## 2. Formalize and adhere to procedures for providing new faculty with start-up space and equipment in a timely way upon their arrival to CCNY.

a. Inventory available space and facilities to ensure that a faculty member will be able to begin his/her research program upon arrival to CCNY.

STATUS: An inventory of space and facilities has been started and is 65 percent complete. A number of departments have not responded or provided the necessary information to complete the survey.
b. Develop a college-wide, uniform "Start-up Package and Commitments" template similar to the spreadsheets currently employed in some school/divisions; templates must include a timeline as to when promised items will be delivered to the new faculty member.

STATUS: The Provost has advised the deans that, effective immediately, all start-up packages will be administered by the Provost's Office and a template that fully describes the start-up commitments has been distributed to departments for use. The Senior Budget Director is responsible for overseeing all start-up packages.
c. Extend research support to adjuncts.

STATUS: Discussions are ongoing to create a research professor position and to allow adjuncts to apply for seed grants. Non-teaching adjunct positions can be used to help support programs. In addition, adjuncts can submit proposals.
d. Coordinate services to support the research environment and monitor compliance.
STATUS: IRB, IACUC and Conflict of Interest have been integrated to help support the research environment of compliance.

STATUS: A CUNY-wide IRB process has been developed. CCNY has a Human Research Protection Program (HRPP) Administrator on campus who is responsible for the IRB. This person is also responsible for IACUC and animal care and will assist with Research Integrity issues. This administrator will also track the research integrity training that is required for all Pls, researchers, postdocs and students doing research.

## D. Achieving a clearer alignment of resources and academic responsibilities.

In order for CCNY to realize its future potential, it is important to align resource allocation with academic priorities. The purpose of the roundtables, and of the larger planning process of which they are a part, is to identify those actions that should become true priorities for the College as a whole along with its faculty, staff, and administrators. An important dimension of this challenge is to rethink current practices within the College with the aim of asking how one might approach
past practices differently. Part of the task is to build systems that yield a better understanding of how the College spends its money and what results those expenditures yield. Just as important is to make more effective use of resources currently available. For example, by distributing the utilization of classroom space more broadly through the five days of a workweek. As a college, CCNY cannot execute a plan for the future by simply asking people to begin doing things they don't currently have the resources to achieve. One of the key tasks in the years ahead will be to find new sources of funding for planning initiatives. The College must also, however, focus existing resources on the actions and programs that align most closely with the needs of an urban college in the twenty-first century. The roundtable discussions of the alignment of resources and academic responsibilities led to the following recommendations.

## 1. Build systems that create greater transparency and accountability in budgeting

a. Work to achieve greater clarity and transparency in CCNY budgets, thereby helping instill a better understanding of institutional revenues and costs. STATUS: An on-line OTPS budget has been developed to be distributed to all departments at the beginning of the fiscal year. (This past year was slightly delayed because of new New York accounting procedures). The Finance Department is working on other financial budget reports, and the first department budgets reflecting tax levy and OTPS will be distributed to all departments prior to the fall 2012 academic year.
b. Commit to improving data management and information transparency by employing a fully functioning data warehouse.
c. Make an institutional commitment to report what things have been accomplished as a result of money spent.

STATUS: The president issued the first President's Report this past year and sent a year-end letter to all faculty and staff highlighting major accomplishments for the year. In addition, the president presented the highlights of the year to CLAS and to the Alumni Association.

## 2. Seek greater efficiency and eliminate redundancy.

a. Streamline the curriculum, with particular emphasis on reducing the number of courses that are similar in content.

STATUS: Implementation of the University's Pathways initiative will result in some streamlining of the General Education curriculum. A Senior Advisor for General Education was appointed to coördinate and oversee the implementation of Pathways for the College and an implementation plan has been submitted to CUNY. The plan calls for the development of "language-intensive content-rich"
course pairings in the first three semesters in addition to FIQWS, which should facilitate bock scheduling.
b. Emphasize and support the Degree Works project as a tool that allows students to understand clearly the degree requirement in their field of study, their progress toward fulfilling those requirements, and the steps needed to fulfill those requirements.

STATUS: A project to reconcile DegreeWorks ${ }^{\text {TM }}$ with each department's curriculum has been completed, and a procedure to modify a curriculum is being established to ensure that there is a single person responsible for approving curriculum changes and for updating DegreeWorks ${ }^{\text {TM }}$. DegreeWorks ${ }^{\text {TM }}$ will be updated at the same time the curriculum is changed. The Central Office is also using City College as a model institution on which to test DegreeWorks ${ }^{\text {TM }}$ scribing for Pathways.

## 3. Seek to achieve a better utilization of time and space.

a. Increase the proportion of space that is controlled and assigned by central administration; at least 65 percent of all space should be centrally assigned. STATUS: The number of class rooms assigned by centralized scheduling has increased.
b. Develop and implement full-week teaching schedules to substantially increase classroom utilization from the current rate of 65 percent.

STATUS: The percentage of FTEs offered on Fridays, evenings and weekends increased from 41.9 percent to 44 percent over the last year.
c. Provide adequate parking to ensure a substantially greater faculty presence on campus Monday through Friday.

## 4. Improve academic administration at both the department and College levels.

a. Inventory current issues/concerns/problems and identify whether the most effective solutions will result from problem solving at the unit or institution-wide level.

STATUS: Many problems have been identified and resolved at the president's monthly roundtable discussions with faculty, students, graduate students and staff. Those electing to attend share concerns and/or interests.
b. Review administrative responsibilities with chairs and identify those responsibilities that should be shifted from the departmental level to central administration.
c. Establish a policy that only full professors should serve as department chairs.
d. Increase the incentives and rewards for chairs.
i. Give chairs more control over their budgets.

STATUS: On-line department level OTPS budgets have been developed and will be distributed to all departments this fiscal year.
ii. Increase the level of capable administrative support.
iii. Provide each chair with an HEO support person.
iv. Create flexibility between faculty and staff lines.
e. Connect faculty and administrative staff more purposefully so that both sides understand the other's respective needs.
f. Determine how to change some of the cumbersome system-level structural issues.

## Promising Progress and Next Steps

At the conclusion, participants in each of the four roundtable sessions conveyed a sense that the discussions had been rich, candid, and productive. The exchanges had avoided falling into a mode of simple complaint and focused instead on actions that have the potential to set CCNY on a different trajectory in the years ahead. The discussions had been generative not just of good thinking, but also of a positive spirit among the participants. No one left the roundtables expecting that the College would be able to act on every idea put forth in the conversations. Yet a pervasive impression emerged that these discussions contained the germs of ideas that could have a transformative impact on the City College of New York.

The next steps will be to bring the report of the roundtable discussions back to the Academic Working Group, with the aim of developing a list of top priorities that the College may wish to include during the development of strategic initiatives over the next several years.

## J.14. Student Admissions Initiatives

Under the direction of the Provost, and in consultation with the Vice President for Finance and Administration, the Office of Admissions has developed a recruitment program aligned with CCNY's enrollment and fiscal goals.

## Recruitment

- A team of recruitment professionals visits more than one hundred local schools, community organizations, and college fairs. In keeping with its mission of "access to excellence," CCNY also targets fifty high schools chosen for their diversity and/or academic excellence, and invites prospective applicants to distinctive on-campus events, campus tours, and other aggressive recruitment activities. CCNY assigns recruits from these high schools to individual Admissions counselors. To strengthen the college's commitment to the Greater Harlem, i.e., Northern Manhattan and the Bronx, community, special recruitment efforts are made to engage local schools and community organizations.
- The Assistant Director of Graduate Admissions assists CCNY's graduate programs in their individual recruitment efforts, e.g., information sessions, open houses, online advertising opportunities.
- In 2009, CCNY launched a customer relations management (CRM) system, Hobson's Connect ${ }^{\text {TM }}$, and it is the means by which CCNY communicates with prospective and admitted freshmen and transfer students. The system's communication plan-targeted emails, phone calls, and personalized web pages ("MyCity")—ensures regular contact with students from their initial identification as prospective applicants through to enrollment. Recently, undergraduate nondegree, readmission, and graduate applicants were added to the Hobson's Connect ${ }^{\text {TM }}$ system.
- In 2010, CCNY adopted Hobson's Apply Yourself ${ }^{\text {TM }}$, an online graduate application system that allows the filing and tracking of applications from any location in the world. An electronic imaging feature enables faculty to review applications and render admission decisions remotely.
- CCNY's Office of Information Technology, Admissions, and the Summer Session Task Force, designed and launched the Summer Session Online Application.


## Scholarships

- Working closely with the Office of Development and Institutional Advancement, the Alumni Association, and the City College Fund, Admissions has made more effective use of scholarship funds by focusing on those populations that support CCNY's mission. Examples include the President's Community Scholarship, which supports under-represented minorities living in Greater Harlem, and the New Era Scholarship, which targets eleven high schools known for their academic excellence.
- In 2008, CCNY hired a Manager of Scholarships to consolidate scholarship management. Previously, scholarships had been processed manually and standards were not consistent across the College. Subsequently, scholarships were leveraged strategically to attract high achieving students from New York City's specialized high schools, e.g., The Bronx High School of Science, Brooklyn Technical High School, Stuyvesant High School. For further efficiencies, CCNY launched an online scholarship application, NextGen Scholarship Manager ${ }^{\text {TM }}$, in 2010 to improve the application and award processes. As a result of efficient coordination, the Office of Admissions awarded $\$ 973,450$ in 2011-2012, as compared to $\$ 81,300$ in 2007-2008, and during the 2012-2013 academic year, 558 students applied for scholarships through NextGen ${ }^{\text {TM }}$.


## Transfer and Readmission

- To assist in the transfer credit evaluation process, CCNY uses several online systems, including the new CCNY Transfer Evaluation System (TES) and CUNY's Transfer Information and Program Planning (TIPPS) System. TES is a data base that maintains course equivalencies, which speeds the evaluation process, ensures consistency, and can send evaluations to students via email. TIPPS permits CUNY students to self-assess their courses prior to transfer. At present, CCNY has evaluated almost 90 percent of all CUNY courses.
- Following a review, Admissions reinstituted the practice of automatic readmission for CCNY students in good academic standing but who stopped out for one semester. As a result, more than 500 stop-outs enrolled-without completing forms-in fall 2012.
- To accelerate degree completion for military personnel, CCNY conceived a plan to increase the maximum number of transfer credits awarded for military training to 24. A draft resolution was presented to the faculty, which was approved and adopted in fall 2012.


## J.15. Student Retention Initiatives

Since 2008, CCNY's Enrollment Management (EM) team has designed, implemented, assessed, and revised many of the following retention initiatives. In addition, representatives from Enrollment Management, Bursar, Financial Aid and Scholarships, and the Registrar meet as needed to resolve complex student issues and to define student tuition payment deadlines and class cancellations.

## Initiatives

- The Select-A-Major (S-A-M) initiative encourages undecided students to declare a major before attaining junior status. This is particularly critical for recipients of New York State's Tuition Assistance Program (TAP), who must declare a major by "the first term of the junior year." CUNY, through its Performance Management Process (PMP), tracks selection of a major by 70 credits. In collaboration with CCNY's Office of Information Technology (IT), EM designed and implemented an online system to facilitate the declaration of a major. Each semester, EM alerts undeclared degree-seeking students and prompts them to select a major, "area of interest," or concentration, and to meet with their academic advisors, who have received official listings of these students from EM. The S-A-M Initiative contributes to the accuracy of student records and of the degree-audit program, Degree Works ${ }^{\text {TM }}$.
- The Potential Stop-Outs (PSO) initiative seeks to increase re-enrollment and retention rates from one semester to the next. Each semester, registration of students in good academic standing, i.e., undergraduate students $>=2.0$ GPA and graduate students $>=3.0$ GPA, is scheduled approximately three to four months prior to the first day of the next semester, i.e., April for fall semester and November for spring semester. Although appointments are scheduled over a seven-day period, CCNY data reveals that almost 30 percent of the students with registration appointments do not enroll within the six-week period prior to the first day of classes. As an encouragement to register earlier, PSO is run at least twice during each enrollment cycle. From 2008 through 2012, the PSO initiative has resulted in an increase of approximately 7 percent in registrations.
- Introduced in spring 2013, the Home Stretch Scholarship provides financial support to qualified undergraduates who are within 18 to 21 credits of graduation, enabling them to complete their final semester or year without incurring additional debt. Eligibility requirements are both academic (GPA >=3.5) and financial need.


## Services

- Implemented in 2010, the Peak Enrollment Service Delivery System is a high-impact, high-touch model designed to streamline registration and improve customer service during peak periods, i.e., three weeks prior to the first day of classes. A key feature of the Peak Enrollment System is the Manager-On-Call Service, which places senior personnel on the frontline of the Enrollment

Services Center (Bursar, Financial Aid, Registrar). This initiative is an excellent training ground for staff, who must respond to issues that cut across departmental lines.

- Since 2010, students have been able to make their tuition payment plan arrangements online, thus eliminating the onsite Tuition Pay Services. This change has resulted not in greater student satisfaction.
- In 2011, CCNY introduced automatic zero bill validation for students without tuition and fee balances, with confirmations sent to the CCNY email addresses of students. This new process has eliminated the need for approximately 2,800 students to visit the Enrollment Services Center each semester.
- CCNY has streamlined the delivery of financial aid delivery, including the manual upload of financial aid awards to student records within the first week of classes.
- In May 2011, the Office of the Registrar integrated the Credentials Solutions Online Transcript Ordering system with its transcript production workflow. This system, which supplements the existing mail and in-person transcript functions, has improved processing time and generated additional, albeit modest, revenue for CUNY. The Registrar is exploring the option of retaining a percentage of this revenue to maintain and improve transcript-issuing services.
- In 2011, CCNY invested in an automated calling system to augment the email communication system in EM. Using the two systems, EM is able to convey critical enrollment and retention information to a broader range of students. The system is a cost-effective investment that can be extended to additional departments at minimal cost.
- In 2013-2014, CCNY will launch yet another a customer relations management (CRM) system, Hobson's Retain ${ }^{\text {TM }}$, which facilitates focused communication in support of the College's retention strategies. The system identifies specific cohorts, e.g., at-risk, potential scholarship recipients, and sends automated messages containing relevant information, e.g., tutoring resources, application deadlines; tracks student progress through an Early Alert option; manages surveys documenting early alerts related to academic progress, attendance, and other impediments to progress; provides surveys to help track students' standing in current courses and advise of any academic alerts, supports sophisticated communication plans; and releases reminders of deadlines and due dates. Information collected from Hobson's Connect ${ }^{\text {TM }}$ (prospective students) is passed to Hobson's Retain ${ }^{\text {TM }}$, to maintain continuity with CCNY's MyCity "VIP" portal.
- To manage walk-in track efficiently during peak registration periods, CCNY is evaluating potential software vendors for an online scheduling product for the Office of Financial Aid. This project, Financial Aid Appointment Scheduling Tool (FAAST), has been funded through a grant from the CUNY Productivity Initiative. ${ }^{2}$ Full implementation is slated for spring 2014.

[^2]
## J.16. Academic Advising Initiatives

Since 2008, efforts to improve advising at CCNY have focused on improving coördination between advising units and the quality of new student advisement. Founded in 2010, the Advisors' Group meets monthly to discuss concerns and resolve issues across units, and it is noted for its efficacy and professional leadership. In October 2012, a subcommittee of the Advisors' Group also hosted the first College-wide Faculty Advisor Training Day, which attracted more than fifty faculty members.

The CCNY Advising Assessment Committee was formed in May 2012 as an extension of a CUNY initiative to improve academic advising across the University, with an emphasis on assessment. To date, the committee has drafted a College-wide mission statement for academic advising and has begun to articulate measurable learning outcomes for advisement by academic year and credits. In addition, the committee is working on a College-wide Student Satisfaction assessment process, to be implemented in fall 2013, with support and guidance from the Office of Assessment. To learn more about best practices, a co-chair of the CCNY Advising Assessment Committee attended the national NACADA Assessment Institute in February 2013.

Three Presidential initiatives will improve the quality of advisement for entering new freshmen:

- CCNY developed four-year (120 Credit) graduation plans in every major that provide students with clear curricular paths to timely graduation.
- The College will pilot "block scheduling" options for the fall 2013 freshman cohort, which are defined by potential major interests and will guarantee course availability while streamlining the registration process.
- A second pilot will uncouple the New Freshmen Registration from New Freshmen Orientation, which will ensure that freshmen meet in late spring or early summer with their academic advisors. Pertinent orientation information will be provided at orientations in late August. This pilot will begin with the fall 2013 freshman cohort.

In preparation for the CCNY advising retreat in spring 2012, the College compiled information about the CCNY student/advisor ratio (fall 2011) and CCNY advising practices.

Table J16.1: CCNY Student / Advisor Ratio, Fall 2011

| Advising Unit | Advisors | Students | Students per Advisor |
| :--- | ---: | ---: | ---: |
| Division of Humanities and the Arts | 3 | 2,226 | 742 |
| Division of Interdisciplinary Studies | 5 | 599 | 120 |
| Division of Science | 4 | 2,065 | 516 |
| Division of Social Sciences | 2 | 2,148 | 1,074 |
| Grove School of Engineering | 8 | 2,214 | 277 |
| School of Education | 1 | 614 | 614 |
| Sophie Davis School of Biomedical Education | 1 | 442 | 442 |
| Spitzer School of Architecture | 1 | 323 | 323 |
| Macaulay Honors College at CCNY | 2 | 209 | 105 |
| Gateway Academic Center | 3 | 2,005 | 668 |
| SEEK Program | 5 | 830 | 166 |
| Student Support Services Program (SSSP) | $\mathbf{3}$ | 510 | 170 |
|  | $\mathbf{3 8}$ | $\mathbf{1 4 , 1 8 5}$ | $\mathbf{5 , 2 1 7}$ |

The 2010 CUNY Student Experience Survey solicited student views on academic advising and online advisement, e.g., DegreeWorks ${ }^{\text {TM }}$, and City College has aggressively sought to meet student expectations through diverse initiatives.

| Table 9B <br> Satisfaction with Academic Support Services <br> Senior Colleges |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Baruch | Brookyn | City | Hunter | Jotn Jay | Lehman | Queens | York | Total Senior | Total CUNY |
|  | \% | \% | \% | \% | \% | \% | \% | \% | \% | \% |
| Indicate your level of satisfaction with each of the services listed below. <br> Academic advising |  |  |  |  |  |  |  |  |  |  |
| Very Satisted | 15 | 13 | 15 | 11 | 27 | 21 | 12 | 14 | 16 | 17 |
| Satisfied | 39 | 47 | 34 | 38 | 32 | 35 | 45 | 38 | 39 | 41 |
| Neutral | 20 | 19 | 21 | 23 | 25 | 22 | 24 | 19 | 22 | 21 |
| Dissatisfed | 14 | 14 | 15 | 18 | 10 | 11 | 13 | 17 | 14 | 13 |
| Very Dissatisfed | 11 | 8 | 16 | 10 | 6 | 11 | 7 | 12 | 10 | 8 |
| Online asvisement (e.g. DegreeWorks) |  |  |  |  |  |  |  |  |  |  |
| Very Satisted | 8 | 10 | 11 | 17 | 27 | 15 | 11 | 21 | 15 | 15 |
| Satisfied | 39 | 38 | 26 | 42 | 33 | 24 | 39 | 37 | 36 | 36 |
| Neutral | 26 | 37 | 37 | 26 | 25 | 31 | 33 | 28 | 30 | 31 |
| Dissatisfed | 14 | 11 | 11 | 11 | 10 | 18 | 12 | 8 | 12 | 11 |
| Very Dissatisfed | 12 | 5 | 13 | 5 | 6 | 12 | 5 | 7 | 8 | 6 |
| Tutoring services |  |  |  |  |  |  |  |  |  |  |
| Very Satisted | 11 | 16 | 8 | 6 | 30 | 22 | 6 | 11 | 14 | 16 |
| Satisfied | 34 | 47 | 31 | 37 | 35 | 34 | 29 | 35 | 35 | 39 |
| Neutral | 31 | 28 | 40 | 35 | 27 | 28 | 52 | 31 | 34 | 31 |
| Dissatisfed | 13 | 7 | 15 | 14 | 6 | 12 | 8 | 14 | 11 | 9 |
| Very Dissatisfied | 10 | 2 | 5 | 8 | 1 | 4 | 5 | 8 | 6 | 5 |
| Library yacilites |  |  |  |  |  |  |  |  |  |  |
| Very Satisted | 19 | 21 | 16 | 10 | 29 | 24 | 13 | 13 | 18 | 19 |
| Satisfied | 51 | 61 | 53 | 50 | 45 | 56 | 52 | 44 | 52 | 52 |
| Neutral | 18 | 16 | 24 | 30 | 22 | 14 | 30 | 25 | 23 | 22 |
| Dissatisfed | 7 | 1 | 5 | 6 | 3 | 5 | 4 | 12 | 5 | 5 |
| Very Dissatisfed | 5 | 1 | 1 | 4 | 1 | 2 | 1 | 6 | 3 | 2 |
| Library services |  |  |  |  |  |  |  |  |  |  |
| Very Satisted | 21 | 19 | 15 | 11 | 26 | 25 | 16 | 13 | 18 | 19 |
| Satisfied | 50 | 59 | 54 | 51 | 45 | 54 | 47 | 43 | 51 | 52 |
| Neutral | 20 | 19 | 26 | 32 | 24 | 16 | 31 | 29 | 25 | 23 |
| Dissatisted | 5 | 2 | 4 | 5 | 4 | 4 | 4 | 9 | 4 | 4 |
| Very Dissatisfed | 4 | 1 | 1 | 2 | 1 | 1 | 1 | 7 | 2 | 2 |

See section 2.12 and section 5.8 for additional information about advising initiatives and specialized programs.

## J.17. Information Technology Initiatives

Within the past four years, the Office of Information Technology (OIT) has dramatically expanded both facilities and service offerings that support the academic success. The most notable examples follow.

## Initiatives

- OIT is developing a three-year Technology Strategic Plan to identify CCNY's technology priorities, with measurable goals, objectives, and project tasks, for the immediate future. To guide this effort, CCNY will convene a Strategic Planning Committee, comprised of faculty, students, and staff.
- The Business Analytics/Data Dashboard initiative will provide an objective framework for planning and executing long-term growth; evaluating metrics of day-to-day operations; discerning trends and patterns within decades of data in the legacy student information management system (SIMS).
- In fall 2014, the CUNY Advanced Science Research Center (ASRC) and the CCNY Science Research Building on the South Campus will open, and OIT is preparing for the extraordinary computing demands of this complex. The coordinated management of terabyte-per-day information throughput will require a state-of-the-art datacenter and network infrastructure, including an independent 'science DMZ ," which will optimize data throughput with enhanced network security to protect highly sensitive, continuous research, and development.


## Services

- To support student success, OIT extended operating hours for some of the general-use computer labs and offers training sessions to students throughout the academic year.
- In fall 2011, the Service ("Help") Desk was relocated to the new clTy Tech Center, and support services, e.g., CUNY Portal, Blackboard LMS ${ }^{\text {TM }}$, laptops, wireless configuration and access, were enhanced. The Service Desk also serves as the central distribution point for campus-wide, sitelicensed software to the CCNY community.
- CCNY deployed RemedyForce ${ }^{\text {TM }}$, a cloud-based ticketing and change management system, designed around an information technology infrastructure library (ITIL) framework, to streamline support issues and response time.
- In spring 2013, OIT launched CityMail, a next generation online messaging and collaboration system for all CCNY students. CityMail combines the Microsoft ${ }^{\text {TM }}$ cloud-based email system, office suite, calendar, address book, chatting capabilities with anti-virus/anti-spam protection and generous storage space (10GB email storage and 7GB SkyDrive file storage).
- To ensure that support services are of the highest quality, professional development for OIT staff is imperative. Since 2008, workshops emphasizing customer service and technical
competencies—desktop support, programming, networking, virtualization, unified communications, and security—have been routinely offered.
- In spring 2013, CCNY re-assigned supervision of the Center for Excellence in Teaching and Learning (CETL) to OIT.


## Facilities and Infrastructure Upgrades

- CCNY increased the number of technology-enhanced ("smart") classrooms in Harris Hall, Marshak Science Building, North Academic Center (NAC), Shepard Hall, and Steinman Hall; and expanded wireless coverage in all college libraries. The typical smart classrooms are equipped with a computer, with the capability to connect a laptop, tablet, or mobile device; projector; sound system; podium with audio-visual (AV) controls and mobile device connections. Some specialized classrooms have additional enhancements, such as interactive whiteboards; large projection screens with high definition projectors; AV and network ports; wireless capability; and curriculumspecific hardware.
- In fall 2011, CCNY initiated a major renovation and expansion project to create the clTy Tech Center, a state-of-the-art computing lab and learning and training resource center, adjacent to the modest NAC computer lab. Located on the ground floor of the Cohen Library, the new facility houses over 300 workstations; ten media study rooms, equipped with dual flat panel displays, connectivity ports, whiteboard walls, and glass doors, that can accommodate up to six students; sixteen two-person study rooms with Windows and Mac desktops; three smart classrooms with dozens of workstations, high definition projectors, and, in the largest classroom, a podium with AV controls and mobile device connections; and open bays containing dozens of single-use desktop and wireless workstations. Each workstation is configured with CCNY's full complement of site-licensed software, including Adobe Creative Suite ${ }^{\text {TM }}$, MathWorks MatLab ${ }^{\text {TM }}$, Microsoft Office Suite ${ }^{\text {TM }}$, SAS, and SPSS. This highly successful CCNY facility has become the premier hub for student computing needs, learning resources, and general-purpose teaching.
- CCNY has replaced and/or upgraded the network infrastructure, mission-critical servers, and desktop computers, resulting in an enhanced work environment for students, faculty, and staff.
- The college's Wide Area Network (WAN) fiber ring was upgraded from a 1GB to a 10GB circuit.
- OIT has leveraged CUNY-negotiated, cost-effective software licensing to offer SPSS, SAS, AutoCAD, McAfee Endpoint ${ }^{\text {TM }}$ protection and encryption, MS Office ${ }^{\text {TM }}$ (Windows and Mac platforms), Windows ${ }^{\text {TM }}$ OS upgrades, CALs for Windows Server $2008{ }^{\mathrm{TM}}$, Cisco Smartnet ${ }^{\text {TM }}$ services, Mathematica®, Microsoft Windows $2010^{\text {™ }}$ campus site licenses, and others. In addition, OIT has facilitated the purchase of annual subscriptions for specialized software packages, including Discover ACT, Medical Media Systems, and ArtStor.
- The college has assisted in the replacement of obsolete equipment, such as computers, laser printers, digital cameras, scanners, and video cameras, for numerous labs, classrooms, and departments.
- To comply with government regulations, OIT has installed specialized accessibility equipment to accommodate students with learning disabilities, thus improving their access to learning resources and services.
- The college installed self-service kiosks in the entrances of main campus buildings to provide convenient network access for students.


## J.18. Center for Excellence in Teaching and Learning (CETL)

Since the 2008 MSCHE Self Study Progress Report, the Center for Excellence in Teaching and Learning (CETL) has expanded its outreach to faculty by over 200 percent in terms of program series, number of events and attendance. Several new program series were started, including Hybrid/Online, Hands-on Technology, CETL Core, CETL webinars, and Special Events. For example, the number of events offered per academic year has increased from 52 in 2008 to 109 in 2012, with concomitant increases in attendance by faculty.

The Office of the President has made part-time faculty training a priority for the 2012-2013 academic year, and is funding stipends for part-time faculty to attend specific CETL workshops and a new adjunct orientation, co-sponsored by the Personnel Staff Congress (PSC)-CUNY. Approximately 200 part-time faculty have taken advantage of these programs, with generally positive feedback reported.

In the last few years, more faculty have incorporated technology into their courses. Blackboard ${ }^{\mathrm{TM}}$ usage has increased significantly over this period, going from approximately 20 percent of courses using Bb to nearly 42 percent of faculty. (See below, "Courses Activated on Blackboard ${ }^{\text {TM .".) CCNY also was }}$ awarded a Department of Education Title V grant, with a portion dedicated to the hybrid/online course initiative. In the past two years, over sixty faculty have been given training and support in converting their courses, and the total courses in these modes have increased over 400 percent, from 20 in 2010-2011, to 83 projected in 2012-2013.

CETL hosted the CUNY-wide Technologist Day in 2011 and the CETL Directors Winter Retreat in January 2012, as well as several smaller special events, e.g., technology immersions. Moreover, CETL originated and presented in several panel discussions about hybrid/online implementation at the CUNY IT Conference in December 2011, 2012, and in 2013.

## (CUNY IT Conference 2011)

## Strategic Planning for Online: Potential for CUNY Campuses

Online teaching at CUNY is undergoing a transition from early ad hoc approaches to one whereby campus administrators and faculty are determining more focused, structured approaches for hybrid/online activities on their campuses. A recent CUNY-wide survey of campus administrators was conducted to delineate online strategies, policies and practices. Findings from this survey will be interwoven with insights from panelists to better stimulate a dialogue on achieving the potential for online teaching and learning throughout CUNY.

Janey Flanagan, Director of E-Learning, Borough of Manhattan Community College
Michelle Fraboni, Lecturer, Childhood Education / Online Teaching Initiative Coordinator, CETL, Queens College Bruce Rosenbloom, Director and Online Learning Coordinator-Title V, CETL, City College

Since 2008, CETL's facility has been significantly upgraded via added technology, furniture, partitions and a new training center. Multiple-sized workshops can be accommodated via moveable furniture, and CETL can conduct simultaneous hands-on workshops in the partitioned training area.

In spring 2013, CETL was re-assigned to the Office of Information Technology.

## Courses Activated on Blackboard ${ }^{\text {TM }}$

The number of course sections activated on Blackboard ${ }^{\text {TM }}$ increased from 22 percent in spring 2009 to 43 percent in fall 2012.

Chart J18.1: Blackboard ${ }^{\text {TM }}$ (Bb) Activated Courses, Fall 2008-Fall 2012


Table J18.1: CCNY (including Center for Worker Education) Courses Listed as Hybrid and Online

|  | Fall 2010-Summer 2011 |  | Online |
| :--- | :---: | :---: | :---: |
| Semester | Hybrid | Notal |  |
| Fall 2010* | N/A | 5 | N/A |
| Spring 2011 | 15 | 4 | 20 |
| Summer 2011 | 0 | 9 | 4 |
| Total | 15 | Fall 2011 - Summer 2012 | 24 |
| Semester | Hybrid | Online | Total |
| Fall 2011 | 28 | 3 | 31 |
| Spring 2012 | 9 | 7 | 16 |
| Summer 2012 | 4 | 6 | 10 |
| Total | 41 | 16 | 57 |
|  | Fall 2012 - Summer 2013 |  |  |
| Semester | Hybrid | Online | Total |
| Fall 2012 | 27 | 6 | 33 |
| Spring 2013 | 29 | 8 | 37 |
| Summer 2013 | N/A | N/A | N/A |
| Total | 56 | 14 | $70^{* *}$ |

[^3]
## Looking Forward: Goals for 2013-2017

CETL acknowledges its future challenges and opportunities:

- Expand hybrid/online throughout the CCNY curriculum with a concentrated focus on several departments and programs. CETL's goal is to train over 200 faculty in the conversion of their traditional courses to either hybrid or online formats. (Standard 10)
- Implement lecture-capture capability at CETL, with the ability to broadcast and archive faculty workshops at CETL. (Standard 10)
- Offer semester- and year-long faculty development workshops on technology in the curriculum for 100 faculty, to be selected by their departments (Standard 10)
- Apply for grants to extend the scope and resources of CETL to better serve CCNY faculty. (Standard 10)
- Hire a minimum of two instructional technologists for CETL to support faculty in hybrid/online development and implementation in their courses. (Standard 10)


## J.19. Gateway Academic Center (GAC)

The Gateway Academic Center (GAC) was established in 2006 in response to the needs of the undeclared student. The mission of the Center is to equip the undecided student with all the resources needed to promote academic success by: coordinating developmental, supplemental and bridge coursework; mandating attendance at especially designed academic skills workshops for at-risk students; rigorously monitoring students throughout the first years of college life; mentoring students in course selection and in the choice of a major that reflects both their interests and strengths; sustaining an environment that stimulates students' intellectual curiosity; providing a firm foundation that will support them through the remaining years of undergraduate study. These goals are firmly aligned with Standards 8 and 9 of the Middle States Self-Study Report.

A major renovation to the GAC physical plant was completed in 2009. Formerly an undifferentiated open space, the GAC was redesigned to accommodate private advising sessions, individual and group study sessions, and an enclosed space created to function as a classroom. Wireless and equipped with a SMART Board, this room hosts workshops, classes, and seminars. Because of an increased emphasis on mandatory advising, tutoring, and workshop attendance, student traffic in the GAC has increased in terms of logged visits from 6,436 in 2009 to 9,926 in 2012.

Chart J19.1: Gateway Academic Center Visits (2009-2012)


The SMART room is mainly used to serve two student constituencies: (1) students who are participating in the University Summer Immersion Program (USIP) ${ }^{3}$ and who are attending mandatory homework labs; and (2) probationary students who are required to attend special sequential academic skills sessions until they achieve a minimum 2.0 GPA. CCNY launched both interventions within the last four years. These interventions have resulted in a statistically significant improvement in the percentage of GAC students who pass the entry tests necessary for admission to CCNY and in the percentage of enrolled students who recover from academic probation. Online registration for USIP controls for ineligible student participants and over-enrollments. Workshop rosters are easily generated.

[^4]Chart J19.2: GPA Comparison Between Academic Skills Workshop Attendees and non-Attendees


Table J19.1: GPA Comparison Between Academic Skills Workshop Attendees and non-Attendees

| Probation | Fall 2011 |  | Spring 2012 |  |
| :---: | :---: | :---: | :---: | :---: |
| With <br> Workshop Intervention $\mathrm{N}=143$ students | Average Overall GPA increase | . 338 | Average overall GPA increase | . 510 |
|  | Students who achieved a 2.0 or better | $\begin{gathered} 34 \% \\ \text { (48 out of 143) } \\ \hline \end{gathered}$ | Students who achieved a 2.0 or better | $\begin{gathered} 55 \% \\ \text { (63 out of 114) } \end{gathered}$ |
|  | Students who dropped out | $\begin{gathered} 0 \% \\ \text { (0 out of 143) } \\ \hline \end{gathered}$ | Students who dropped out | $\begin{gathered} 20 \% \\ \text { (29 out of } 143 \text { ) } \end{gathered}$ |
| Without <br> Workshop Intervention $\mathrm{N}=44$ students | Average overall GPA increase | . 109 | Average overall GPA increase | . 355 |
|  | Students who achieved a 2.0 or better | $26 \%$ (11 out of 44) | Students who achieved a 2.0 or better | $\begin{gathered} 54 \% \\ \text { (12 out of 22) } \end{gathered}$ |
|  | Students who dropped out | $\begin{gathered} 0 \% \\ (0 \text { out of } 44) \end{gathered}$ | Students who dropped out | $\begin{gathered} 45 \% \\ (20 \text { out of } 44) \end{gathered}$ |

In 2011 CCNY developed and installed a data base to track the GAC student cohorts. The collected student data, such as the number of individual student visits to GAC and resulting advisor's notes, are not available on the College's Student Information Management System (SIMS). This tracking is especially important for the pre-engineering cohort, which accounts for approximately one-third of GAC's student activity. Since less than ten percent of these hopefuls are accepted by the Grove School of Engineering, it is critical for GAC advisers to intervene and re-focus the career goals of the Engineering aspirants, who are not tagged in SIMS. ${ }^{4}$ The new database enables the GAC to easily track and retrieve their numbers and to compile data on their progress.

For over twenty-five years, CCNY has "required" some type of freshman experience class. In the fall of 2011, the delivery of the New Student Sessions (NSS) was reconceived, with topical sessions-career planning, sexual harassment, text anxiety-offered on a rotating basis, at different times and days to

[^5]accommodate student schedules. Students are able to browse and register for available sessions online at the GAC website.

Goals for the new NSS are ambitious, covering not only academic and administrative policy but also providing opportunities for students to engage in the cultural, social, and intellectual life of the campus. To that end, cultural events such as plays, concerts and poetry readings, as well as talks by distinguished academicians or statesmen, are NSS accredited. Development of a mandatory "Technical Literacy" session is now underway, thus bringing up to five the total number of NSS required before the sophomore year.

## J.20. SEEK Program

Established in the 1960s through legislation proposed by then State Assemblyman Charles Rangel, State Senator Basil Patterson, and Manhattan Borough President Percy Sutton, SEEK (Search for Education, Elevation, and Knowledge) became the first program of its kind in the nation and has remained the model for Higher Education Opportunity programs across the country. As specified in the CUNY SEEK Guidelines, SEEK's mission, "which is central to the University's mission, is to assist in providing equality of higher educational opportunity to students who otherwise would not have access." To be eligible for SEEK, students must demonstrate that they are both "academically and financially disadvantaged." Although the definition of financial need is set by New York State, academic unpreparedness is determined by CCNY. In addition to financial assistance, SEEK features an intensive summer program, tutoring, and counseling. SEEK students may earn baccalaureate degrees from all schools and divisions within CCNY.

The CCNY SEEK Counseling and Student Support Services, which reports directly to the Provost at the College level and to the CUNY Associate Dean of Special Programs at the University level, is an academic department within the College of Liberal Arts and Sciences (CLAS). The Director, who enjoys faculty status, is both the director of the program and the chairperson of the SEEK Department. The six department faculty, who are have non-instructional status, are responsible for providing personal and academic support services, including the teaching of a required, non-credit New Student Seminar for SEEK freshmen. The seminar focuses on the academic competencies and behaviors necessary for student success.

The New York State Legislature provides annual funding for all state-wide opportunity programs, i.e., SEEK, Equal Opportunity Program (EOP), Higher Education Opportunity Program (HEOP), with the CUNY Office of Special Programs determining the specified number of students and the corresponding budget allocation. Additional funds provide for Supplemental Instruction, Other Than Personnel Services (OTPS), and financial aid covers the cost of textbooks and College activity fees.

While CCNY raised it admissions requirements for fall 2012, SEEK requirements have not changed since fall 2010. Since the decennial review, SEEK cohorts-and their proportional representation in the College's entering freshman class—have increased.

Table J20.1: Trends in Enrollment of SEEK and non-SEEK First-Time Freshmen

|  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SEEK Freshmen | 198 | 228 | 164 | 159 | 214 | 240 |
| non-SEEK Freshmen | 1,571 | 1,480 | 1,521 | 1,230 | 1,303 | 1,134 |
| Total Freshman Enrollment | 1,769 | 1,708 | 1,685 | 1,389 | 1,517 | 1,374 |
| SEEK \% of Total Freshman Enrollment | $11.2 \%$ | $13.3 \%$ | $9.7 \%$ | $11.4 \%$ | $14.1 \%$ | $17.5 \%$ |

Although CCNY met or exceeded the freshman enrollment targets, the total number of SEEK undergraduates has fallen below projections for the last three years.

Table J20.2: Trends in SEEK and non-SEEK Enrollment

| Academic Year/Term | $2007-2008$ | $2008-2009$ | $2009-2010$ | $2010-2011$ | $2011-2012$ | $2012-2013$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Fall (SEEK) | 901 | 920 | 876 | 803 | 830 | 883 |
| Spring (SEEK) | 821 | 853 | 777 | 733 | 770 | 809 |
| Annualized Average <br> (SEEK) | 861 | 886 | 826 | 768 | 800 | 846 |
| Fall (non-SEEK) | 13,636 | 14,482 | 15,432 | 14,750 | 15,259 | 12,229 |
| Spring (non-SEEK) | 10,201 | 10,621 | 1,175 | 11,477 | 11,604 | 11,737 |
| Annualized Average <br> (non-SEEK) | 11,919 | 12,552 | 13,304 | 13,114 | 13,432 | 11,983 |

One of SEEK's primary assessment challenges is to identify specific learning outcomes that accurately reflect program goals. Nevertheless, assessment, both formative and summative, plays a critical rôle in evaluating the effect of interventions and services and in developing future plans and programmatic strategies. Data from a variety of sources are collected and analyzed, using a multipleevidence approach. These data include student demographic and enrollment information, e.g., SAT scores; academic performance, e.g., GPA distribution by class standing, enrollment status, basic skills completion rates; grades in critical gateway and General Education courses; probation and dismissal rates; student progress, e.g., credits attempted and earned, one- and two-year retention rates, graduation rates; and student satisfaction surveys. SEEK uses multi-year comparisons to identify changes and discern trends, which are then used to inform revised and new program initiatives.

In addition, SEEK collects student feedback from the SEEK Counseling Survey, distributed annually near the end of the spring semester. The survey assesses student satisfaction with counseling services and their counselors, as well as their understanding of their rôle as students. In spring 2012, 93 percent of the students expressed either strong agreement ( 48 percent) or agreement ( 45 percent) with the latter. SEEK launched an electronic version of the counseling survey in spring 2011. The response rate increased from 31.3 percent in 2011 to 45 percent in 2012. Other assessment instruments are SEEK's New Student Seminar course evaluations and an academic support services survey.

Improvements in student performance parallel improved graduation rates.
Table J20.3: SEEK and non-SEEK 6-Year Graduation Rates

| Cohort | Fall 2001 | Fall 2002 | Fall 2003 | Fall 2004 | Fall 2005 | Fall 2006 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SEEK | $27.5 \%$ | $24.1 \%$ | $20.9 \%$ | $30.2 \%$ | $32.9 \%$ | $39.9 \%$ |
| non-SEEK | $38.8 \%$ | $40.4 \%$ | $38.6 \%$ | $41.4 \%$ | $42.0 \%$ | $42.5 \%$ |

## J.21. Student Support Services Program (SSSP)

CCNY's Student Support Services Program (SSSP) is a federal program for low-income firstgeneration undergraduates. The goal of the program is to increase the retention and graduation rates of students. Funds are awarded through a grant competition from the Department of Education to provide students with opportunities for academic development, acquisition of basic college competencies, and achievement of a baccalaureate degree. SSSP provides academic tutoring, advisement in course selection, information on financial aid and scholarships, assistance in securing financial aid and grant aid to students receiving Pell Grant. ${ }^{5}$

There are five program components: academic advising, tutoring, financial aid, mentoring, and cocurricular activities. A website of the Program is www.cony.cuny.edu/sssp lists the activities, components and the achievements of the program. The program currently serves over 500 students in all major disciplines of the college, who are served by three full time advisors/counselors, a tutoring coördinator, an administrative assistant, the director, and a team of paid student tutors and peer mentors.

## Assessment

SSSP conducts comprehensive assessment with identified success measures for each component of the program, with the previous year used as baseline. Outcomes assessment also is performed by CCNY Office of Institutional Research, the Federal Department of Education Annual Performance Report (APR), and feedback.

## Recruitment of Students

Each September, Information Technology (IT) provides SSSP with a report of over 1,700 undergraduates. Each must satisfy the following conditions:

- new freshman, continuing, or transfer student
- US citizen or permanent resident
- fall semester registrant
- Pell grant recipient
- individual with SAT scores of 480 or below in Critical Reading, Math, or Writing; and a high school average of 82 percent to 90 percent
- current student with college GPA of 2.5 or below and a college major

SSSP invites identified students, by email, to an open house in late September, and those interested complete an application form that includes academic and financial information, as well as the reason for seeking admission to SSSP. Staff retrieve high school and college transcripts and official financial aid information. In addition, CCNY units may refer currently enrolled students directly to SSSP. During 20122013, sixty CCNY students attended the open house, and SSP accepted 124 students.

[^6]
## Success Measures

Academic preparedness is measured by SAT scores; high school courses; type of high school, e.g., public, independent, specialized, charter; academic major; CCNY courses; college GPA; attempted and earned credits; participation in a "bridge," summer, or winter program; demonstrated characteristics, e.g., traditional/non-traditional, independent/dependent student, motivation; evident desire to participate actively in academic support programs; potential to enhance the SSSP student experience. A key indicator of success is the increases in the number of SSSP students retained at the College.

## Academic Advising (9)

Each student in the program is assigned an advisor upon entry into the program through graduation or separation from the college. The advisor provides targeted advisement based on grade level, major, and financial condition. All facets of academic advisement, including monitoring student progress, referrals to tutoring services; recommendation letters for graduate school applications; major scholarships; referrals to career information and options; counseling for students facing personal, financial or academic issues and, if needed, referrals to CCNY's professional counseling services are addressed. In addition, SSSP counselors assist students who must write appeal letters for academic standing issues, financial aid, and housing. Counselors also serve as advisors to SSSP student clubs, such as The Leadership Society, The Fusion Club, and the Chi-Alpa-Epsilon Honor Society. The staff also identifies future mentors and tutors.

In fall 2012, advisors were trained in the use of Advisortrac ${ }^{\text {TM }}$, a web-based application that improves and tracks students-advisor interactions. Each advisor completes the APR and calculates retention rates and six year graduation rates for their individual caseload.

Success is measured by the increase in number students who meet see the advisor; number of students referred to tutoring; number of students who attend enrichment programs and participate in extra-curricular activities; number of students that apply for and receive scholarship; number of students retained; and number of students who graduate. Performance of outcomes is seen in the number of students retained, the number who graduate each year, and the number who pursue graduate degrees.

## Academic Support and Tutoring (9)

Academic support and tutoring is offered in most first-level courses in the sciences-biology, chemistry, mathematics (Math 80-202), and physics—and in other courses, such as Psychology 102-215, economics, philosophy, foreign languages, and computer science. Group tutoring, in collaboration with CCNY's Coördinated Undergraduate Education (CUE) initiative, targets biology, mathematics, physics, and psychology courses. In the future, supplemental Instruction will be offered in Physics 207. Two writing instructors also assist at the CCNY Tutoring Center. Students are referred to tutoring by their counselor and may be assigned a tutor on a one-to-one basis for fourteen weeks, or they may "walk-in" to
receive tutoring on a one-time basis. Each semester 10-15 peer tutors, who are trained prior to the beginning of the semester, are available to students. Tutors are upper-division undergraduates who have earned GPAs of 3.0 or higher, and who are willing to tutor more than one subject. SSSP students also may attend tutoring sessions and centers across the College.

## Program and Student Success

Program and student success is measured by the increase in the number of referrals; number of courses tutored per student; number of students demanding tutoring, frequency of attendance for each tutored course, improvement in course grade during the semester, retention of students for tutoring each semester, number of tutors available to tutor and match schedules, number of tutors returning. Performance of outcomes of tutoring are measured in terms of improvement of grades and increase in the completion of courses tutored. Performance of the center is also measured in the number of students that received a grade of $C$ or above in courses tutored.

## Financial Aid Program (9)

Students may receive financial assistance from several sources:

- Grant aid is available to students receiving Pell Grants. Students apply for additional grant aid through their advisors, who provide recommendations. The selection of students and a determination of the award amount are based on the applicant's personal statement, earned grades, enrolled credits, academic program plan, and unmet financial need.
- Qualified SSSP students serve as peer tutors (\$10/hr) and peer mentors (\$500/academic year). Nine peer mentors were hired in fall 2012.
- Students are encouraged to use SSSP as site for Federal Work Study awards, and eleven such students were hired in 2012-2013.
- The Zitrin Peer Mentoring and Tutoring Scholarship, an alumnus-funded award of $\$ 5,000$, is offered to four students selected on the basis of academic excellence and community service.

In addition, SSSP hosts a financial aid workshop to inform students of Federal and State financial aid policies and available loans and scholarships (34 students attended). Success is measured by the increase in number of students receiving financial aid; and in the number applying for peer tutoring and peer mentoring positions.

## Mentoring Program (9)

SSSP initiated a mentoring program in the fall of 2008. The purpose of the program is to provide entering students a contact with a successful upper-division student to ease the transition between high school or prior college and CCNY; to ensure student participation in all SSSP services; and to train all peer mentors. The training session, which is conducted by the SSSP director, presents various topics,
such as the definition of mentoring, types of mentoring, goals of the mentoring program in SSSP, the mentor/mentee commitment; confidentiality issues; campus resources; General Education requirements; and the SSSP Academic Program Plan. Each counselor recruits three peer mentors on the basis of academic record, major, and grade-level, and each peer mentor has a "case load" of seven to ten students. The peer mentors must commit to four hours per week that include face-to-face meetings, emails, club attendance, workshops, presentations, and other events, and they must maintain logs of all mentee contacts. Success is measured by the number of contacts with mentee, increases in the number of visits and participation in the services of the program.

## Co- and Extra-curricular Activities (9)

Informational and developmental workshops, such as time management, pre-med preparation, and résumé development, are held each week to help students achieve their academic goals. Juniors and seniors also attend informational workshops on CUNY Pipeline Programs, CCNY graduate programs at CCNY, the graduate school application process, and the CCNY Career Recruitment Program. SSSP collaborates with various offices and programs-Career Center, CCNY Graduate Admissions, and the CUNY Pipeline Program-to ensure that SSSP students have current and accurate information.. Success is measured by the increase in the number of students that follow-up, apply, and complete requirements of the programs. A survey is sent to all participants of the Junior-Senior Experience Program to capture feedback.

An Annual Award Ceremony is held in May. For low-income, first-generation, non-traditional students from immigrant backgrounds, the annual award ceremony recognizes and reinforces their commitment. CCNY divisions of Humanities, Social Sciences, Science, Education, and Engineering present divisional awards to outstanding SSSP students. Graduating seniors and students with outstanding records are recognized with trophies and medals. Mentors, Federal Work Study students, and student aides receive certificates of appreciation for their contributions to the program. A reception is held for the college community, parents and significant others of the awardees. Success is measured by the increase in the number of students receiving awards, the number of awards, and the increase in the number of seniors who graduate.

SSSP collaborates with the SEEK Program to induct students to the Chi-Alpha-Epsilon National Honor Society once a year. A reception and recognition ceremony is held following the induction to which parents and significant others and leading members of the college and community are invited. Success is measured by the increase in the number of students inducted each year.
J.22. Peer-Led Team Learning Initiative

In spring 2013, CUNY awarded CCNY a grant to expand its successful peer-led team learning (PLTL) model to other STEM "gateway" courses in calculus, computer science, and physics. Planning and training has commenced at the College, and PLTL supported sections will begin in fall 2013. The original proposal, which outlines implementation phases, assessment plan, and research model follows.

## Increasing Student Success: Peer-led Learning Communities in the STEM Disciplines

Why do some students succeed in the STEM disciplines and others do not? A common explanation cites individual talent, motivation, and capability, which reinforce the prevailing academic culture and pedagogical methods that rely on the unforgiving "weeding out" model. Such an approach discourages able STEM aspirants and ultimately forces many to leave the sciences for other disciplines (Seymour, 2000). With support through the CUNY Student Success Research initiative, City College (CCNY) proposes to alter this trend by scaling up its proven peer-led team learning (PLTL) model to other STEM "gateway" courses (calculus, computer science, physics); by introducing PLTL to a Pathways course (Exploring Chemistry for non-science majors); by testing and assessing the PLTL model; and by disseminating significant research innovations in PLTL scholarship. Under the oversight of the Senior Associate Provost, this project will:

- demonstrate the effectiveness of the PLTL model across the STEM disciplines;
- provide training and on-going support to PLTL faculty and peer leaders;
- create generic and discipline-specific PLTL procedures and materials;
- align curricular maps and learning outcomes across the STEM disciplines;
- increase the success and persistence of students in the PLTL courses;
- employ a new research model (comparative linear regression) to demonstrate the impact of the PLTL model on student learning and retention;
- disseminate research findings across CUNY and through external professional groups; and
- conduct professional development workshops to promote the adoption of the PLTL model by other faculty teaching "gateway" and Pathways courses at CCNY and other CUNY colleges.


## - What is the Peer-led Team Learning Model?

CCNY founded the Peer-led Team Learning (PLTL) model in response to concerns about low success rates in general chemistry, in which only 38 percent of the enrolled students earned grades of $A$, B, and C (Gosser, 2001). In PLTL, peers lead weekly, two-hour study group sessions to discuss and debate the course material and to engage in problem solving and model building; the sessions are integral to the course and complement the course lectures and recitations. Students who have succeeded in the course are then recruited to serve as peer leaders in subsequent semesters. During the semester, specially trained faculty and PLTL course assistants oversee the peer leaders, who (1) help to prepare the content presented at the weekly study group sessions and (2) take a one-credit course in leadership.

In this supportive, peer-to-peer environment, students learn actively, make mistakes without fear, and discover the value of persistence. Currently, over 700 CCNY students enrolled in general chemistry benefit from 20,000 hours of workshops ( $700+$ students $\times 28$ workshop hours) each semester. At present, the percentage of participating PLTL students achieving grades of A, B, and C at CCNY is 70 percent.

The development and dissemination of the PLTL model was initially supported by the National Science Foundation (NSF). Thereafter, a CCNY-led coalition of national universities replicated CCNY's PLTL model in over 200 courses at 150 institutions, at which more than 2,000 peer leaders directed weekly study group sessions for over 20,000 students. Subsequent studies in Chemistry examined both A, B and C grades, as well as exam grades, validating the original reports (Hockings, 2006; Wamser, 2006; Lewis, 2011). Preliminary studies indicate programmatic compatibility with other STEM courses, such as computer science (Horwitz, 2009). All of the successful PLTL implementations included the following critical components: (1) study group sessions were an integral component of the course; (2) peer leaders received leadership training and reviewed course and study group session content with faculty; (3) materials for workshops were challenging and encouraged collaborative work; (4) faculty were involved; (5) facilities were appropriate; and (6) the PLTL community was recognized as a valuable part of the college mission.

## - Project Objectives

CCNY proposes to increase student success substantially in STEM and to advance PLTL scholarship significantly by:

## - integrating PLTL into "gateway" courses in several STEM disciplines

In the past, most PLTL implementations have been limited to a single course at the sponsoring institution. Such resource-driven decisions have prevented the PLTL model from effecting increases in student success across the disciplines, with some key courses continuing to report low performance rates. This proposal will create a multi-disciplinary PLTL community in calculus, physics, and computer science that encourages student success and offers an exceptional assessment opportunity.

## - fostering science literacy among non-science majors

To date, all PLTL implementations have been in "gateway" courses for science majors. However, science literacy-the knowledge and understanding of scientific concepts and processes-among non-science majors is critical, if they are to make informed decisions, participate in civic and cultural affairs, and achieve economic productivity in the future. The proposed PLTL Pathways course-Exploring Chemistry-will develop analytical thinking and scientific literacy through peer-led discussions of concepts and real-world applications.

- using a comparative linear model to assess PLTL

Prior research, utilizing controls such as the SAT math score and high school GPA, has confirmed the effectiveness of the PLTL model in improving student success. However, these
researchers have used multi-linear regression models, which make incorrect assumptions regarding the data. This proposal will employ a comparative linear model, adapted from the biological literature, to eliminate flawed assumptions and produce a more accurate analysis of student performance data and PLTL innovations.

## - evaluating the effectiveness of the PLTL model in other STEM disciplines

Controlled studies of PLTL and non-PLTL student performance using regression methods have been restricted to chemistry courses. This proposal will result in the first controlled studies of PLTL in calculus, computer science, and physics, as well as in a new Pathways course.

Table J22.1: Implementation Timeline and Plan: Spring 2013-Spring 2014 (18 months)

## Spring/Summer 2013 Fall 2013 (320 PLTL students) $\quad$ Spring 2014 (320 PLTL students)

- faculty development workshops
- development of disciplinary materials for PLTL weekly study group sessions
- recruitment of peer leaders
- peer-leader orientation for fall 2013
- research and evaluation
- PLTL communities (32 peer-led groups, 320 students)
- leadership course and content preparation for peer leaders
- weekly meetings of PLTL faculty, course assistants, peer leaders
- assessment of PLTL and non-PLTL cohorts, peer leaders, and faculty
- revision of materials and training
- peer-leader orientation for spring 2014
- research and evaluation
- present emerging research findings
- PLTL communities (32 peer-led groups, 320 students)
- leadership course and content preparation for peer leaders
- weekly meetings of PLTL faculty, course assistants, peer leaders
- assessment of PLTL and nonPLTL cohorts, peer leaders, and faculty
- research and evaluation
- present summative report
- host CUNY-wide professional development workshops about the PLTL model for CUNY faculty


## Spring 2013/Summer 2013

CCNY will offer a two-day intensive faculty development workshop, led by Dr David Gosser (Chemistry), campus professionals, and three experienced peer leaders. Participating faculty will gain a deeper understanding of the PLTL model through engagement with the current peer leaders and topical sessions: An Overview of the PLTL Model, Leadership and Pedagogy for Peer Leaders, Developing PLTL Study Group Session Materials, and Understanding the Comparative Linear Regression Model: Assessing PLTL Student Performance.

Faculty, in consultation with Dr Gosser, will create multi-discipline materials for their courses and the study group sessions, followed by formative testing with a group of students. Additionally, course materials will be aligned with student learning outcomes developed by the Division of Science as part of CCNY's self-study for the Middle States Commission on Higher Education (MSCHE). Additional assessment materials will be prepared for both PLTL and non-PLTL cohorts in collaboration with the Director of College Assessment, Dr Kathy Powell-Manning, and evaluators from Columbia University.

In late summer, Dr Gosser, course assistants, and several experienced peer leaders will provide a rigorous orientation to the new peer leaders, and the fall 2013 materials will be posted on the PLTL web site (www.pltl.org).

CCNY's Office of Institutional Research (CCNY IR) will provide baseline data to the external evaluators, who will administer pre-questionnaires to PLTL faculty, course assistants, and peer leaders. Feedback forms from the faculty development workshops and the peer leader orientation will be developed, disseminated, collected, analyzed, and presented before the beginning of the fall 2013 semester.

## Fall 2013

Each of the fall 2013 PLTL courses-CSC 102 (Introduction to Computing), MATH 201 (Calculus I), PHYS 207 (General Physics), and CHEM 110 (Exploring Chemistry/Pathways)-will have one faculty mentor, one course assistant, and eight peer leaders; each peer leader will support one 8 -student PLTL study group. Enrollment in particular course recitations or labs will establish the PLTL and nonPLTL cohorts. Throughout the semester, PLTL faculty will meet weekly with their course assistants and peer leaders to review content for the next study group session, progress within the study groups, experiences of the peer leaders, and related matters. In addition, Dr Gosser and his PLTL colleagues will periodically observe study groups in action. He also will offer a semester-long leadership course to the fall 2013 peer leaders and will coordinate an orientation for spring 2014 peer leaders in November 2013.

During the semester, the external evaluators will administer pre-and post-questionnaires to PLTL faculty, course assistants, peer leaders, and students; and will observe several study group sessions.

In January 2014, Drs Gosser and Powell-Manning, in collaboration with the external evaluators, will conduct formative evaluation of the PLTL materials and the PLTL implementations. The PLTL team will prepare and release a report of significant, albeit preliminary, research findings.

## Spring 2014

As in the fall 2013 semester, enrollment in particular course recitations or labs will establish the PLTL and non-PLTL cohorts, who will have access to revised materials through the updated PLTL web site. During the semester, PLTL faculty will meet weekly with their course assistants and peer leaders, and Dr Gosser and the PLTL team will periodically observe study groups in action. He also will offer a semesterlong leadership course to the peer leaders. The external evaluators will administer pre-and postquestionnaires to PLTL faculty, course assistants, peer leaders, and students; and will observe several study group sessions.

A summative report will be available in August 2014, and CCNY will sponsor professional development workshops soon thereafter.

## -Research Model and Assessment

A notable contribution in PLTL studies has been the introduction of multi-linear regression models to PLTL research to control for potential differences in ability between the two groups (PLTL versus non-

PLTL) (Hockings, 2008, Wamser, 2006). Measures of ability that are well correlated with performance in chemistry have been utilized, such as SAT math scores or high school GPA. They begin with an equation of the type:

$$
\text { Grade }=\alpha \times \mathrm{SAT}(\mathrm{Math})+\beta \times \text { Group }+\varphi \times \text { Gender }+\mathrm{Int}
$$

where the numerical course grade is a function of SAT score, gender (M or F ), and group (PLTL or nonPLTL).

However, since gender and group are categorical variables, they take a value of either 0 or 1 . This means, in effect, that they can only influence the intercept of the linear equation, and not the slope. As a consequence, multi-linear models assume all such lines are parallel (Figure 1a). While this has been a common assumption in several prior PLTL studies, an examination of actual data in graphical format shows


Figure 1a. Multi-linear regression


SAT Math
Figure 1b. Actual data trends that this assumption is in general not true (Figure 1b). Figure 1b is based on a preliminary analysis of data in Organic Chemistry and General Chemistry courses (Gosser, 2011).

This is understandable, in that students who have a very high measure of prior ability, e.g., SAT Math score, are likely to earn a high course grade, whether or not they participate in PLTL. Fitting this type of data by multi-linear regression results in a fit that overestimates the impact of PLTL at the high end of prior student ability, and underestimates the impact at the lower end.

A method of analysis that does not make the assumption of parallel lines can be found in the biological literature (Zar, 1884). This method, comparative linear regression, uses traditional statistical measures to discern whether linear fits, i.e., $\operatorname{Grade}=\alpha \times \mathrm{SAT}(\mathrm{Math})+\mathrm{Int} 7$, of two different data sets have significantly different slopes or intercepts. Thus, we can directly compare groups, e.g., PLTL versus nonPLTL, and specific populations, e.g., PLTL-Women versus non-PLTL-Women, to achieve a truer measure of the impact of PLTL.

CCNY will analyze the performance of students in each course utilizing the comparative linear regression model. Students will be assigned to PLTL and non-PLTL cohorts by random distribution within each course, which will ensure wide overlap in prior ability between the cohorts and will lead to a robust analysis. Both cohorts will receive the same class problems and examinations, and all examination scores will be collected and analyzed by comparative linear regression.

## - External Evaluation

The external evaluation of this project will be conducted by Dr Ellen Meier and the Evaluation Group of the Center for Technology and School Change (CTSC), Teachers College, Columbia University. CTSC has partnered successfully with CCNY in the past on Department of Education, Title V, and HSISTEM grants.

The scope of work for the Evaluation Group includes (1) design and administration of pre- and postquestionnaires to PLTL faculty, course assistants, peer leaders, and students; (2) conduct focus groups with PLTL faculty, course assistants, and samples of peer leaders and students; (3) observe selected PLTL study groups; (4) analyze student data, e.g., SAT Math, high school GPA, course grade, CCNY GPA (source: CCNY IR); (4) provide formative findings; and (5) collaborate with project personnel on the writing of a summative report. The Evaluation Group will support CCNY's PLTL team in determining the effectiveness of the implementation of the project and examining strategies for institutional adoption of PLTL.

## - Dissemination Plan

The project will maintain a web site devoted to this CUNY initiative, with descriptions of project goals, activities, materials, research, and assessment, with links to the web sites of the Center for PLTL and CCNY's Division of Science. In addition, CCNY and its Center for Excellence in Teaching and Learning (CETL) will offer a CUNY-wide faculty workshop in fall 2014.

## J.27. CCNY Green: Sustainability Initiatives



CCNY actively promotes sustainability, not only in traditional disciplines, such as Biology and Earth and Atmospheric Sciences (EAS), but also across its schools, departments, and offices. A global challenge. A campus commitment.

As per the CUNY Goals and Targets, each college "should have a functioning campus sustainability council and have a recognized, multi-year campus sustainability plan." CCNY's sustainability council, the CCNY Green Taskforce, is comprised of eight working groups of students, faculty, and staff who monitor energy, water, transportation, recycling, procurement, nutrition, and community outreach. The Vice President for Campus Planning and Facilities Management, Robert D. Santos, and the Environmental Analyst/Sustainability Coördinator, Cheila Benavides, serve as the Taskforce Chair and Co-chair, respectively.

Table J27.1: CCNY Green Taskforce Working Groups and Chairs

| Working Group | Chair | Administrative Superintendent |
| :--- | :---: | :---: |
| Campus Planning and Operations | Kyle Manley | Director of Public Relations |
| Communications | Ellis Simon | Director of Government and Community Affairs |
| Community Affairs and Public Education | Anthony Achille | George Smith |
| Education and Research | Coördinator of Sustainability in Urban Environment Program |  |
| Food, Auxiliary Services, Residence Hall | Kenneth Waldhof | Executive Director of Auxiliary Enterprises Corporation |
| Procurement | Mario Crescenzo | Director of Business and Finance |
| Student Engagement | Wendy Thornton | Executive Director of Student Services and Conduct |
| Transportation and Waste Management | George Varian | Supervisor of Mechanics |

In 2011, CCNY completed a ten-year sustainability plan, Sustainable CUNY, which details achievements and goals for the coming years. Highlights include:

- completed phase I—installation of a curtain wall—of the HVAC system upgrade project of the Marshak Science Building
- switched boilers in the Marshak Science Building and the North Academic Center (NAC) from Number 6 fuel oil to natural gas
- completed the NAC building boiler plant heat exchanger assembly and pump upgrade
- continuation of comprehensive exterior renovations to Shepard Hall, which will result in energy savings and cost reductions
- retrofitted approximately 175 laboratory fume hoods with low-flow ventilation fans
- installed across campus low-flow plumbing faucets; multiple user-friendly hydration stations to decrease the use of plastic water bottles; energy motion sensors; high-efficiency lighting fixtures and switches; electric Dyson hand dryers in restrooms; and Direct Digital Control (DDC) Building Automation System
- implemented the Information Technology energy efficiency center
- replaced gasoline buses with energy efficient diesel, natural gas, and electric vehicles for CCNY's fleet
- invested in thirty-yard containers to separate garbage from recyclables
- partnered with the NYC Department of Sanitation to track all CCNY waste
- initiated the "Rethink and Reconsider" recycling campaign
- installed only certified recyclable computers, furniture, and carpet in the new cITy Tech Center
- aligned procurement policies with the goal of reducing greenhouse gas emissions, e.g., purchasing Energy Star-rated appliances and equipment, environmentally friendly cleaning products
- increased the purchase of recycled products from 15 percent to 18 percent in 2011
- created an educational 60-foot "Sustainability Wall" in the NAC dining hall and a 70-foot wall that features environmental and sustainability research in the Marshak Gallery Café
- diverts e-waste to a third-party company
- encourages the use of public transportation, bicycles, carpools, and walking to decrease carbon emissions and offers reduced campus parking rates to those who drive hybrid fuel vehicles
- requires all on-campus service providers to comply with CCNY sustainable policies, e.g., CCNY's food vendor buys seasonal produce from farmers within 150 miles of the campus
- recycles all used cooking oil (Metropolitan) into biodiesel fuel
- working with the NYC Department of Environmental Protection on a project that will replace over 800 campus restroom fixtures and meters
- partnering with Health Services to create the Campus Connections Trail—a walking, jogging, and cycling path around the CCNY campus


## Academic

Since 2010, the Grove School of Engineering, the Bernard and Anne Spitzer School of Architecture, and the Division of Science have offered a joint Master of Science in Sustainability in the Urban Environment, the first such degree program offered in the US. The curriculum is designed to educate the interdisciplinary leaders needed to solve pressing local, regional, and global environmental challenges. In addition, the program has partnered with the New York Restoration Project in managing 130,000 gallons per year of NYC's storm water runoff. Other degrees include Computer Science's Master in Information Science, which includes hands-on GIS applications related to environmental research, and the Grove School of Engineering and the Division of Science's Earth Systems Science and Environmental Engineering for undergraduates, which takes a systems-based approach to environmental sciences.

The CUNY Energy Institute, the New York NOAA-CREST Center, and CUNY's Environmental CrossRoads Initiative are located on CCNY's campus, where they offer expertise and opportunities.

In fall 2011, over one hundred CCNY students from the Bernard and Anne Spitzer School of Architecture and the Grove School of Engineering participated in the international Solar Decathlon competition, sponsored by the US Department of Energy, and created the Solar Roof Pod. The "Pod" investigated the re-use of space in densely populated urban environments by harnessing the power of the sun to produce clean energy.

## J.34. CUNY Advanced Science Research Center and CCNY Science Research Building

Opening in 2014, the CUNY Advanced Science Research Center (ASRC) and the CCNY Science Research Building will bring the nation's largest urban public university—and its flagship college, CCNY— to a landmark moment in its decade-long, multibillion-dollar commitment to innovative science.


Located on CCNY's South Campus, the ASRC and the CCNY Science Research Building will open in 2014, and plans for staffing and outfitting the facilities are accelerating.

The ASRC will facilitate cutting-edge interdisciplinary research in nanotechnology, photonics, structural biology, neuroscience, and environmental sciences. In consultation with faculty researchers, CUNY is now in the process of finalizing the selection of the high-end instrumentation that will be housed at the center. Approximately 50 percent of the ASRC will be dedicated to core facilities, such as a clean room for diagnostics and fabrication and equipment for deposition and etching. In addition, the ASRC will house state-of-the-art imaging facilities: nuclear magnetic resonance spectrometers (NMRs), functional magnetic resonance imaging (fMRI), cryo-electron microscopes, transmission and scanning electron microscopes, and confocal and fluorescent microscopes. The top floor of the ASRC and a rooftop observatory will support research efforts in all aspects of remote sensing, including: sensor development, satellite remote sensing, ground-based field measurements, data processing and analysis, modeling, and forecasting.

The CCNY Science Research Building complements the ASRC, offering state-of-the-art facilities to interdisciplinary "clusters" in Structural Biology and Physics (first floor), Immunology and Photonics (second floor), Biology and Model Systems (third floor), and Organic Chemistry (fourth floor).

CCNY and the ASRC share the ground floor, which is dedicated to cryo-physics imaging, NMR imaging, EM imaging, and the vivarium. Together, the ASRC and the CCNY Science Research Building will provide over 400,000 square feet for cutting-edge research.

For renderings and floor plans, visit the CCNY Science Research Building.

## J.37. Government and Community Affairs

To enhance its relationships with the Harlem and greater New York communities, CCNY has invested in its Office of Government and Community Affairs. The office now comprised oversees five principal areas: Government and Community Affairs, Grant Funded Programs, Events Management, Arts and Cultural Activities, and Aaron Davis Hall, and is committed to improving community partnerships, focusing on research and program development, and serving as a bridge between CCNY and its surrounding communities by sponsoring and supporting events and activities.

CCNY is located within Manhattan Community Board 9, but it also is active in Community Boards 10 and 12, because of the College's extended relationships with diverse organizations and local legislators.

External funding sources are derived from allocations from the mayor's office, the borough presidents, city agencies, and members of the New York City Council. Received funds are used to support various initiatives and improvement and enhancement projects.

Table J37.1: External Funding from New York City Government, Council, Boroughs, and Agencies

| FY 2008 FY 2009 | FY 2010 | FY 2011 | FY 2012 | FY 2013 |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $\$ 1,984,000$ | $\$ 2,863,000$ | $\$ 30,000$ | $\$ 2,350,000$ | $\$ 2,400,000$ | $\$ 840,000$ |

## Strengthening Ties with the Community

In 2010, CCNY established a task force of faculty, students, and members of the community to strengthen existing partnerships and forge new ones. Examples of the task force's progress include:

- The CCNY Community Collaborations Through the Arts Committee oversees special local projects with the John H. Finley Day School, Hamilton Grange Landmark Gallery, Dwyer Cultural Center, and Harlem Hospital. The activities include collaborations with CCNY's Department of Art Education and with CCNY students enrolled in "Quilt Making in American History," a Freshman Inquiry Writing Seminar (FIQWS).
- The $125^{\text {th }}$ Street Business Improvement District (BID) asked CCNY to help the neighborhood improve its major corridor. CCNY is contributing its expertise and energies to the development of a community-based vision to preserve $125^{\text {th }}$ Street.
- The Center for Harlem Studies, funded through an allocation from Council Member Inez Dickens, is dedicated to the history and future of the vibrant Harlem community. For example, in collaboration with the Center, the Colin Powell for Policy Studies offers a service-learning course-Media Arts and Communications/Film and Video Production: Research and Writing the Documentary-that uses the visual arts to record the oral histories of Harlem elders and to produce a documentary.
- In response to the Harlem community's expressed need for employment training and job placement, Government and Community Affairs asked the Continuing and Professional Studies Program to develop a certified nursing assistant program, which recently earned official approval
from the New York State Department of Education and will offer a "career ladder" for students interested in nursing and physician assistants programs.


## Arts and Cultural Renaissance

In recent years, CCNY has experienced a cultural renaissance. The College appointed an Executive Director of Arts and Culture; regained supervision and managerial control of Aaron Davis Hall (ADH); created The City College Center for the Arts and established its board of trustees; and hired a Managing Director for ADH; designed new gallery spaces, e.g., Windows on Amsterdam, for exhibitions; increased partnerships with community arts programs; developed the "I Am City" tee-shirt and button campaign; cosponsored "Jazz on the Plaza," a public music series, with Jazzmobile; and many other events and initiatives. In addition, Government and Community Affairs is working with Aaron Davis Hall to recruit performing artists interested in teaching courses in Continuing and Professional Studies.

In 2012, CCNY received $\$ 1$ million in capital funding from the New York City Council for renovations to Aaron Davis Hall. The funds provided by the City Council will support projects to improve the building's interior. Additional capital funding for exterior and infrastructure is coming from CUNY.

Andreas Acrivos<br>Albert Einstein Professor Emeritus of Chemical Engineering and Mechanical Engineering<br>The Grove School of Engineering<br>National Academy of Science<br>National Academy of Engineering<br>Stephen C. Cowin<br>Distinguished Professor of Biomedical Engineering and Mechanical Engineering<br>The Grove School of Engineering<br>National Academy of Engineering<br>Morton Denn<br>Albert Einstein Professor of Science and Engineering<br>The Grove School of Engineering<br>National Academy of Engineering<br>H. Jack Geiger<br>Medical Professor Emeritus of Community Health and Social Medicine<br>The Sophie Davis School of Biomedical Education<br>Institute of Medicine<br>Marthe R. Gold<br>Arthur C. Logan Professor and Chair of Community Health and Social Medicine<br>The Sophie Davis School of Biomedical Education<br>Institute of Medicine<br>Myriam P. Sarachik<br>Distinguished Professor of Physics<br>Division of Science<br>National Academy of Science<br>Reuell Shinnar<br>Distinguished Professor of Chemical Engineering<br>The Grove School of Engineering<br>National Academy of Engineering<br>Sheldon Weinbaum<br>Distinguished Professor Emeritus of Biomedical Engineering and Mechanical Engineering<br>The Grove School of Engineering<br>National Academy of Science<br>National Academy of Engineering<br>Institute of Medicine


[^0]:    ${ }^{1}$ Faculty Direct is an assessment instrument that contains faculty ratings for student achievement of learning outcomes based on exams, reports, and assignments. Faculty Direct also provides vital closing-the-loop data derived from past offerings that inform future decisions.

[^1]:    * \% Immersion need initially vs. \% Immersion need at start of fall semester

[^2]:    ${ }^{2}$ The CUNY Productivity Initiative, an innovative plan whose goals are to generate more work at lower cost and to generate more revenue, with over $\$ 22$ million saved and re-invested in the CUNY colleges. The initiative has been so successful that other university systems, including the University of Maryland, have used it as a model for their own programs.

[^3]:    * There were no special designations at the Registrar's Office for hybrid and online courses up to spring 2011
    **
    The projected total number of hybrid/online courses for academic year 2012-2013 is 85 .

[^4]:    ${ }^{3}$ The GAC offers the USIP throughout the year, i.e., summer, fall, and spring

[^5]:    ${ }^{4}$ Of the ten percent who are admitted by the Grove School of Engineering, less than 5 percent will graduate. Every effort is being made across campus to help these "hopefuls" explore more realistic academic and career goals.

[^6]:    ${ }^{5}$ Department of Education Program Description website

