

Brooklyn College Academic Assessment Handbook

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1. Introduction

The administrative and academic leadership of Brooklyn College believes that a strong assessment program will improve student learning outcomes, enabling students to persist and complete their degree program goals. Due to the essential role that the College plays for its students and for New York City, the institution closely monitors and improves traditional measures of student success, such as retention and graduation rates. Given the challenges that many students face, maintaining a strong College-wide assessment plan is critical to our success. A carefully considered assessment plan helps Brooklyn College faculty identify academic areas where students are struggling and where they are excelling.

Faculty discussion regarding how to address the challenges in their courses and attain program outcomes is part of the College culture. This focus on improvement planning and implementation aligns with Brooklyn College's strategic planning goals. Furthermore, a robust data-focused assessment system utilizing data collected by faculty and administrators enables the College to make better decisions on the use of limited resources.

Faculty are the most familiar with their own courses, programs, and students. They are the best equipped to develop appropriate measurement tools to assess progress. Our faculty, including tenured and untenured professors, instructors, and Ph.D. candidates teaching courses, actively lead the assessment process throughout the College. Faculty-driven assessment is required on two levels: the program level and the institutional level. Institutionally, the College uses its General Education/Pathways Outcomes. Without faculty participation and faculty content expertise, the assessment process would be unproductive and the College would be unable to effectively engage in the Continuous Improvement Model (see Figure 1).

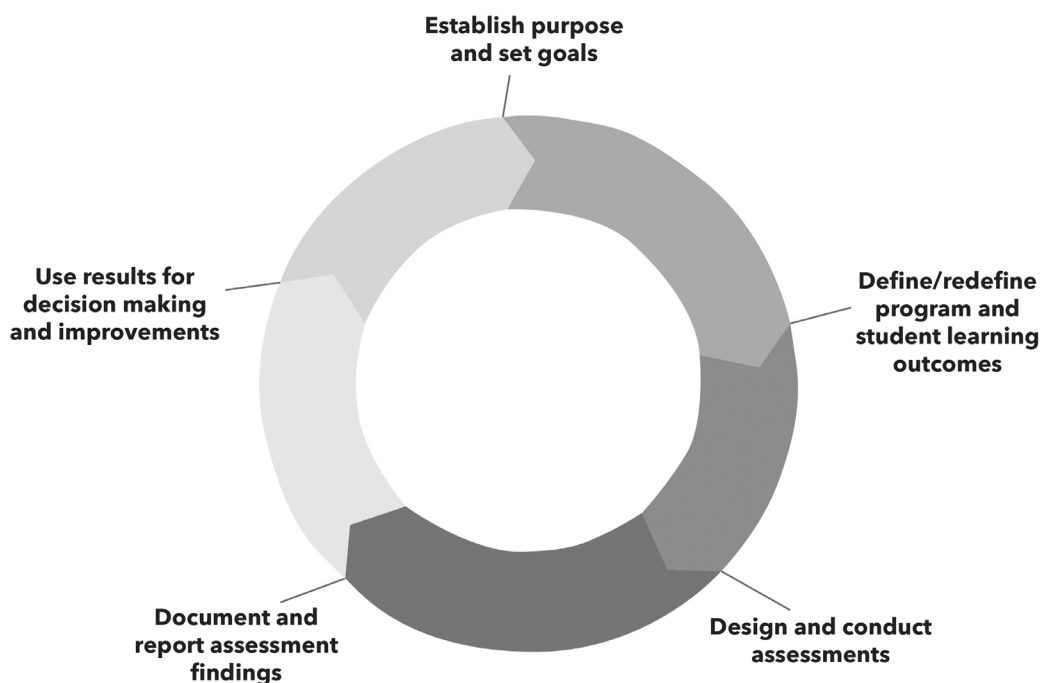


Figure 1. The model for the Cycle of Continuous Improvement

Purpose: How to Use This Manual

The purpose of the *Academic Assessment Handbook* is to provide guidance and resources for the Brooklyn College assessment process, and – more broadly – for assessment best practices. This handbook also includes the College's assessment timelines and calendars. The Office of Educational Research and Assessment (ERA) is available to serve as a resource and to provide customized training sessions for departments and programs. Please visit our webpage for additional information and for important supplemental resources.

Continuous Improvement Model

As you read this handbook, it is important to bear in mind the overriding ***purpose*** of assessment: to provide information that will enable faculty and administrators to improve student learning by making changes in policies, curricula, and other institutional programs, and to see how these are actualized through pedagogy and the student experience. This is less a method than a ***mindset*** and it has several relevant dimensions.

Firstly, the motivation for assessment resides within Brooklyn College and the programs themselves. Far too much assessment in higher education is undertaken at the behest of government bodies and accreditors instead of arising from a genuine interest and concern on the part of institutions and their faculties about their students (Kuh et. al, 2015). While accountability is important, Brooklyn College maintains that assessment should be proactive rather than reactive: the questions that it seeks to answer are generated by members of our academic community, not by an outside body.

Secondly, those engaged in assessment should bear in mind that it should under no circumstances be regarded as a closed enterprise that ends with definitive answers. Instead, assessment is an important part of a Continuous Improvement Cycle. One must not forget that the foundational values of assessment lie in action and improvement.

Continuous Improvement Plan

It is not enough to simply collect data. The most important part of the Continuous Improvement Model is ensuring that the data collected via assessment is used to inform improvement strategies at the appropriate level. After data has been collected and analyzed, faculty can generate reports to present their findings.

Assessment results will highlight a program's proficiencies or insufficiencies in achieving student mastery of learning outcomes. Once the results are disseminated, faculty will come together to discuss any challenges identified within their program. Figure 2 provides more detailed information on the Continuous Improvement Model with relevant questions that may be helpful in reviewing the assessment results.

ASSESSMENT PLANNING AND IMPLEMENTATION

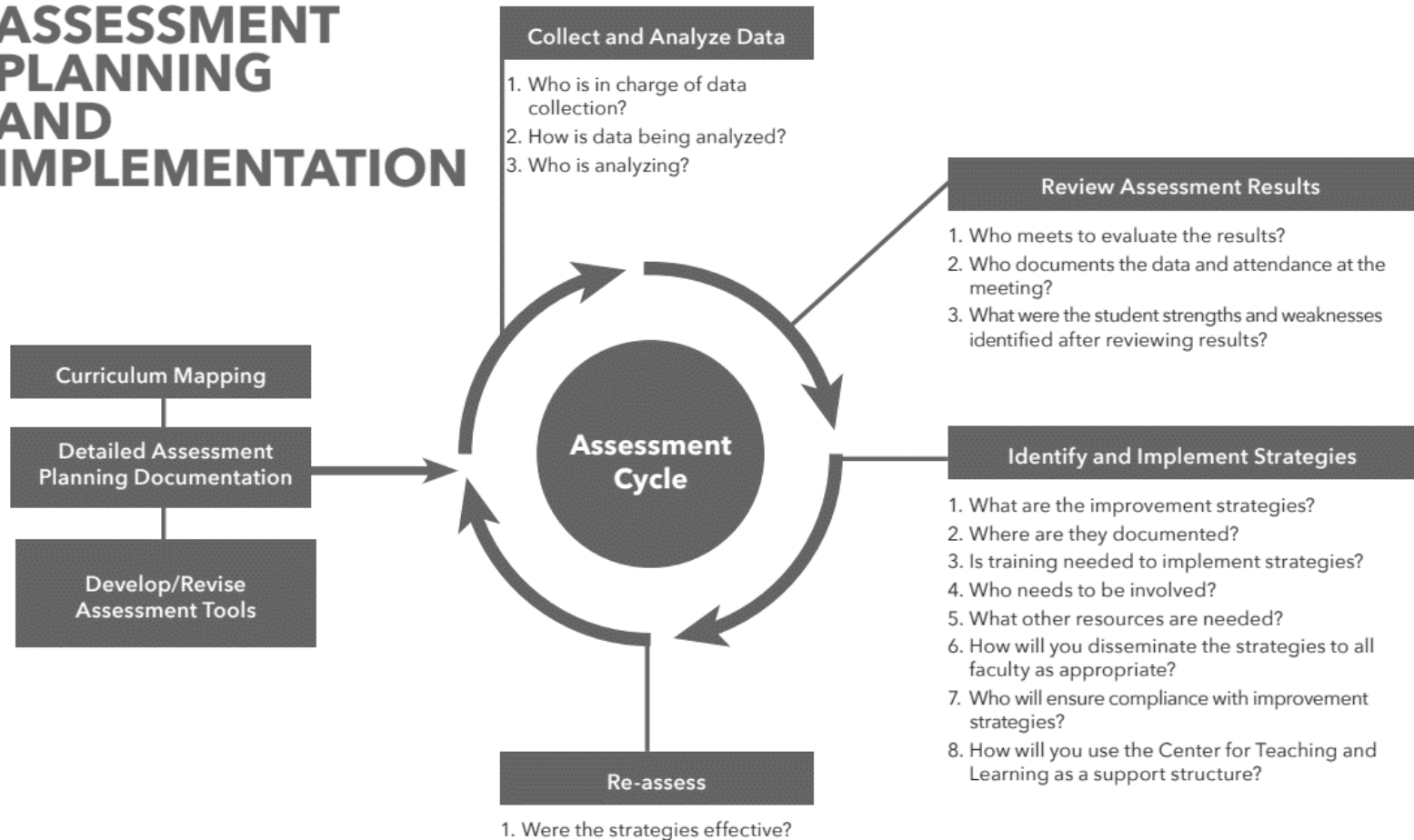


Figure 2. The Cycle of Continuous Improvement and pertinent assessment cycle questions: Assessment Planning and Implementation

2. What is Assessment?

Assessment is an ongoing process through which faculty can appraise student learning. Cumming and Miller (2017) summarize assessment as follows:

- Establishing clear, measurable, expected outcomes of student learning;
- Ensuring that students have sufficient opportunities to achieve those outcomes;
- Gathering evidence in a systematic manner to determine how well student learning [outcomes] match expectations;
- Using the data obtained from the assessment to understand and improve student learning.

Collecting data to understand student strengths and weaknesses is one of the main reasons that we engage in assessment activities; its application helps us to improve student learning.

A rigorous, transparent, and continuous assessment cycle benefits students, faculty, programs, and the College. Students benefit from clear expectations and meaningful feedback from faculty, allowing them to better focus their learning efforts. Additionally, faculty benefit from assessment by being able to better identify which outcomes are difficult for students to attain and which outcomes are mastered. Once these have been identified, departments can adjust their curricula accordingly. Lastly, the College also benefits from assessment by documenting the strengths and weaknesses of particular programs, allowing faculty and administrators to make informed decisions about resource allocation.



Brooklyn College's assessment system brings faculty together to communicate with one another about their students and curriculum. The faculty understand that good decision making at every level – course, program, and institution – is advantaged by valid, actionable data.”

-- Dr. Tammie Lea Cumming, Associate Provost for Institutional Effectiveness

The American Association of University Professors (AAUP), American Federation of Teachers (AFT), and National Education Association (NEA) have recognized the importance of assessment, emphasizing that the process should be faculty-driven in order to ensure that the principles of academic freedom and shared governance are honored in all phases of the assessment process (Gold, et.al., 2011). These three organizations have also emphasized that assessment be used to enhance the quality of student learning, as well as for accountability purposes. *However, it is important for faculty to understand that the administration does not view the assessment of student learning as a tool to evaluate the faculty.* Students bring various background knowledge, skills, and values to Brooklyn College. Faculty have the responsibility to teach their courses using the tools available. However, identifying a weakness with respect to student learning is not viewed by the administration as an evaluative factor regarding faculty.

The American Association for Higher Education (AAHE) asked key higher education leaders to develop guidance for good practice in assessing student learning (Hutchings, 2012). The nine principles outlined below should inform all aspects of the assessment process on both levels, institutional and program-based.

1. The assessment of student learning begins with educational values.
2. Assessment is most effective when it reflects an understanding of learning as multidimensional, integrated, and revealed in performance over time.
3. Assessment works best when the programs it seeks to improve have clear, explicitly stated purposes. Assessment is a goal-oriented process.
4. Assessment requires attention to outcomes, but also – and equally – to the experiences that lead to those outcomes.
5. Assessment works best when it is ongoing, not episodic. Assessment is a process whose power is cumulative.
6. Assessment fosters wider improvement when representatives from across the educational community are involved.
7. Assessment makes a difference when it begins with issues of use and illuminates questions that people really care about.
8. Assessment is most likely to lead to improvement when it is part of a larger set of conditions that promote change.
9. Through assessment, educators meet responsibilities to students and to the public. There is compelling public stake in education.

3. Assessment at Brooklyn College

Assessment at Brooklyn College: A Key to Improving Student Success

Brooklyn College is one of the largest minority-serving educational institutions in New York City and part of the City University of New York (CUNY), itself the largest urban university system in the nation and one of the most diverse. Brooklyn College provides a crucial service to the city by offering access to degree programs in a variety of fields for many of New York City's underserved populations. Brooklyn College not only helps the city develop a much needed highly skilled labor force, but also provides a critical stepping stone for many of our students by preparing them for professional and personal success.



"We are especially proud of our 2020 U.S. News & World Report ranking (1st) for campus ethnic diversity because it is a reflection of our mission to educate immigrants, first-generation college students, and others who represent the diversity of this great borough. This is an exciting moment for Brooklyn College as these high-profile rankings reinforce the exceptional educational value that we provide to our students."

-- Michelle J. Anderson, J.D., LL.M.
President, Brooklyn College

It is important to recognize that General Education/Institutional Outcomes, with Brooklyn College graduates being able to think critically and creatively, effectively express their thoughts, make sound ethical judgments, integrate knowledge from diverse sources, and become informed and responsible citizens of the world, as well as the College's degree program outcomes, are aligned with Brooklyn College's Mission Statement (see Figure 3):

Brooklyn College provides a transformative, distinctive, and affordable education to students from all backgrounds. We are proud of our history of intellectual freedom and academic excellence, as well as our location in a borough known for innovation, culture, and the arts. We have a special commitment to educate immigrants and first-generation college students from the diverse communities that make up our city and state. Our striving spirit reflects our motto: "Nothing without great effort." Through outstanding research and academic programs in the arts, business, education, humanities, and sciences, we graduate well-rounded individuals who think critically and creatively to solve problems. They become leaders who transform their fields and professions and serve our increasingly global community.



Figure 3. A hierarchical pyramid of educational outcomes and the school and system mission

Given the challenges that Brooklyn College students face, and the rates of graduation and retention, implementing a strong, College-wide assessment plan is essential. A carefully considered assessment plan enables Brooklyn College faculty to identify areas of student academic need. Once these needs are identified, departments can discuss the best strategies to improve student outcomes, ultimately improving student retention and completion.



Figure 4. Students engage with a faculty member in a small group setting

Accreditation

In addition to the benefits listed, assessment is also an important component to accreditation. In order to receive federal funding, the US federal government requires that colleges and universities be accredited by one of the regional accrediting bodies seen in Figure 5. Brooklyn College is accredited by the Middle States Commission of Higher Education (MSCHE). Most accrediting commissions have requirements for a well-documented and resourced assessment process.

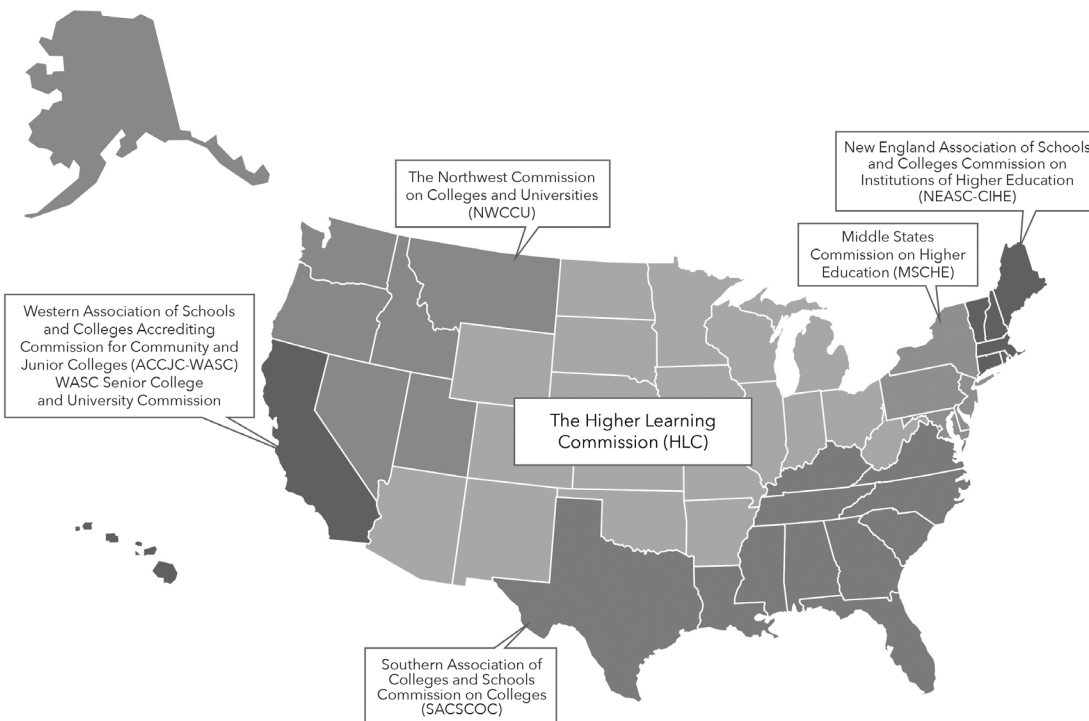


Figure 5. Regional accrediting bodies in the United States. *Adapted from Enhancing Assessment in Higher Education: Putting Psychometrics to Work (p. xiv), by T. Cumming and M. D. Miller, eds, 2017, Sterling, VA: Stylus. Copyright 2017 by Stylus Publishing, LLC. Adapted with permission.*

In 2014, MSCHE released its newly revised *Standards for Accreditation and Requirements of Affiliation*. Standard V, Education Effectiveness Assessment, details the criteria for assessment practice needed to receive accreditation. In addition to the assessment criteria reflected in Standard V, the other six standards additionally emphasize assessment as an embedded criterion. The Standards are provided in Appendix A.

Many of Brooklyn College's programs also have professional accreditation standards that they must meet. Like the regional accrediting bodies, these organizations have also included assessment requirements. These requirements vary by organization, but they are similar to those of MSCHE. Below is a list of additional organizations that provide professional accreditation at Brooklyn College:

- Accreditation Council for Education in Nutrition and Dietetics (ACEND)
- American Chemical Society (ACS)
- Association for Advancing Quality in Educator Preparation (AAQEP) – *accreditation pending*

- Association to Advance Collegiate Schools of Business (AACSB) International
- Council for Accreditation of Counseling and Related Educational Programs (CACREP)
- Council on Academic Accreditation in Audiology and Speech Language Pathology of the American Speech-Language Hearing Association (CAA)
- National Association of School Psychologists (NASP)
- National Council for Accreditation of Teacher Education (NCATE) – *accrediting body dissolved and replaced with Council for the Accreditation of Educator Preparation; School of Education accreditation extended by New York State while School pursues AAQEP accreditation*
- New York State Board of Regents and Commissioner of Education

Responsibility for Assessment

Faculty and staff are responsible for all assessments conducted within their respective programs. Department chairs and Assessment Coordinators are responsible for ensuring timely and complete program and General Education assessment as outlined by the planning documentation submitted to the appropriate School Dean (program assessment) or coordinated via the Faculty Council General Education Committee (General Education assessment). An organizational chart outlining Brooklyn College's distributive leadership model of assessment is shown in Figure 6. The Continuous Improvement process is often most valuable when all faculty are involved and invested in assessment.

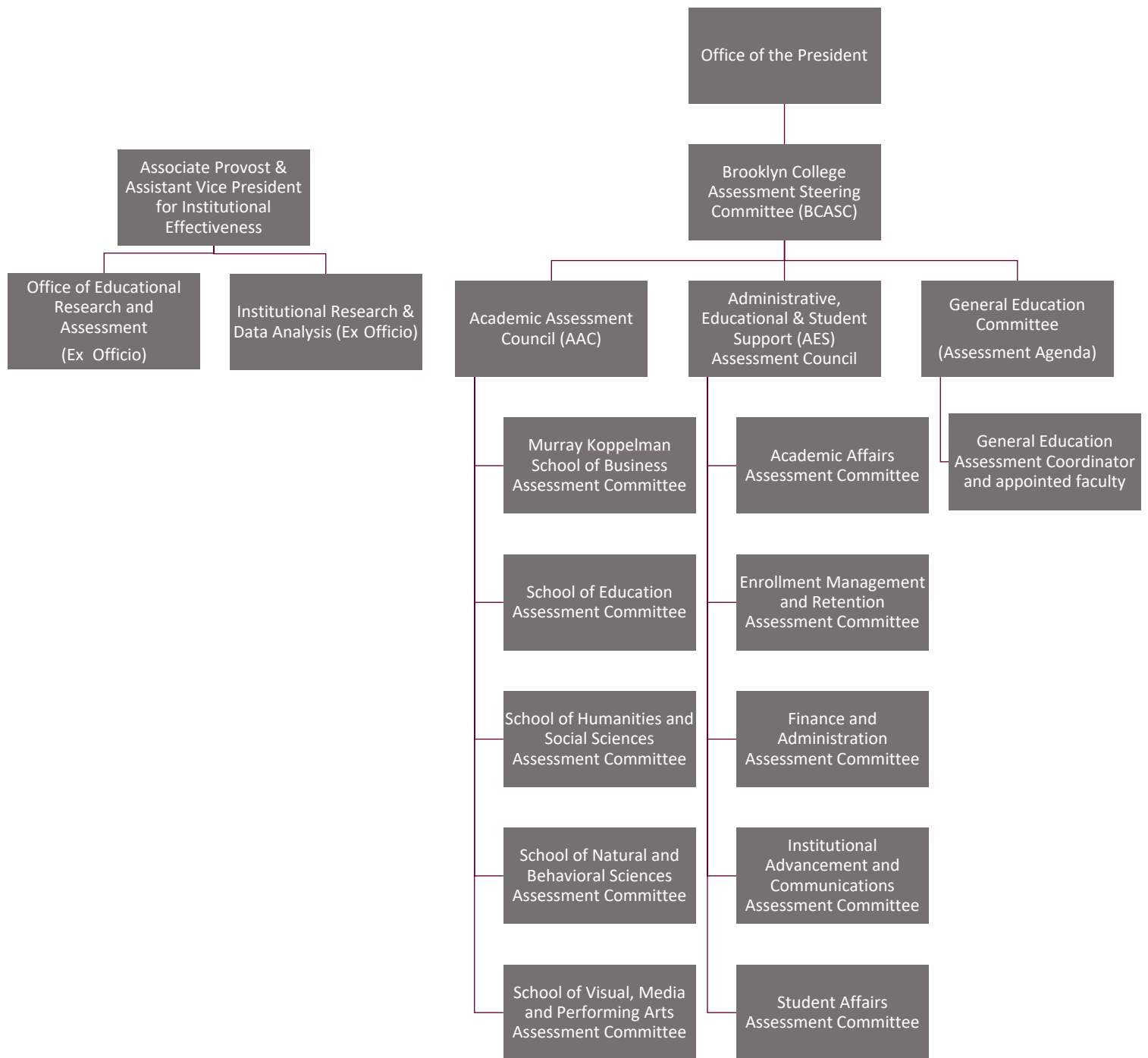


Figure 6. Organizational Chart of the Brooklyn College Distributive Assessment Leadership Structure

The Brooklyn College Assessment Steering Committee consists of senior administrators including the Provost, the Associate Provost for Institutional Effectiveness, and Vice Presidents and Senior Vice Presidents, such as the SVP for Finance and Administration, who together make executive decisions about the assessment process at Brooklyn College.

The Academic Assessment Council brings together both faculty and administration, and in doing so ensures that governance is shared. The Council consists of School Deans, Deans' Appointees, and Assessment Faculty Co-Chairs from each of the five Schools at Brooklyn College. The Council guides the assessment of College programs, responding to faculty needs and addressing any issues that arise in the process, giving faculty a voice in assessment decisions and providing crucial support for programs as they work toward continuous improvement. The Council meets monthly to ensure continuity and support for assessment activities.

School assessment committees are an integral part of the assessment process at Brooklyn College. These five committees (one for each of our Schools) are made up of the Faculty Co-Chairs of the Academic Assessment Council, the Dean or an appointee of the Dean, and the assessment coordinators of every program within each School. By bringing assessment coordinators together, faculty and administration are better able to respond to challenges and to safeguard the continuous improvement process. Each School committee meets monthly to ensure communication and coordination of relevant assessment activities and to provide support to program assessment coordinators.

Positions within the assessment process are defined as follows:

- **School Dean:** Deans are School assessment leaders, ensuring that the General Education and program-level assessment work submitted by their faculty is complete and of good quality. Deans, along with their School assessment faculty co-chairs, are responsible for the review of annually submitted program-level reports. School Deans work with department/program assessment coordinators as well as the Office of Educational Research and Assessment to provide faculty support, guiding assessment activities and identifying areas of need in their school assessment processes.
- **Dean's Appointee:** Deans can be represented in their respective School's assessment committee and on the Academic Assessment Council by an appointee who ensures that Council-driven assessment activities are in line with the School and College's best practices. The appointee may be an Associate Dean or a faculty member selected by the School Dean. Working with the School's faculty co-chair, the appointee provides the Dean with updates on ongoing assessment work and the status of the continuous improvement process.
- **Faculty Assessment Co-chair:** Each School has one faculty representative on the Academic Assessment Council who participates in shared governance of the assessment process at the College. The faculty co-chairs advise the School assessment committees and work with program assessment coordinators to integrate Assessment Council decisions at the program level. In addition, they work with the Dean and Dean's appointee to ensure that the assessment work of their faculty meets College standards. They are responsible for supporting the Dean in the review of annual program-level assessment reports.
- **Assessment Coordinator:** Each College degree program has an assessment coordinator who, with the appropriate program head or department chair, is responsible for ensuring rigorous and timely assessment at the program level. Though the exact nature of their work varies by program, assessment coordinators generally

ensure that data is collected and analyzed and that results are documented in an organized way. They shepherd program-level assessment from start to finish. In addition, assessment coordinators work with department chairs to ensure that General Education/Pathways assessment work is completed by the faculty and with the General Education Coordinator to analyze the resulting data for submission.

- Faculty: Faculty who do not serve on the assessment committees or councils may be involved in assessment activities for General Education or program-level assessment. While assessment coordinators may be responsible for coordinating the collection and analysis of data, other faculty may be responsible for data collection within their courses. Data collection is coordinated through proper communication among faculty, program assessment coordinators, department chairs, the General Education Coordinator (if applicable), and the School Dean. The Office of Educational Research and Assessment (ERA) is available to provide guidance on coordination of data collection.
- The ERA Office Representative (Council Ex-Officio): This representative plays an integral supporting role in the assessment process. The ERA Office representative provides assessment guidance, resources, and training to faculty, assessment coordinators, and leadership. The representative advises faculty and administrators on best practices in assessment, helping devise tools for gathering data, and guiding data analysis and documentation of results. The representative also provides feedback to ensure that assessment results are used to make meaningful administrative and pedagogical decisions.
- The Institutional Research and Data Analysis (IRDA) Representative (Council Ex-Officio): The IRDA representative provides data-based insight on assessment practices during Assessment Council meetings and aids in the development of reporting templates for program-level assessment and annual reporting.
- The General Education Committee: This committee steers the assessment efforts for General Education/Pathways at the College. Its planning and organizational efforts are communicated to departments by the General Education Coordinator.
- The General Education Coordinator: The General Education Coordinator is the first resource for departments in their General Education/Pathways assessment efforts. The coordinator communicates Pathways requirements to selected departments and faculty and provides support to faculty engaging in the Pathways assessment process. In conjunction with departmental/program assessment coordinators, this individual ensures that General Education/Pathways assessment work is completed and analyzed, and communicates the results to the General Education Committee.

Additionally, senior administrators play a central role in the assessment process by articulating and providing support and resources to faculty and staff; this connection is essential if the institution is to implement a sustainable and meaningful assessment process. The Office of Institutional Effectiveness and the ERA Office provide guidance and resources with respect to assessment best practices and help faculty devise assessment plans for their programs that are practical and capable of generating important information about student learning. The Associate Provost of Institutional Effectiveness's office oversees the

comprehensive program review process of the College (a comprehensive schedule is available on the IE website).

Internal Review of Assessment

As of 2019, appraisal of the quality of annual assessment reports is a requirement at Brooklyn College. The School Deans, who are the assessment leaders for their respective schools, review reports submitted by their programs in the fall semester and return evaluations or approvals for these reports to the appropriate department chair and program coordinator by the spring semester. A dean may appoint a dean's designee and an assessment co-chair to help in this evaluation of annual reports. This evaluation process is integral to ensuring that reports are complete and practical tools for reflection on and participation in the continuous improvement process. In addition, the evaluation of assessment activities is a criterion of Standard V of the MSCHE Standards for Accreditation.

Assessment as Service

Brooklyn College recognizes exemplary assessment work via The Office of the Associate Provost for Faculty and Administration's (APFA's) annual Award for Excellence in Academic Outcomes Assessment, which is presented to a faculty member or faculty team for extraordinary contributions in advancing academic outcomes assessment at the College. To learn more, please contact the Office of the Associate Provost of Faculty and Administration via email at apfa@brooklyn.cuny.edu. Assessment service is also becoming an important consideration in faculty promotion and tenure.

4. Student Learning Outcomes

Student Learning Outcomes (SLOs) are the specific skills, attitudes, and abilities that a student should have obtained upon completion of a particular course or program. Defining SLOs should incorporate extensive faculty feedback. SLOs need to be specific enough to capture the essence of a program, yet flexible enough to apply to all students within the program (Miller et. al., 2012). For Brooklyn College's General Education/Pathways courses, these outcomes are defined by the CUNY Central Office and have been affirmed by Brooklyn College faculty. In the assessment process, if a performance appraisal is conducted to measure these outcomes, measurable performance indicators (discussed in greater detail in Rubrics and Performance Indicators) must be defined for each outcome to determine whether or not students are meeting the outcomes. SLOs can be challenging to define because faculty consensus is required on the fundamental elements of a student's education. SLOs can be discipline-specific or wide-ranging. They generally fall into several broad categories (see Table 1).

Table 1. Descriptions and Examples of Student Learning Outcomes

OUTCOMES	DESCRIPTION	GENERAL EXAMPLES
KNOWLEDGE / COGNITIVE OUTCOMES	Particular areas of disciplinary or professional content that students can recall, explain, relate, and appropriately deploy	Technical proficiency within the discipline
SKILLS OUTCOMES	A learned capacity to do something	Critical thinking; effective communication
ATTITUDINAL OR AFFECTIVE OUTCOMES	Changes in beliefs or development of certain values	Ethical behavior; self-respect; empathy for others
LEARNED ABILITIES OR PROFICIENCIES	An integration of knowledge, skills, and attitude that require multiple elements of learning	Leadership; teamwork; effective problem solving

A note on terminology

Some of the language in the assessment literature can be used differently by authors and practitioners. For the purposes of this handbook, "Student Learning Outcomes" refers to the outcomes determined by departments for their specific programs. Sometimes these outcomes may be referred to as "Program Outcomes" by various accrediting bodies, such as AACSB. "General Education Outcomes" refer to General Education Pathways outcomes that are assessed by faculty leaders to ensure that the Pathways curriculum is serving students effectively and leading to their growth. General Education/Pathways outcomes are aligned to institutional-level outcomes for the College.

At Brooklyn College, we strive to use the following terminology consistently when engaging in assessment scholarship and initiatives:

Accountability is a relationship where one party is responsible to another party for achieving and assessing agreed upon goals.

Assessment is a term that is sometimes distinct from testing, but can be broader. It is a process that integrates information from tests or performance appraisals or other sources, but it can be as narrow as a single test (AERA, APA & NCME, 2014).

Assessment Tool is the form, test, rubric, etc. that is used to collect data for an outcome or set of outcomes.

Assignment Alignment: The process of identifying and documenting evidence of how an assessment tool assesses specified learning outcomes.

Construct Validity is the broadest form of validity; it refers to the “concept or characteristic that an assessment is designed to measure” (AERA, APA & NCME, 2014).

Direct Assessment is the measurement of student knowledge, behaviors, and learning. It is linked to specified student learning outcomes. These measures are directly observed and assessed by the content expert.

Evaluation is the process of assessing the value, worth, or effectiveness of an educational program, process, or curriculum.

Goals are the general aims or purposes of an educational system, often at the program level, that are broadly defined and include intended outcomes.

Indirect Assessment is the measurement of student learning experiences often linked to direct assessments but not directly measuring student learning outcomes. Consequently, indirect assessments can include opinions or thoughts about student knowledge, values, beliefs, and attitudes about educational programs, processes, and curriculum. They may also include measures of student outcomes like retention rate, course grades, or GPA that are not direct assessments of the student learning outcomes.

Locally Developed Exam (LDE) is an exam created locally usually at an institution.

Objectives are brief clear statements of the expected learning outcomes of instruction, typically at the course level.

Outcomes are the student results of programs including behaviors, knowledge, skills, and level of functioning. They are usually measured by a test or other assessment method, such as a performance appraisal.

Outputs are the results of program participation that specify types, levels, and targets of service. They are often measured as a count (e.g., number of students participating in a program).

Performance Appraisal is the assessment of student performance on an assignment such as a paper, project, or presentation. Performance appraisals may be assessed/evaluated via an assessment tool such as a rubric.

Reliability is the consistency of scores across replications of a testing procedure (AERA, APA & NCME, 2014).

Rubric is a tool used in assessing student artifacts, e.g., oral exams, research papers, and capstone projects. Assessment rubrics are useful because they list clear expectations of student performance and provide a way to rate student work.

Student Learning Outcomes (SLOs) are behavioral statements that specify what students will learn or be able to do as a result of a learning program, process, or curriculum.

Test is a device or procedure in which a sample of an examinee's behavior in a specified domain is obtained and subsequently evaluated and scored using a standardized process (AERA, APA, NCME, 2014).

Test Blueprint is a document aligning test items on a locally developed exam to the learning outcomes that the test is assessing.

Validity is the degree to which evidence and theory support the interpretations of test scores or assessment results for proposed uses (AERA, APA, NCME, 2014).

5. Assessment of Student Learning

How to Assess Student Learning

Types of Assessment

In general, there are two broad types of assessment measures, direct and indirect. Direct measures of assessment capture actual student performance or skill against measurable outcomes. Such assessment measures include locally developed exams, portfolios with samples of student artifacts, research papers, and other performance appraisals. Indirect measures of assessment examine the opinion or value of a certain experience or activity. These measures include surveys/questionnaires, focus groups, or archival records. Table 2 summarizes examples of both direct and indirect measures (see Figure 7). Certainly, both types of assessment can yield meaningful information for faculty. However, for the purposes of assessing SLOs and performance criteria, this handbook will focus only on direct measures of assessment.

Table 2. Direct and Indirect Methods of Assessment

Direct	Indirect
Behavioral Observations	Archival Data
External Examiner	Exit and Other Interviews
Locally Developed Exams	Focus Groups
Oral Exams	Grade Distribution Results
Performance Appraisal	Graduation Rates
Portfolios	Job Placement Rates
Simulations	Retention Rates
Standardized Exams	Written Surveys, Questionnaires

EXAMPLES OF EVIDENCE OF STUDENT LEARNING

C = evidence suitable for course-level as well as program-level student learning

Direct (Clear and Compelling) Evidence of What Students Are Learning

- Ratings of student skills by field experience supervisors
- Scores and pass rates on appropriate licensure/ certification exams (e.g., Praxis, NLN) or other published tests (e.g., Major Field Tests) that assess key learning outcomes
- “Capstone” experiences such as research projects, presentations, theses, dissertations, oral defenses, exhibitions, or performances, scored using a rubric
- Other written work, performances, or presentations, scored using a rubric (C)
- Portfolios of student work (C)
- Scores on locally-designed multiple choice and/or essay tests such as final examinations in key courses, qualifying examinations, and comprehensive examinations, accompanied by test “blueprints” describing what the tests assess (C)
- Score gains between entry and exit on published or local tests or writing samples (C)
- Employer ratings of employee skills
- Observations of student behavior (e.g., presentations, group discussions), undertaken systematically and with notes recorded systematically
- Summaries/analyses of electronic discussion threads (C)
- “Think-alouds” (C)
- Classroom response systems (clickers) (C)
- Knowledge maps (C)
- Feedback from computer simulated tasks (e.g., information on patterns of actions, decisions, branches) (C)
- Student reflections on their values, attitudes and beliefs, if developing those are intended outcomes of the course or program (C)

Indirect Evidence of Student Learning (Signs that Students Are Probably Learning, But Exactly What or How Much They Are Learning is Less Clear)

- Course grades (C)
- Assignment grades, if not accompanied by a rubric or scoring guide (C)
- For four-year programs, admission rates into graduate programs and graduation rates from those programs
- For two-year programs, admission rates into four-year institutions and graduation rates from those institutions
- Quality/reputation of graduate and four-year programs into which alumni are accepted
- Placement rates of graduates into appropriate career positions and starting salaries
- Alumni perceptions of their career responsibilities and satisfaction
- Student ratings of their knowledge and skills and reflections on what they have learned in the course or program (C)
- Questions on end-of-course student evaluation forms that ask about the course rather than the instructor (C)
- Student/alumni satisfaction with their learning, collected through surveys, exit interviews, or focus groups
- Voluntary gifts from alumni and employers
- Student participation rates in faculty research, publications and conference presentations
- Honors, awards, and scholarships earned by students and alumni

Evidence of Learning Processes that Promote Student Learning (Insights into *Why* Students Are or Aren’t Learning)

- Transcripts, catalog descriptions, and course syllabi, analyzed for evidence of course or program coherence, opportunities for active and collaborative learning, etc. (C)
- Logs maintained by students documenting time spent on course work, interactions with faculty and other students, nature and frequency of library use, etc. (C)
- Interviews and focus groups with students, asking why they achieve some learning goals well and others less well (C)
- Many of Angelo and Cross’s *Classroom Assessment Techniques* (C)
- Counts of out-of-class interactions between faculty and students (C)
- Counts of programs that disseminate the program’s major learning goals to all students in the program
- Counts of courses whose syllabi list the course’s major learning goals
- Documentation of the match between course/program objectives and assessments (C)
- Counts of courses whose final grades are based at least in part on assessments of thinking skills as well as basic understanding
- Ratio of performance assessments to paper-and-pencil tests (C)
- Proportions of class time spent in active learning (C)
- Counts of courses with collaborative learning opportunities
- Counts of courses taught using culturally responsive teaching techniques
- Counts of courses with service learning opportunities, or counts of student hours spent in service learning activities
- Library activity in the program’s discipline(s) (e.g., number of books checked out; number of online database searches conducted; number of online journal articles accessed)
- Counts of student majors participating in relevant co-curricular activities (e.g., the percent of Biology majors participating in the Biology Club)
- Voluntary student attendance at disciplinary seminars and conferences and other intellectual/cultural events relevant to a course or program (C)

Suskie, L. (2009). *Assessing student learning: A common sense guide* (2nd ed.). San Francisco: Jossey-Bass.

Figure 7. Examples of Evidence of Student Learning. Adapted from Suskie, L. (2009). *Assessing student learning: A common sense guide* (2nd ed.)

Rubrics and Performance Indicators

After defining SLOs, faculty will articulate the performance indicators that will be used to assess the attainment of those outcomes. Performance indicators are a set of observable and measurable student actions or abilities that enable faculty to assess whether an SLO has been met. It is recommended that multiple faculty members be included in the process of choosing or defining performance indicators.

After establishing performance indicators, faculty can further articulate a scale with various levels of mastery. A four-point scale is commonly used when developing a scoring matrix known as a rubric. A rubric is a tool used in assessing student artifacts, e.g., oral exams, research papers, and capstone projects. A rubric is a matrix consisting of three parts: performance indicators, a scale, and descriptors for each of the performance indicators and the scale. Assessment rubrics are useful because they list clear expectations of student performance and provide a way to rate student work. See example in Figure 8.

TEAMWORK VALUE RUBRIC

for more information, please contact valued@aacu.org



Definition

Teamwork is behaviors under the control of individual team members (effort they put into team tasks, their manner of interacting with others on team, and the quantity and quality of contributions they make to team discussions).

Evaluators are encouraged to assign a zero to any work, sample or collection of work that does not meet benchmark (cell one) level performance.

	Highest 4	3	2	Lowest 1
Contributes to Team Meetings	Helps the team move forward by articulating the merits of alternative ideas or proposals.	Offers alternative solutions or courses of action that build on the ideas of others.	Offers new suggestions to advance the work of the group.	Shares ideas but does not advance the work of the group.
Facilitates the Contributions of Team Members	Engages team members in ways that facilitate their contributions to meetings by both constructively building upon or synthesizing the contributions of others as well as noticing when someone is not participating and inviting them to engage.	Engages team members in ways that facilitate their contributions to meetings by constructively building upon or synthesizing the contributions of others.	Engages team members in ways that facilitate their contributions to meetings by restating the views of other team members and/or asking questions for clarification.	Engages team members by taking turns and listening to others without interrupting.
Individual Contributions Outside of Team Meetings	Completes all assigned tasks by deadline; work accomplished is thorough, comprehensive, and advances the project. Proactively helps other team members complete their assigned tasks to a similar level of excellence.	Completes all assigned tasks by deadline; work accomplished is thorough, comprehensive, and advances the project.	Completes all assigned tasks by deadline; work accomplished advances the project.	Completes all assigned tasks by deadline.
Fosters Constructive Team Climate	Supports a constructive team climate by doing all of the following: <ul style="list-style-type: none"> Treats team members respectfully by being polite and constructive in communication. Uses positive vocal or written tone, facial expressions, and/or body language to convey a positive attitude about the team and its work. Motivates teammates by expressing confidence about the importance of the task and the team's ability to accomplish it. Provides assistance and/or encouragement to team members. 	Supports a constructive team climate by doing any three of the following: <ul style="list-style-type: none"> Treats team members respectfully by being polite and constructive in communication. Uses positive vocal or written tone, facial expressions, and/or body language to convey a positive attitude about the team and its work. Motivates teammates by expressing confidence about the importance of the task and the team's ability to accomplish it. Provides assistance and/or encouragement to team members. 	Supports a constructive team climate by doing any two of the following: <ul style="list-style-type: none"> Treats team members respectfully by being polite and constructive in communication. Uses positive vocal or written tone, facial expressions, and/or body language to convey a positive attitude about the team and its work. Motivates teammates by expressing confidence about the importance of the task and the team's ability to accomplish it. Provides assistance and/or encouragement to team members. 	Supports a constructive team climate by doing any one of the following: <ul style="list-style-type: none"> Treats team members respectfully by being polite and constructive in communication. Uses positive vocal or written tone, facial expressions, and/or body language to convey a positive attitude about the team and its work. Motivates teammates by expressing confidence about the importance of the task and the team's ability to accomplish it. Provides assistance and/or encouragement to team members.
Responds to Conflict	Addresses destructive conflict directly and constructively, helping to manage/resolve it in a way that strengthens overall team cohesiveness and future effectiveness.	Identifies and acknowledges conflict and stays engaged with it.	Redirecting focus toward common ground, toward task at hand (away from conflict).	Passively accepts alternate viewpoints/ideas/opinions.

Figure 8. The AAC&U Teamwork Value Rubric. Adapted from Teamwork VALUE Rubric, in the Association of American Colleges & Universities. A denotes the 4-point rubric scale, with 4 being the highest score and 1 being the lowest; Circle B denotes the performance indicators for the rubric; Circle C denotes the descriptors for the performance indicators at each scale score.

It should be noted that the scale used in an assessment rubric is not necessarily the same as in a graded assignment. The scale refers to a specific performance criterion and a student's ability to meet it. The scale allows faculty to determine which performance indicators students find most challenging, and at what level. A grade is for overall performance on a student artifact or in a course, but it often does not have the same level of granularity. For example, a scale level of 4 – exceeds criterion 1 of 5 on a rubric – should not be confused with a grade of “A” on an assignment.

For program-level assessment, Brooklyn College departments and their faculty have developed rubrics and tests for assessment purposes. While the score scale on a rubric does not necessarily correlate directly to a grade, the assessment can – and should – be used for scoring student work and assigning grades.

Locally Developed Exams and Test Blueprints

Another tool used for assessing student learning is a Locally Developed Exam (LDE), which is an exam created locally, usually at the institution. According to MSCHE (2007), an LDE is considered a direct measure of student performance when accompanied by a test blueprint. Test blueprints map SLOs to test items, providing a tool to interpret the test item performance in relation to the attainment of SLOs. Like rubrics, test blueprints help faculty more clearly define student learning within a course or program, as well as providing evidence of validity of the assessment instrument.

Test blueprints may be constructed so that SLOs, learning objectives, the number of test items that measure student learning, point values, and the weighted percentage of the items with respect to the total exam are indicated. The instructional learning objectives on a test blueprint are similar to performance indicators on a rubric, signifying specific competencies that a student must demonstrate. Certain SLOs and learning objectives may also be more significant for a particular course or program; that may be reflected by the number of test items that address a certain objective or outcome, or by the weight given to a certain test item or set of test items.

When developing items for the exam, it is important to consider the level of student learning that will be assessed. Classifying the expected learning level will assist faculty in developing appropriate test items. Bloom's Taxonomy is commonly used, but other classification types may be better suited to certain programs. Bloom's Taxonomy allows for the classification of student learning on six levels, from *Knowledge* to *Evaluation* (using the original Bloom's Taxonomy commonly used by testing companies). *Knowledge* is the most basic level of learning, progressing all the way up to the most advanced level, *Evaluation*. A table with brief descriptions of Bloom's Taxonomy, as well as some examples of verbs that are commonly used to define measurable student performance, is shown in Table 3.

Once the test blueprint is constructed, faculty members construct the exam. If the exam is for the purpose of assessment beyond an individual faculty member's course, as it may be for assessing a General Education Competency or a program-level SLO, it is advisable that the faculty share item-writing responsibilities while constructing the test. After the test items have been written by faculty, a test key must be developed, indicating how the items should be scored. A sample test blueprint is provided in Table 4.

Table 3. Bloom's Taxonomy

Level	Definition	Sample verbs					Sample behaviors
Knowledge	Student recalls or recognizes information, ideas, and principles in the approximate form in which they were learned.	arrange define describe duplicate	identify label list match	memorize name order outline	recognize relate recall repeat	reproduce select state	The student will define the 6 levels of Bloom's taxonomy of the cognitive domain
Comprehension	Student translates, comprehends, or interprets information based on prior learning.	classify convert describe defend discuss distinguish	estimate explain express extend generalize give	example(s) identify indicate infer illustrate locate	predict paraphrase recognize rewrite review select	summarize translate	The student will explain the purpose of Bloom's taxonomy of the cognitive domain.
Application	Student selects, transfers, and uses data and principles to complete a problem or task with a minimum of direction.	apply change choose compute construct	demonstrate discover dramatize employ illustrate	interpret manipulate modify operate practice	predict prepare produce relate schedule	show sketch solve use write	The student will write an instructional objective for each level of Bloom's taxonomy.
Analysis	Student distinguishes, classifies, and relates the assumptions, hypotheses, evidence, or structure of a statement or question.	apply analyze categorize change choose compute	compare contrast discover demonstrate dramatize employ	illustrate interpret manipulate modify operate practice	predict prepare produce relate separate schedule	show sketch solve use write	The student will compare and contrast the cognitive and affective domains.
Synthesis	Student originates, integrates, and combines ideas into a product, plan or proposal that is new to him or her.	arrange assemble categorize collect combine comply	compose construct create design develop devise	explain formulate generate hypothesize invent plan	prepare rearrange reconstruct relate reorganize revise	rewrite set up summarize synthesize tell write	The student will design a classification scheme for writing educational objectives that combines the cognitive, affective, and psychomotor domains.
Evaluation	Student appraises, assesses, or critiques on a basis of specific standards and criteria.	appraise argue assess attach choose compare	conclude contrast critique defend describe discriminate	estimate evaluate explain interpret judge justify	predict recommend rate relate select summarize	support value	The student will judge the effectiveness of writing objectives using Bloom's taxonomy.

Adapted from Bloom's Taxonomy Action Verbs.

Table 4. A Sample Test Blueprint

Program Outcome	Topic	Bloom's Taxonomy Classification	Test Item	Total Points	(%) Weight of Test
Recognize the influence that the Latin and Greek languages have exerted on English	Identification of Latin word roots	Comprehension	1-10	10	20%
Apply the fundamental morphology, syntax and vocabulary of ancient Greek and/or Latin	Latin Conjugation	Knowledge	11-20	5	10%
	Short Response in Latin on Ancient Roman Governmental Structure	Application	21-25	15	30%
Create cogent and critically rigorous arguments rooted in textual and material evidence, arguments that explore the complexity and ambiguity of primary and secondary sources	Latin essay on the literary and historical context of a poem by Ennius	Synthesis	26 - 27	20	40%
Total			27	50	100%

Adapted from the Program Level SLOs for the BA in Classics

Inter-rater Reliability

Once a rubric or test blueprint has been developed, faculty are encouraged to establish inter-rater reliability. Establishing sufficient inter-rater reliability ensures faculty are scoring student work in a consistent manner using the appropriate scoring tool, such as a rubric or a test key. An assessment instrument with a high inter-rater reliability coefficient (ranging from 0 to 1) produces consistent ratings among faculty. A reliability coefficient of 1 indicates perfect consistency among raters. Essentially, if a student artifact is assigned a “low” score for a particular performance indicator by one faculty member, other faculty members should also rate the student artifact “low” for that same performance indicator for a clearly defined rubric or scoring key. Inconsistent ratings among faculty members using the same rubric/test scoring key for the same student artifact indicates that the scoring tool should be modified for clarity of student performance expectations at varying levels of mastery.

Once pilot data has been collected, additional faculty members are invited to assist in establishing inter-rater reliability as well as to discuss the assessment instrument. Scoring inconsistencies are noted and used to inform faculty as to where assessment instrument improvement is needed. Faculty members meet to discuss any difficulties they had with the scoring tool and to agree on any modifications. Modifications are made before the full-scale data collection, but assessments are reviewed routinely to ensure continued inter-rater reliability. Discussing student work and the scoring tools often provides faculty with an opportunity to interact meaningfully during the assessment process. The discussions centered on student learning and how to both assess and maximize that learning are an important and rewarding part of the assessment process for many faculty. These discussions engage faculty in the assessment process and facilitate intellectual stimulation around student learning.



Figure 9. School of Education Faculty participating in discussion regarding assessment of student work

6. Types of Assessment at Brooklyn College

As already mentioned, there are two types of assessment activities supported at Brooklyn College: program-level and General education/Pathways assessment, aligned with Institutional-level outcomes. Program-level assessment examines student learning outcomes for each program at the College. General education/Pathways assessment examines broader, College-wide student learning outcomes across all five of our Schools. The two levels of assessment are related (see Figure 10). Each assessment activity is discussed in more detail below.

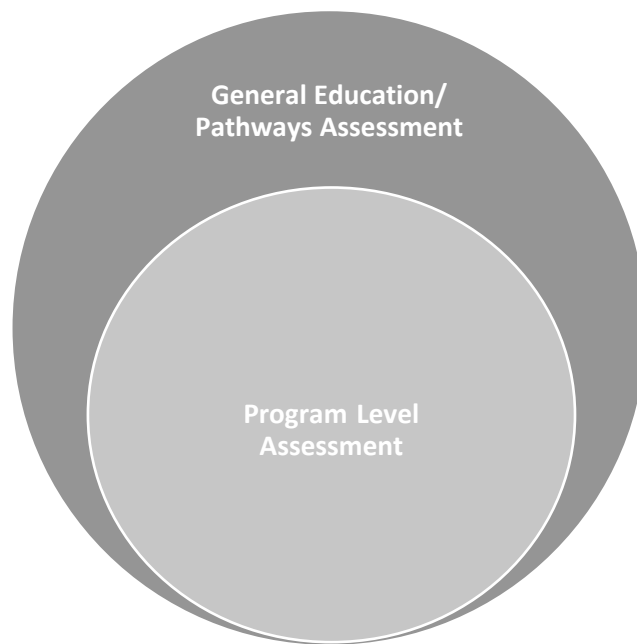


Figure 10. The two levels of academic assessment at Brooklyn College

Program-Level Assessment

Every degree program offered at the College is required to engage in program-level assessment. Program-level student learning outcomes (SLOs) are generated by program faculty as a reflection of the knowledge, behaviors, and skills that students have obtained by the end of their degree. These SLOs are measurable statements that are the public face of the program, listed in the College bulletin and featured on the program webpage.

Once the SLOs for the program are published in the college bulletin and on the College website, departments are required to maintain a curriculum map that identifies the course alignment with the program outcomes (see Tables 5 and 6). Several courses can be aligned with one outcome, and often courses reinforce SLOs throughout the duration of the program.

Table 5. A Sample Curriculum Map using Classifications

Please determine how each program outcome is being met using: **I (Introduce)**, **R (Reinforce)**, and **M (Master)**, if you are able to classify, other indicate with an "X".

Program Name: MA in Counseling

Courses	Program Outcomes				
	1. Knowledge base in psychology: Demonstrate ability to apply developmental theory, psychodynamic, experiential/humanistic, and cognitive-behavioral approaches, and DSM diagnostic criteria to mental health diagnosis, case formulation and treatment planning.	2. Scientific inquiry and critical thinking: Demonstrate ability to apply clinical research findings to mental health case formulation and treatment planning.	3. Ethical and social responsibility in a diverse world: Demonstrate ability to apply professional ethical principles to mental health treatment.	4. Communication: Demonstrate ability to produce clear, concise professional treatment case notes, reports and other documentation.	5. Professional development: Demonstrate ability to apply psychodynamic, experiential/humanistic, and cognitive-behavioral approaches to effective treatment with mental health clients.
PSYC 7410G	I		I		I
PSYC 7720G	R				
PSYC 7755G	R	I	I		I
PSYC 7421G	R		I	R	
PSYC 7431G	I		I	M	M
PSYC 7771G	I		R	R	
PSYC 7442G	R		I	I	R
PSYC 7443G	R	I	I	I	R
PSYC 7110G	I		I	I	R
PSYC 7449G	M	M	M	M	M
PSYC 7441G	I		R		R
PSYC 7544G	R		I	I	R
PSYC 7545G	I		I	I	R
PSYC 7591G	M	M	M	M	M
PSYC 7245G					R
PSYC 7106G		R	R		
PSYC 7592G	M	M	M	M	M
PSYC 7546G	R	R	I	I	R
PSYC 7571G	I	R	I		R

Note. list the full statement of program outcomes, e.g., "Program Outcome #1: Create instructional plans to promote and enhance critical thinking, and problem solving abilities."

Adapted from a Curriculum Map for the MA in Counseling

Table 6. A Sample Curriculum Map without Classifications for a Subset of Program Outcomes

Please determine how each program outcome is being met with an "X".			
Program Name: MS in Health Informatics			
	Program Outcomes		
Courses	1. Practical Competency: Be able to participate in the management of a small project	2. Practical Competency: Be able to set up and program databases and use standard network application software	3. Practical Competency: Be able to recommend appropriate software for application and communication security
CISC 7320			X
CISC 7330			X
CISC 7500	X		
CISC 7510		X	
CISC 7530	X		
CISC 7532	X	X	
CISC 7534	X		
CISC 7980	X	X	X
HNSC 7140	X		
HNSC 7145	X		
KINS 7100			X
KINS 7342	X		

Note. List the full statement of program outcomes, e.g., "Program Outcome #1: Create instructional plans to promote and enhance critical thinking, and problem solving abilities."

Adapted from a Curriculum Map for the MS in Health Informatics

SLOs should be assessed on a rotating basis. Programs do not need to assess all SLOs at the same time – for many programs, a three-year assessment cycle is recommended, with a Program Review occurring every seven years (see Figure 11). For professionally accredited programs, the accreditation self-study schedule is set by the accreditor.

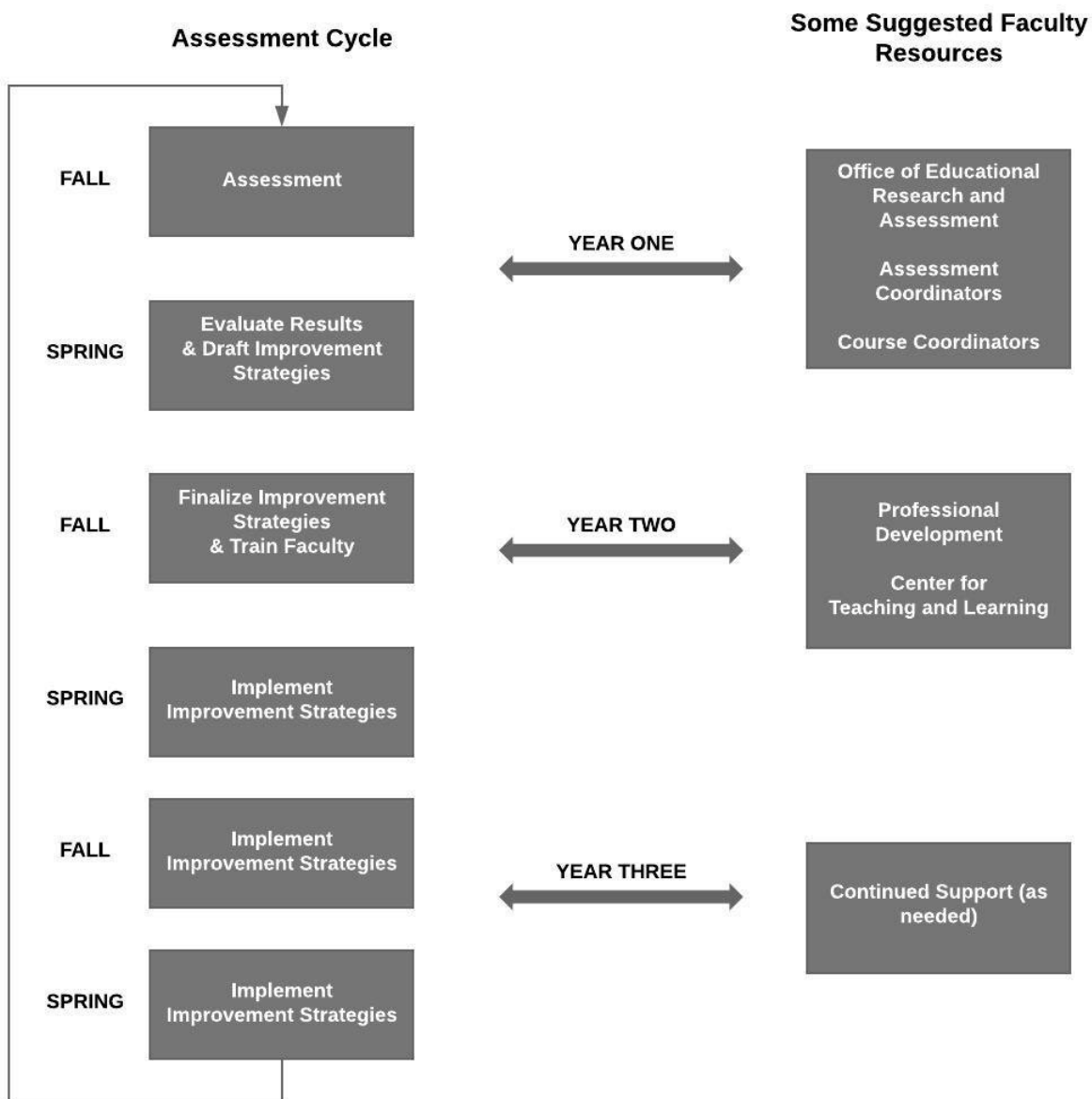


Figure 11. A 3-Year proposed assessment cycle and an abridged list of faculty resources

Programs are required to provide assessment planning documentation for each of the program outcomes (see Table 7). The planning document provides a road map to ensure:

- courses utilized for program level assessment have been selected for sampling,
- assessment is conducted as scheduled,
- faculty are aware of their assessment responsibilities,
- results are evaluated by appropriate faculty,
- improvement strategies are identified and disseminated, and
- improvement strategies are implemented by faculty teaching the course.

Table 7. Sample Program-Level Detailed Assessment Planning Document

Program Name: BA in Africana Studies									
Program Outcomes ¹	Assessment Methods (e.g., Test, Performance Appraisal)	Course(s) and/or Departmental Project(s) Selected for Data Collection	Data Collection (semester)	Faculty Member Coordinating ²	Improvement Planning Meeting(s) (semester) ³	Semester to Train Faculty to Implement Improvement Strategies ⁴	Implement Improvement Plan (semester(s)) ⁴	Re Assess/Data Collection (semester)	Evaluate Effectiveness of Improvement Plan ⁴
1. Identify and summarize the social, political, historical, and cultural experiences that shape and reflect the lives of people of African descent in the Americas, Africa and Europe.	Midterm Paper with Rubric	AFST 3360	Spring 2021	Zinga Fraser	Fall 2021	Fall 2021	Spring 2022 - Fall 2023	Spring 2024	Fall 2024
2. Recognize and explain the vernacular, popular, and creative arts as sites of self-definition, engagement with other cultural traditions, self-invention and resistance.	Locally Developed Exam with Test Blueprint	AFST 3247 AFST 3210	Fall 2020	Lynda Day	Spring 2021	Fall 2021	Spring 2022 - Spring 2023	Fall 2023	Spring 2024
3. Appraise the interconnections of race, gender, class and nationality in the formation of notions of identities.	Presentation with Rubric	AFST 3135 AFST 3362	Fall 2020	Moses Davies Zinga Fraser	Spring 2021	Fall 2021	Spring 2022 - Spring 2023	Fall 2023	Spring 2024
4. Demonstrate critical thinking and analytical skills through comparative and interdisciplinary inquiry and thought, as well as, interrogate the ideological, methodological, cultural, and social ways of looking at the regions of the African Diaspora and its members.	Presentation with Rubric; Locally Developed Exam with Test Blueprint	AFST 3135 AFST 3349	Spring 2022	Dane Peters Marie Cerat	Fall 2022	Spring 2023	Fall 2023 - Fall 2024	Spring 2025	Fall 2025
5. Utilize academic writing to demonstrate facility in disciplinary and interdisciplinary methods of research, independent thought, and critical analysis.	Research Paper with Rubric; Research Project with Rubric	AFST 3290 AFST 5403W	Fall 2021	Prudence Cumberbatch Lynda Day	Spring 2022	Fall 2022	Spring 2023 - Spring 2024	Fall 2024	Spring 2025
6. Apply their knowledge through internships and other engagements with community organizations.	Internship Supervisor Evaluation Form	AFST 4301	Spring 2023	Dale Byam	Fall 2023	Spring 2024	Fall 2024 - Fall 2025	Spring 2026	Fall 2026
Notes: 1. List the full statement of program outcomes, e.g., "Program Outcome #1: Create instructional plans to promote and enhance critical thinking, and problem solving abilities." 2. Please note that the assigned coordinators/faculty may vary. 3. Faculty should meet to discuss assessment results. If an outcome's target is met, there may be no improvement strategies to implement for that outcome. 4. If an outcome's target is met, there may be no improvement strategies to implement for that outcome. However, the outcome must still be re-assessed in the following assessment cycle as scheduled.									

Adapted from Program Level SLOs for the BA in Africana Studies

In addition, programs are required to align their outcomes to the College Mission (see Tables 8 & 9 for alignment samples) and to the Institutional General Education Outcomes (Table 10). These alignments ensure that a Brooklyn College education within any of its many programs produces well-rounded graduates with strong General Education backgrounds reflective of the College's specific institutional outcomes. The MSCHE Standard I, criterion 1d supports these alignments, as any MSCHE-accredited institution should have "clearly defined mission and goals that...guide faculty, administration, staff, and governing structures in making decisions related to ...program and curricular development, and the definition of institutional and educational outcomes" (Middle States, 2018).

Table 8. The Brooklyn College Mission Statement Coded for Mapping

College Mission Statement	Code
Brooklyn College provides a transformative, distinctive, and affordable education to students from all backgrounds. We are proud of our history of intellectual freedom and academic excellence, as well as our location in a borough known for innovation, culture, and the arts.	CMS_1
We have a special commitment to educate immigrants and first-generation college students from the diverse communities that make up our city and state.	CMS_2
Our striving spirit reflects our motto: "Nothing without great effort." Through outstanding research and academic programs in the arts, business, education, humanities, and sciences, we graduate well-rounded individuals who think critically and creatively to solve problems.	CMS_3
They become leaders who transform their fields and professions and serve our increasingly global community.	CMS_4

Table 9. Sample Alignment of Program Outcome Alignment to the College Mission

Program Outcomes	CMS 1	CMS_2	CMS 3	CMS_4
1. Define and describe communication differences vs. disorders, roles, responsibilities, scope of practice, career paths, and inter-professional collaborations within the fields of speech-language pathology and audiology.			X	X
2. Identify and discuss the development and nature of communication and swallowing from physiological, neurological, psychological, linguistic, and multicultural perspectives.		X		X
3. Demonstrate a foundational understanding of the theories, concepts, research, and processes related to the prevention, identification, assessment, and intervention of various communication and swallowing disorders.	X			X
4. Analyze, develop and/or execute research studies on contemporary communication topics.	X			X

Adapted from the BA in Communication Sciences and Disorders Program SLOs

Table 10. Sample Program Outcome Alignment to the General Education/Institutional Outcomes

Program Outcomes	Think critically and creatively	Effectively express their thoughts	Make sound ethical judgments	Integrate knowledge from diverse sources	Become informed and responsible citizens of the world
1. Graduates will be able to discuss the complexity and potential trade-offs between social, economic, and environmental systems when analyzing urban sustainability issues and causes for environmental change.		X	X		
2. Graduates will be able to apply methodologies in economics, sociology and/or environmental sciences to analyze an urban sustainability problem through multiple disciplinary lenses using various forms of data (primary, secondary, qualitative, quantitative).	X			X	
3. Graduates will be able to work in interdisciplinary teams to solve urban problems at the intersection of social, economic, and natural systems.	X				X
4. Graduates will be able to communicate sustainability concepts and information to a variety of audiences with well-organized and clear graphics (e.g., annotated photos, maps, graphs, posters) using technologies frequently used in urban sustainability research (e.g., software for GIS, statistics, spreadsheets, and presentations).		X		X	

Adapted from the BA in Urban Sustainability Program SLOs

General Education/Institutional Outcomes Assessment

Pathways

General Education assessment by way of CUNY Pathways is conducted by faculty at an institutional level and follows a similar process to program-level assessment; however, it is not program- or department-specific. Brooklyn College's approved General Education is applicable to all Brooklyn College students across all disciplines. In 2018 faculty representatives devised and began implementing a five-year plan (2019-2023) for General Education assessment. Coordination of General Education activities is overseen by the General Education Committee of the Faculty Council.

A faculty member on the General Education Committee was designated by Faculty Council to coordinate the General Education assessment, and in consultation with other faculty leaders, began to do so by identifying the courses which applied to be part of the major competencies of Brooklyn College's General Education curriculum: the Required Core (English Composition, Mathematical and Quantitative Reasoning, and Life and Physical Sciences) and the Flexible Core (World Cultures & Global Issues, US Experience in Its Diversity, Creative Expression, Individual & Society, and Scientific World). The General Education Coordinator further identified courses housed under the College Option, courses that are categorized under Inter-Cultural Competency or Language Other Than English.

Each Pathways competency was then reviewed for the specific skills, knowledge, and competencies that students are expected to master via Pathways outcomes identified by CUNY Central. In addition to the Pathways competencies, specific courses were mapped to three key skills identified by faculty for General Education assessment: Oral Communication, Information Literacy, and Technological Competencies. General Education/Pathways assessment began on identified courses in 2018, with a set cycle for future assessment planned through 2026. A Brooklyn College *General Education Workbook* was developed for faculty use by the General Education Coordinator and the ERA Office. It contains useful information, guidelines, and resources for faculty participating in the General Education process. Table 11, a part of the *General Education Workbook*, outlines the General Education/Pathways assessment process over its administration. The assessment cycle for General Education/Pathways competencies is 3 years with a sampling option for certain courses. A detailed timeline of General Education/Pathways assessment of courses through the year 2026 shows the cycle of data collection, analysis, and improvement planning for General Education/Pathways competencies (Table 12).

Table 11. A Detailed Timeline of General Education Assessment

Action	Responsible Parties	Timeline for Fall semester assessment	Timeline for Spring semester assessment
Confirmation of General Education Requirement and/or Thematic Area of Flexible Core for following AY	Committee on General Education, Coordinator of General Education	March	March
Notification of departments	Meetings between department chairs, Coordinator of General Education, and Assessment team to discuss departments' involvement in the assessment of general education courses during the next AY	April-May	April-May (previous academic year)
Selection of sections for assessment	Department chair and department assessment coordinator(s)	April-May	November-December
Informing of relevant instructors	Department chair and department assessment coordinator(s)	May, or upon hiring	December, or upon hiring
Consulting Meeting(s)	Interested departments, Assessment team, and/or General Education Coordinator	Early September	Early February
Confirmation of Variable SLOs (VSLOs) for assessment	Department chair and/or department assessment coordinator(s) ¹	Early September	Early February
Section syllabus submission	Department chair and department assessment coordinator(s)	Early September	Early February
Selection of assignment(s) for assessment: Locally Developed Exam (LDE) or Performance Appraisal	Department chair, department assessment coordinator(s) ² , and relevant instructors	September	February
Test Blueprint for LDE or Rubric Selection/Design for a Performance Appraisal	Department chair, department assessment coordinator(s) ³ , and relevant instructors	September	February
Assignment and/or Exam Finalization & submission to Gen Ed Coordinator	Department chair, department assessment coordinator(s) ³ , and relevant instructors	Early October	Early March
Submission of completed test blueprints and Assignment Alignment Worksheets ³	Relevant instructors	Early October	Early March
Data Collection	Department assessment coordinator(s), relevant instructors	October through December ⁴	March through May/June ⁵
Submission of Data	Department assessment coordinator(s), relevant instructors	December ⁵	May/June ⁵
Analysis of results and submission to Gen Ed Coordinator	Department chair and/or department assessment coordinator(s)	Due the first week in March	Due the first week in October

Note: Timeline developed by the Brooklyn College General Education Coordinator

¹ As assessment of the General Education curriculum proceeds, the Committee on General Education and Coordinator of General Education will provide feedback to department chairs regarding program-level assessment of the general education program.

² The Office of Educational Research and Assessment and the Coordinator of General Education are available to facilitate, if desired by the department.

³ Assignment Alignment Worksheets are a sound practice for providing evidence of validity.

⁴ The assessment timing of courses depends on the course and department. The assignment(s) used for assessment may be administered at any time during the semester, but preferably after the consulting meetings (if applicable) and before faculty go off contract.

Table 12. The Brooklyn College General Education/Pathways Assessment Cycle Planned Through Spring 2026

Competency	General Education/ Pathways Competency	Fall 2020	Spring 2021	Fall 2021	Spring 2022	Fall 2022	Spring 2023	Fall 2023	Spring 2024	Fall 2024	Spring 2025	Fall 2025	Spring 2026	
English Composition	Required Core	II					CA	DC		AEI	II		CA	
Mathematical and Quantitative Reasoning	Required Core	II					CA	DC		AEI	II		CA	
Individual and Society	Flexible Core							CA	DC		AEI	II		CA
Creative Expression	Flexible Core					CA	DC		AEI	II		CA	DC	
World Cultures and Global Issues	Flexible Core					CA	DC		AEI	II		CA	DC	
Inter-Cultural Competency	College Option					CA	DC		AEI	II		CA	DC	
Life and Physical Sciences	Required Core	DC*					AEI	II		CA	DC		AEI	II
Scientific World	Flexible Core	DC*					AEI	II		CA	DC		AEI	II
U.S. Experience in Its Diversity	Flexible Core								CA	DC		AEI	II	

Code for Abbreviations

DC* = Semester of Data Collection - may be additionally deferred due to COVID-19

DC = Semester of Data Collection

AEI = Analysis of data, evaluation of report, and drafting of improvement plan

II = Implementation of improvement plan

CA = Communication Regarding Next Data Collection

- Notes: 1. This cycle was developed by the Brooklyn College General Education Coordinator and approved by the General Education Curriculum Committee.
2. The General Education/Pathways Assessment Timeline has been modified due to COVID-19.

Brooklyn College's Emphasis on Assessment for Learning

According to Ewell and Cumming (2017), faculty and administrators:

Must never forget that the foundational values of assessment lie in action and improvement. Every assessment approach is a means to an end, and each end is different. Returning to the basic question to be answered or pedagogical problem to be addressed is always a basic prerequisite to effective assessment. (pp. 22-23)

Brooklyn College considers the use of the assessment data to improve student outcomes as the primary reason to engage in the assessment process. The mandatory regional and professional accreditation requirements are a secondary, although necessary, consideration. For more information on our assessment process' alignment to the College's mission, see Table 13.

Table 13. The College's and Office of Institutional Effectiveness's Alignment of the Brooklyn Mission with its Educational Goals

Mission Alignment	
Our Mission as an institution is...	Provide a transformative, distinctive, and affordable education to students from all backgrounds. We are proud of our history of intellectual freedom and academic excellence, as well as our location in a borough known for innovation, culture, and the arts. We have a special commitment to educate immigrants and first-generation college students from the diverse communities that make up our city and state. Our striving spirit reflects our motto: "Nothing without great effort." Through outstanding research and academic programs in the arts, business, education, humanities, and sciences, we graduate well-rounded individuals who think critically and creatively to solve problems. They become leaders who transform their fields and professions and serve our increasingly global community.
Our educational goals are focused on helping students to...	<ul style="list-style-type: none"> • think critically and creatively, • effectively express thoughts, • make sound ethical judgments, • integrate knowledge from diverse sources, and • become informed and responsible citizens of the world.
The Office of Institutional Effectiveness is focused on...	Supporting efforts to improve the quality of student learning outcomes through assessment, as well as supporting the collection, analysis, interpretation and dissemination of accurate and timely information on all aspects of the College's activities in support of institutional planning, decision-making, and reporting.
We assess our academic performance through...	<ul style="list-style-type: none"> • Program and General Education/Institutional Outcomes Assessment • Placement Rates of Brooklyn College Graduates • Professional Accreditation • Professional Certification Exam Outcomes • Retention and Graduation Rates at the Program and Institutional Level • Self Studies and Comprehensive Program Reviews • Student, Faculty, and Alumni Survey Results

Types of Improvement Through Assessment

General Education Improvement

For General Education assessment, improvement plans are considered at the College level. A support system via the Faculty Council General Education Committee is identified to ensure faculty members have the tools they need to address any shortcoming. Communication is vetted widely among the senior administration, Academic Assessment Committee leadership, General Education Committee leadership, Student Affairs staff, Student Government leadership, department chairs, and the various faculty support systems listed. The improvement strategies are typically implemented over several semesters, allowing time for the effects of the strategies to take hold. After the improvement implementation phase of the Continuous Improvement Cycle is complete, there is a re-assessment.

Program-Level Improvement

For program-level assessment, the improvement plan drafting and implementation are determined and monitored by the program faculty. Department chairs and assessment coordinators provide the leadership for their respective departments. They guide faculty to the resources available that may help them improve their programs, such as learning about pedagogy best practices via professional development activities offered through the Roberta S. Matthews Center for Teaching and Learning. Recommended assessment cycle lengths are outlined in table 14.

Table 14. Recommended Assessment Cycle Lengths

Assessment Type	Cycle Length
Program	3 years
General Education/Pathways	3 years
CUNY-Mandated Program Review	7 years
Accreditation Self-Study	Dependent on Accreditor

Resources for Improvement Strategies

The Roberta S. Matthews Center for Teaching and Learning

Brooklyn College's Center for Teaching and Learning (CTL) serves as the campus teaching and learning nucleus. There, our faculty can capitalize on the synergy of pedagogical efforts across programs. The CTL operates as a faculty resource and think tank where members can collaborate and find resources to help them with their needs through workshops publicized via the CTL website. Assessment workshops are run through CTL for faculty to collaboratively work to improve both their assessment and teaching skills. In addition to providing faculty with professional development opportunities, the CTL runs a highly structured student-centered team-based learning initiative with the goal of increasing student attainment of learning outcomes and demonstrated competence in specifically identified difficult core concepts.

The Office of Educational Research and Assessment

The Office of Educational Research and Assessment (ERA) supports faculty and staff assessment efforts by providing guidance and best practices for assessing student learning and administrative operations. ERA conducts workshops through CTL to train faculty and staff to think critically about their programmatic, institutional, and divisional assessment practices and to guide them in systematizing their assessment efforts. These workshops also train faculty and staff in using College assessment resources and documents. Furthermore, ERA works closely with the Academic Assessment Council to drive College-wide assessment efforts, and with the General Education Coordinator to ensure efficient data collection for the College's Pathways assessment efforts.

Budgetary Considerations in Planning for Improvement

A program may find, through the assessment process – either via the annual assessment report or the Program Review – that additional resources, such as equipment or staffing, are needed to improve or maintain their program outcomes. Within assessment reporting, the program should thus outline the following:

Step 1. Discuss the possibility of program-level resource redistribution to help make the appropriate changes to improve or maintain outcomes.

Step 2. If the program believes that program-level changes will not make a significant impact, the program may additionally request resources from the department. At this level of request, a ranking must be provided of the importance of the change and its linkage to program outcomes, along with justification and appropriate evidence (see Appendix C for a ranking table template). In reviewing the assessment report, the department head then may consider a resource redistribution from within the department, or an official budgetary request via the usual Brooklyn College budget request process.

Step 3. If these budgetary changes are granted, the program must report on their impact in the following annual assessment reports and Program Reviews.

Assessment Data for Research or Publication

According to the CUNY Assessment Council, activities that are conducted for the purposes of assessment do not require CUNY Institutional Review Board review. CUNY's exemption policy is indicated in Appendix D1.

The assessment data may not be used for research purposes (e.g., conference presentations, publications) without contacting Brooklyn College's Institutional Review Board coordinator for instructions for attaining the permission to utilize such data. The College IRB policies can be found on the Brooklyn College website.

Information regarding the Family Educational Rights and Privacy Act (sometimes referred to as the Buckley Amendment or FERPA) is in Appendix D2. Further information on CUNY policy can be found on the CUNY website.

GLOSSARY

Accountability is a relationship where one party is responsible to another party for achieving and assessing agreed upon goals.

Assessment is a term that is sometimes distinct from testing, but can be broader. It is a process that integrates information from tests or performance appraisals or other sources, but it can be as narrow as a single test (AERA, APA & NCME, 2014).

Assessment Tool is the form, test, rubric, etc. that is used to collect data for an outcome or set of outcomes.

Assignment Alignment: The process of identifying and documenting evidence of how an assessment tool assesses specified learning outcomes.

Construct Validity is the broadest form of validity; it refers to the “concept or characteristic that an assessment is designed to measure” (AERA, APA & NCME, 2014).

Direct Assessment is the measurement of student knowledge, behaviors, and learning. It is linked to specified student learning outcomes. These measures are directly observed and assessed by the content expert.

Evaluation is the process of assessing the value, worth, or effectiveness of an educational program, process, or curriculum.

Goals are the general aims or purposes of an educational system, often at the program level, that are broadly defined and include intended outcomes.

Indirect Assessment is the measurement of student learning experiences often linked to direct assessments but not directly measuring student learning outcomes. Consequently, indirect assessments can include opinions or thoughts about student knowledge, values, beliefs, and attitudes about educational programs, processes, and curriculum. They may also include measures of student outcomes like retention rate, course grades, or GPA that are not direct assessments of the student learning outcomes.

Locally Developed Exam (LDE) is an exam created locally usually at an institution.

Objectives are brief clear statements of the expected learning outcomes of instruction, typically at the course level.

Outcomes are the student results of programs including behaviors, knowledge, skills, and level of functioning. They are usually measured by a test or other assessment method, such as a performance appraisal.

Outputs are the results of program participation that specify types, levels, and targets of service. They are often measured as a count (e.g., number of students participating in a program).

Performance Appraisal is the assessment of student performance on an assignment such as a paper, project, or presentation. Performance appraisals may be assessed/evaluated via an assessment tool such as a rubric.

Reliability is the consistency of scores across replications of a testing procedure (AERA, APA & NCME, 2014).

Rubric is a tool used in assessing student artifacts, e.g., oral exams, research papers, and capstone projects. Assessment rubrics are useful because they list clear expectations of student performance and provide a way to rate student work.

Student Learning Outcomes (SLOs) are behavioral statements that specify what students will learn or be able to do as a result of a learning program, process, or curriculum.

Test is a device or procedure in which a sample of an examinee's behavior in a specified domain is obtained and subsequently evaluated and scored using a standardized process (AERA, APA, NCME, 2014).

Test Blueprint is a document aligning test items on a locally developed exam to the learning outcomes that the test is assessing.

Validity is the degree to which evidence and theory support the interpretations of test scores or assessment results for proposed uses (AERA, APA, NCME, 2014).

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Appendix A: MSCHE Standards for Accreditation

Standard I

Mission and Goals

The institution's mission defines its purpose within the context of higher education, the students it serves, and what it intends to accomplish. The institution's stated goals are clearly linked to its mission and specify how the institution fulfills its mission.

Criteria

An accredited institution possesses and demonstrates the following attributes or activities:

1. clearly defined mission and goals that:
 - a. are developed through appropriate collaborative participation by all who facilitate or are otherwise responsible for institutional development and improvement;
 - b. address external as well as internal contexts and constituencies;
 - c. are approved and supported by the governing body;
 - d. guide faculty, administration, staff, and governing structures in making decisions related to planning, resource allocation, program and curricular development, and the definition of institutional and educational outcomes;
 - e. include support of scholarly inquiry and creative activity, at levels and of the type appropriate to the institution;
 - f. are publicized and widely known by the institution's internal stakeholders;
 - g. are periodically evaluated;
2. institutional goals that are realistic, appropriate to higher education, and consistent with mission;
3. goals that focus on student learning and related outcomes and on institutional improvement; are supported by administrative, educational, and student support programs and services; and are consistent with institutional mission; and
4. periodic assessment of mission and goals to ensure they are relevant and achievable.

Standard II

Ethics and Integrity

Ethics and integrity are central, indispensable, and defining hallmarks of effective higher education institutions. In all activities, whether internal or external, an institution must be faithful to its mission, honor its contracts and commitments, adhere to its policies, and represent itself truthfully.

Criteria

An accredited institution possesses and demonstrates the following attributes or activities:

1. a commitment to academic freedom, intellectual freedom, freedom of expression, and respect for intellectual property rights;
2. a climate that fosters respect among students, faculty, staff, and administration from a range of diverse backgrounds, ideas, and perspectives;
3. a grievance policy that is documented and disseminated to address complaints or grievances raised by students, faculty, or staff. The institution's policies and procedures are fair and impartial, and assure that grievances are addressed promptly, appropriately, and equitably;
4. the avoidance of conflict of interest or the appearance of such conflict in all activities and among all constituents;
5. fair and impartial practices in the hiring, evaluation, promotion, discipline, and separation of employees;
6. honesty and truthfulness in public relations announcements, advertisements, recruiting and admissions materials and practices, as well as in internal communications;
7. as appropriate to its mission, services or programs in place:
 - a. to promote affordability and accessibility;
 - b. to enable students to understand funding sources and options, value received for cost, and methods to make informed decisions about incurring debt;
8. compliance with all applicable federal, state, and Commission reporting policies, regulations, and requirements to include reporting regarding:
 - a. the full disclosure of information on institution-wide assessments, graduation, retention, certification and licensure or licensing board pass rates;
 - b. the institution's compliance with the Commission's Requirements of Affiliation;
 - c. substantive changes affecting institutional mission, goals, programs, operations, sites, and other material issues which must be disclosed in a timely and accurate fashion;
 - d. the institution's compliance with the Commission's policies; and
9. periodic assessment of ethics and integrity as evidenced in institutional policies, processes, practices, and the manner in which these are implemented.

Standard III

Design and Delivery of the Student Learning Experience

An institution provides students with learning experiences that are characterized by rigor and coherence at all program, certificate, and degree levels, regardless of instructional modality. All learning experiences, regardless of modality, program pace/schedule, level, and setting are consistent with higher education expectations.

Criteria

An accredited institution possesses and demonstrates the following attributes or activities:

1. certificate, undergraduate, graduate, and/or professional programs leading to a degree or other recognized higher education credential, of a length appropriate to the objectives of the degree or other credential, designed to foster a coherent student learning experience and to promote synthesis of learning;
2. student learning experiences that are designed, delivered, and assessed by faculty (full-time or part-time) and/or other appropriate professionals who are:
 - a. rigorous and effective in teaching, assessment of student learning, scholarly inquiry, and service, as appropriate to the institution's mission, goals, and policies;
 - b. qualified for the positions they hold and the work they do;
 - c. sufficient in number;
 - d. provided with and utilizing sufficient opportunities, resources, and support for professional growth and innovation;
 - e. reviewed regularly and equitably based on written, disseminated, clear, and fair criteria, expectations, policies, and procedures;
3. academic programs of study that are clearly and accurately described in official publications of the institution in such a way that students are able to understand and follow degree and program requirements and expected time to completion;
4. sufficient learning opportunities and resources to support both the institution's programs of study and students' academic progress;
5. at institutions that offer undergraduate education, a general education program, free standing or integrated into academic disciplines, that:
 - a. offers a sufficient scope to draw students into new areas of intellectual experience, expanding their cultural and global awareness and cultural sensitivity, and preparing them to make well-reasoned judgments outside as well as within their academic field;
 - b. offers a curriculum designed so that students acquire and demonstrate essential skills including at least oral and written communication, scientific and quantitative reasoning, critical analysis and reasoning, technological competency, and information literacy. Consistent with mission, the general education program also includes the study of values, ethics, and diverse perspectives; and
 - c. in non-US institutions that do not include general education, provides evidence that students can demonstrate general education skills;
6. in institutions that offer graduate and professional education, opportunities for the development of research, scholarship, and independent thinking, provided by faculty and/or other professionals with credentials appropriate to graduate-level curricula;
7. adequate and appropriate institutional review and approval on any student learning opportunities designed, delivered, or assessed by third-party providers; and
8. periodic assessment of the effectiveness of programs providing student learning opportunities.

Standard IV

Support of the Student Experience

Across all educational experiences, settings, levels, and instructional modalities, the institution recruits and admits students whose interests, abilities, experiences, and goals are congruent with its mission and educational offerings. The institution commits to student retention, persistence, completion, and success through a coherent and effective support system sustained by qualified professionals, which enhances the quality of the learning environment, contributes to the educational experience, and fosters student success

Criteria

An accredited institution possesses and demonstrates the following attributes or activities:

1. clearly stated, ethical policies and processes to admit, retain, and facilitate the success of students whose interests, abilities, experiences, and goals provide a reasonable expectation for success and are compatible with institutional mission, including:
 - a. accurate and comprehensive information regarding expenses, financial aid, scholarships, grants, loans, repayment, and refunds;
 - b. a process by which students who are not adequately prepared for study at the level for which they have been admitted are identified, placed, and supported in attaining appropriate educational goals;
 - c. orientation, advisement, and counseling programs to enhance retention and guide students throughout their educational experience;
 - d. processes designed to enhance the successful achievement of students' educational goals including certificate and degree completion, transfer to other institutions, and post-completion placement;
2. policies and procedures regarding evaluation and acceptance of transfer credits, and credits awarded through experiential learning, prior non-academic learning, competency-based assessment, and other alternative learning approaches;
3. policies and procedures for the safe and secure maintenance and appropriate release of student information and records;
4. if offered, athletic, student life, and other extracurricular activities that are regulated by the same academic, fiscal, and administrative principles and procedures that govern all other programs;
5. if applicable, adequate and appropriate institutional review and approval of student support services designed, delivered, or assessed by third-party providers; and
6. periodic assessment of the effectiveness of programs supporting the student experience.

Standard V

Educational Effectiveness Assessment

Assessment of student learning and achievement demonstrates that the institution's students have accomplished educational goals consistent with their program of study, degree level, the institution's mission, and appropriate expectations for institutions of higher education.

Criteria

An accredited institution possesses and demonstrates the following attributes or activities:

1. clearly stated educational goals at the institution and degree/program levels, which are interrelated with one another, with relevant educational experiences, and with the institution's mission;
2. organized and systematic assessments, conducted by faculty and/or appropriate professionals, evaluating the extent of student achievement of institutional and degree/program goals. Institutions should:
 - a. define meaningful curricular goals with defensible standards for evaluating whether students are achieving those goals;
 - b. articulate how they prepare students in a manner consistent with their mission for successful careers, meaningful lives, and, where appropriate, further education. They should collect and provide data on the extent to which they are meeting these goals;
 - c. support and sustain assessment of student achievement and communicate the results of this assessment to stakeholders;
3. consideration and use of assessment results for the improvement of educational effectiveness. Consistent with the institution's mission, such uses include some combination of the following:
 - a. assisting students in improving their learning;
 - b. improving pedagogy and curriculum;
 - c. reviewing and revising academic programs and support services;
 - d. planning, conducting, and supporting a range of professional development activities;
 - e. planning and budgeting for the provision of academic programs and services;
 - f. informing appropriate constituents about the institution and its programs;
 - g. improving key indicators of student success, such as retention, graduation, transfer, and placement rates;
 - h. implementing other processes and procedures designed to improve educational programs and services;
4. if applicable, adequate and appropriate institutional review and approval of assessment services designed, delivered, or assessed by third-party providers; and
5. periodic assessment of the effectiveness of assessment processes utilized by the institution for the improvement of educational effectiveness.

Standard VI

Planning, Resources, and Institutional Improvement

The institution's planning processes, resources, and structures are aligned with each other and are sufficient to fulfill its mission and goals, to continuously assess and improve its programs and services, and to respond effectively to opportunities and challenges.

Criteria

An accredited institution possesses and demonstrates the following attributes or activities:

1. institutional objectives, both institution-wide and for individual units, that are clearly stated, assessed appropriately, linked to mission and goal achievement, reflect conclusions drawn from assessment results, and are used for planning and resource allocation;
2. clearly documented and communicated planning and improvement processes that provide for constituent participation, and incorporate the use of assessment results;
3. a financial planning and budgeting process that is aligned with the institution's mission and goals, evidence-based, and clearly linked to the institution's and units' strategic plans/objectives;
4. fiscal and human resources as well as the physical and technical infrastructure adequate to support its operations wherever and however programs are delivered;
5. well-defined decision-making processes and clear assignment of responsibility and accountability;
6. comprehensive planning for facilities, infrastructure, and technology that includes consideration of sustainability and deferred maintenance and is linked to the institution's strategic and financial planning processes;
7. an annual independent audit confirming financial viability with evidence of follow-up on any concerns cited in the audit's accompanying management letter;
8. strategies to measure and assess the adequacy and efficient utilization of institutional resources required to support the institution's mission and goals; and
9. periodic assessment of the effectiveness of planning, resource allocation, institutional renewal processes, and availability of resources.

Standard VII

Governance, Leadership, and Administration

The institution is governed and administered in a manner that allows it to realize its stated mission and goals in a way that effectively benefits the institution, its students, and the other constituencies it serves. Even when supported by or affiliated with governmental, corporate, religious, educational system, or other unaccredited organizations, the institution has education as its primary purpose, and it operates as an academic institution with appropriate autonomy.

Criteria

An accredited institution possesses and demonstrates the following attributes or activities:

1. a clearly articulated and transparent governance structure that outlines roles, responsibilities, and accountability for decision making by each constituency, including governing body, administration, faculty, staff and students;
2. a legally constituted governing body that:
 - a. serves the public interest, ensures that the institution clearly states and fulfills its mission and goals, has fiduciary responsibility for the institution, and is ultimately accountable for the academic quality, planning, and fiscal well-being of the institution;
 - b. has sufficient independence and expertise to ensure the integrity of the institution. Members must have primary responsibility to the accredited institution and not allow political, financial, or other influences to interfere with their governing responsibilities;
 - c. ensures that neither the governing body nor its individual members interferes in the day-to-day operations of the institution;
 - d. oversees at the policy level the quality of teaching and learning, the approval of degree programs and the awarding of degrees, the establishment of personnel policies and procedures, the approval of policies and by-laws, and the assurance of strong fiscal management;
 - e. plays a basic policy-making role in financial affairs to ensure integrity and strong financial management. This may include a timely review of audited financial statements and/or other documents related to the fiscal viability of the institution;
 - f. appoints and regularly evaluates the performance of the Chief Executive Officer;
 - g. is informed in all its operations by principles of good practice in board governance;
 - h. establishes and complies with a written conflict of interest policy designed to ensure the impartiality of the governing body by addressing matters such as payment for services, contractual relationships, employment, and family, financial or other interests that could pose or be perceived as conflicts of interest;
 - i. supports the Chief Executive Officer in maintaining the autonomy of the institution;
3. a Chief Executive Officer who:
 - a. is appointed by, evaluated by, and reports to the governing body and shall not chair the governing body;
 - b. has appropriate credentials and professional experience consistent with the mission of the organization;

- c. has the authority and autonomy required to fulfill the responsibilities of the position, including developing and implementing institutional plans, staffing the organization, identifying and allocating resources, and directing the institution toward attaining the goals and objectives set forth in its mission;
 - d. has the assistance of qualified administrators, sufficient in number, to enable the Chief Executive Officer to discharge his/her duties effectively; and is responsible for establishing procedures for assessing the organization's efficiency and effectiveness;
4. an administration possessing or demonstrating:
- a. an organizational structure that is clearly documented and that clearly defines reporting relationships;
 - b. an appropriate size and with relevant experience to assist the Chief Executive Officer in fulfilling his/her roles and responsibilities;
 - c. members with credentials and professional experience consistent with the mission of the organization and their functional roles;
 - d. skills, time, assistance, technology, and information systems expertise required to perform their duties;
 - e. regular engagement with faculty and students in advancing the institution's goals and objectives;
 - f. systematic procedures for evaluating administrative units and for using assessment data to enhance operations; and
5. periodic assessment of the effectiveness of governance, leadership, and administration

Retrieved on April 26th, 2020 from:
<https://www.msche.org/wp-content/uploads/2018/06/RevisedStandardsFINAL.pdf>

Appendix B: General Education/Pathways Courses, Core Competencies, and Outcomes

Appendix Table B1: Table of General Education/Pathways Core Competencies and Their Outcomes

Competency	Core	Pathways Outcomes
English Composition	Required	<ul style="list-style-type: none"> Read and listen critically and analytically, including identifying an argument's major assumptions and assertions and evaluating its supporting evidence.
English Composition	Required	<ul style="list-style-type: none"> Write clearly and coherently in varied, academic formats (such as formal essays, research papers, and reports) using standard English and appropriate technology to critique and improve one's own and others' texts.
English Composition	Required	<ul style="list-style-type: none"> Demonstrate research skills using appropriate technology, including gathering, evaluating, and synthesizing primary and secondary sources.
English Composition	Required	<ul style="list-style-type: none"> Support a thesis with well-reasoned arguments, and communicate persuasively across a variety of contexts, purposes, audiences, and media.
English Composition	Required	<ul style="list-style-type: none"> Formulate original ideas and relate them to the ideas of others by employing the conventions of ethical attribution and citation.
Mathematical & Quantitative Reasoning	Required	<ul style="list-style-type: none"> Interpret and draw appropriate inferences from quantitative representations, such as formulas, graphs, or tables.
Mathematical & Quantitative Reasoning	Required	<ul style="list-style-type: none"> Use algebraic, numerical, graphical, or statistical methods to draw accurate conclusions and solve mathematical problems.
Mathematical & Quantitative Reasoning	Required	<ul style="list-style-type: none"> Represent quantitative problems expressed in natural language in a suitable mathematical format.
Mathematical & Quantitative Reasoning	Required	<ul style="list-style-type: none"> Effectively communicate quantitative analysis or solutions to mathematical problems in written or oral form.
Mathematical & Quantitative Reasoning	Required	<ul style="list-style-type: none"> Evaluate solutions to problems for reasonableness using a variety of means, including informed estimation.
Mathematical & Quantitative Reasoning	Required	<ul style="list-style-type: none"> Apply mathematical methods to problems in other fields of study.
Life & Physical Sciences	Required	<ul style="list-style-type: none"> Identify and apply the fundamental concepts and methods of a life or physical science.
Life & Physical Sciences	Required	<ul style="list-style-type: none"> Apply the scientific method to explore natural phenomena, including hypothesis development, observation, experimentation, measurement, data analysis, and data presentation.
Life & Physical Sciences	Required	<ul style="list-style-type: none"> Use the tools of a scientific discipline to carry out collaborative laboratory investigations.
Life & Physical Sciences	Required	<ul style="list-style-type: none"> Gather, analyze, and interpret data and present it in an effective written laboratory or fieldwork report.
Life & Physical Sciences	Required	<ul style="list-style-type: none"> Identify and apply research ethics and unbiased assessment in gathering and reporting scientific data.

Competency	Core	Pathways Outcomes
World Cultures & Global Issues	Flexible	· Gather, interpret, and assess information from a variety of sources and points of view.
World Cultures & Global Issues	Flexible	· Evaluate evidence and arguments critically or analytically.
World Cultures & Global Issues	Flexible	· Produce well-reasoned written or oral arguments using evidence to support conclusions.
World Cultures & Global Issues	Flexible	· Identify and apply the fundamental concepts and methods of a discipline or interdisciplinary field exploring world cultures or global issues, including, but not limited to, anthropology, communications, cultural studies, economics, ethnic studies, foreign languages (building upon previous language acquisition), geography, history, political science, sociology, and world literature.
World Cultures & Global Issues	Flexible	· Analyze culture, globalization, or global cultural diversity, and describe an event or process from more than one point of view.
World Cultures & Global Issues	Flexible	· Analyze the historical development of one or more non-U.S. societies.
World Cultures & Global Issues	Flexible	· Analyze the significance of one or more major movements that have shaped the world's societies.
World Cultures & Global Issues	Flexible	· Analyze and discuss the role that race, ethnicity, class, gender, language, sexual orientation, belief, or other forms of social differentiation play in world cultures or societies.
World Cultures & Global Issues	Flexible	· Speak, read, and write a language other than English, and use that language to respond to cultures other than one's own.
U.S. Experience in Its Diversity	Flexible	· Gather, interpret, and assess information from a variety of sources and points of view.
U.S. Experience in Its Diversity	Flexible	· Evaluate evidence and arguments critically or analytically.
U.S. Experience in Its Diversity	Flexible	· Produce well-reasoned written or oral arguments using evidence to support conclusions.
U.S. Experience in Its Diversity	Flexible	· Identify and apply the fundamental concepts and methods of a discipline or interdisciplinary field exploring the U.S. experience in its diversity, including, but not limited to, anthropology, communications, cultural studies, economics, history, political science, psychology, public affairs, sociology, and U.S. literature.
U.S. Experience in Its Diversity	Flexible	· Analyze and explain one or more major themes of U.S. history from more than one informed perspective.
U.S. Experience in Its Diversity	Flexible	· Evaluate how indigenous populations, slavery, or immigration have shaped the development of the United States.
U.S. Experience in Its Diversity	Flexible	· Explain and evaluate the role of the United States in international relations.
U.S. Experience in Its Diversity	Flexible	· Identify and differentiate among the legislative, judicial, and executive branches of government and analyze their influence on the development of U.S. democracy.
U.S. Experience in Its Diversity	Flexible	· Analyze and discuss common institutions or patterns of life in contemporary U.S. society and how they influence, or are influenced by, race, ethnicity, class, gender, sexual orientation, belief, or other forms of social differentiation.

Competency	Core	Pathways Outcomes
Creative Expression	Flexible	· Gather, interpret, and assess information from a variety of sources and points of view.
Creative Expression	Flexible	· Evaluate evidence and arguments critically or analytically.
Creative Expression	Flexible	· Produce well-reasoned written or oral arguments using evidence to support conclusions.
Creative Expression	Flexible	· Identify and apply the fundamental concepts and methods of a discipline or interdisciplinary field exploring creative expression, including, but not limited to, arts, communications, creative writing, media arts, music, and theater.
Creative Expression	Flexible	· Analyze how arts from diverse cultures of the past serve as a foundation for those of the present, and describe the significance of works of art in the societies that created them.
Creative Expression	Flexible	· Articulate how meaning is created in the arts or communications and how experience is interpreted and conveyed.
Creative Expression	Flexible	· Demonstrate knowledge of the skills involved in the creative process.
Creative Expression	Flexible	· Use appropriate technologies to conduct research and to communicate.
Individual & Society	Flexible	· Gather, interpret, and assess information from a variety of sources and points of view.
Individual & Society	Flexible	· Evaluate evidence and arguments critically or analytically.
Individual & Society	Flexible	· Produce well-reasoned written or oral arguments using evidence to support conclusions.
Individual & Society	Flexible	· Identify and apply the fundamental concepts and methods of a discipline or interdisciplinary field exploring the relationship between the individual and society, including, but not limited to, anthropology, communications, cultural studies, history, journalism, philosophy, political science, psychology, public affairs, religion, and sociology.
Individual & Society	Flexible	· Examine how an individual's place in society affects experiences, values, or choices.
Individual & Society	Flexible	· Articulate and assess ethical views and their underlying premises.
Individual & Society	Flexible	· Articulate ethical uses of data and other information resources to respond to problems and questions.
Individual & Society	Flexible	· Identify and engage with local, national, or global trends or ideologies, and analyze their impact on individual or collective decision-making.

Competency	Core	Pathways Outcomes
Scientific World	Flexible	<ul style="list-style-type: none"> Gather, interpret, and assess information from a variety of sources and points of view.
Scientific World	Flexible	<ul style="list-style-type: none"> Evaluate evidence and arguments critically or analytically.
Scientific World	Flexible	<ul style="list-style-type: none"> Produce well-reasoned written or oral arguments using evidence to support conclusions.
Scientific World	Flexible	<ul style="list-style-type: none"> Identify and apply the fundamental concepts and methods of a discipline or interdisciplinary field exploring the scientific world, including, but not limited to: computer science, history of science, life and physical sciences, linguistics, logic, mathematics, psychology, statistics, and technology-related studies.
Scientific World	Flexible	<ul style="list-style-type: none"> Demonstrate how tools of science, mathematics, technology, or formal analysis can be used to analyze problems and develop solutions.
Scientific World	Flexible	<ul style="list-style-type: none"> Articulate and evaluate the empirical evidence supporting a scientific or formal theory.
Scientific World	Flexible	<ul style="list-style-type: none"> Articulate and evaluate the impact of technologies and scientific discoveries on the contemporary world, such as issues of personal privacy, security, or ethical responsibilities.
Scientific World	Flexible	<ul style="list-style-type: none"> Understand the scientific principles underlying matters of policy or public concern in which science plays a role.

Appendix Table B2: Gen Ed/Pathways Courses

Competency	Competency Category	Course	Note
English Composition	Required	ENGL 1010 English Composition I	Must also take ENGL 1012 English Composition II
English Composition	Required	ENGL 1012 English Composition II	Must also take ENGL 1010 English Composition I
Life & Physical Sciences	Required	ANTH 1200 Human Origins	
Life & Physical Sciences	Required	ANTH 3265 Human Anatomy and Physiology 1	Cross-listed: BIOL 1501/HNSC 2302/KINS 3281 STEM Variant
Life & Physical Sciences	Required	ANTH 3266 Human Anatomy and Physiology 2	Cross-listed: BIOL 1502/HNSC 2303/KINS 3285 STEM Variant
Life & Physical Sciences	Required	ANTH 3470 Summer Archaeological Field School	Cross-listed: CLAS 3212; STEM Variant
Life & Physical Sciences	Required	BIOL 1001 General Biology 1	STEM Variant
Life & Physical Sciences	Required	BIOL 1002 General Biology 2	STEM Variant
Life & Physical Sciences	Required	BIOL 1010 Biology: The Study of Life	
Life & Physical Sciences	Required	CASD 1178 Speech-Language and Hearing Science: Anatomy and Physiology	STEM Variant
Life & Physical Sciences	Required	CHEM 1007 Chemistry in Modern Life: An Introduction for Nonmajors	
Life & Physical Sciences	Required	CHEM 1040 General Chemistry for Health-related Professions	STEM Variant
Life & Physical Sciences	Required	CHEM 1100 General Chemistry I	STEM Variant
Life & Physical Sciences	Required	CHEM 1200 General Chemistry I Lecture	STEM Variant
Life & Physical Sciences	Required	CHEM 2050 General Chemistry IB	STEM Variant
Life & Physical Sciences	Required	CHEM 2060 General Chemistry IB Lecture	STEM Variant
Life & Physical Sciences	Required	CHEM 2100 General Chemistry II	STEM Variant

Competency	Competency Category	Course	Note
Life & Physical Sciences	Required	CHEM 2200 General Chemistry II Lecture	STEM Variant
Life & Physical Sciences	Required	EESC 1010: The Dynamic Earth	
Life & Physical Sciences	Required	HNSC 2300 Human Physiology	Cross-listed: KINS 3271; STEM Variant
Life & Physical Sciences	Required	KINS 3275 Human Anatomy	STEM Variant
Life & Physical Sciences	Flexible	PHYS 1005 The Simple Laws That Govern the Universe	
Mathematical & Quantitative Reasoning	Required	BUSN 3400 Introduction to Economic and Business Statistics	STEM Variant
Mathematical & Quantitative Reasoning	Required	CISC 1001 Computing and Quantitative Reasoning	
Mathematical & Quantitative Reasoning	Required	CISC 1002 The Outer Limits of Reasoning	Cross-listed: PHIL 2200
Mathematical & Quantitative Reasoning	Required	ECON 3400 Introduction to Economic and Business Statistics	STEM Variant
Mathematical & Quantitative Reasoning	Required	EESC 3800 Statistics and Data Analysis in Geosciences	STEM Variant
Mathematical & Quantitative Reasoning	Required	MATH 1006 College Algebra for Precalculus	STEM Variant
Mathematical & Quantitative Reasoning	Required	MATH 1011 Precalculus Mathematics	STEM Variant
Mathematical & Quantitative Reasoning	Required	MATH 1012 Precalculus With Recitation	STEM Variant
Mathematical & Quantitative Reasoning	Required	MATH 1021 Precalculus Mathematics A	Together with MATH 1026; STEM Variant
Mathematical & Quantitative Reasoning	Required	MATH 1026 Precalculus Mathematics B	Together with MATH 1021; STEM Variant

Competency	Competency Category	Course	Note
Mathematical & Quantitative Reasoning	Required	MATH 1201 Calculus I	STEM Variant
Mathematical & Quantitative Reasoning	Required	MATH 1311 Thinking Mathematically	
Mathematical & Quantitative Reasoning	Required	MATH 1401 Elementary Mathematics From an Advanced Standpoint	Together with MATH 1021; STEM Variant
Mathematical & Quantitative Reasoning	Required	MATH 1501 Elements of Statistics with Applications	
Mathematical & Quantitative Reasoning	Required	PSYC 3400 Statistical Methods in Psychological Research	STEM Variant
Creative Expression	Flexible	ARTD 1010 Art: Its History and Meaning	
Creative Expression	Flexible	MCHC 1001 Arts in New York	Macaulay course
Creative Expression	Flexible	MUSC 1300 Music: Its Language, History and Culture	
Creative Expression	Flexible	MUSC 1400 Fundamentals of Music	
Individual and Society	Flexible	CASD 1707 Public Speaking	
Individual and Society	Flexible	CLAS 2109 The Self and Society	
Individual and Society	Flexible	CLAS 3200: Heroes, Gods, Monsters: Classical Mythologies	Cross-listed: RELG 3030
Individual and Society	Flexible	ECAE 2004 Early Childhood Education Foundations	
Individual and Society	Flexible	ENGL 2002 Ideas of Character in the Western Literary Tradition	
Individual and Society	Flexible	ENGL 2006 Text/Context	
Individual and Society	Flexible	HNSC 3314 Human Encounters with Death and Bereavement	
Individual and Society	Flexible	JUST 2017 Jewish Approaches to Ethical Issues	
Individual and Society	Flexible	MCHC 2002 Shaping the Future of New York City	Macaulay course
Individual and Society	Flexible	MLAN 2015 Con, Cop, and Mark: Representations of Criminality and Authority	
Individual and Society	Flexible	MLAN 2610 Literature in Translation	
Individual and Society	Flexible	PHIL 2101 Introduction to the Problems of Philosophy	

Competency	Competency Category	Course	Note
Individual and Society	Flexible	PHIL 2501 Philosophical Issues in Literature	
Individual and Society	Flexible	RELG 3003 Questions of Text and Truth: Introduction to Judaism, Christianity, and Islam	Cross-listed: CLAS 3246
Individual and Society	Flexible	SEED 2001 Historical, Philosophical, and Cultural Foundations of Education	Cross-listed: CBSE 2001
Individual and Society	Flexible	SOCY 1200 Sociology of Sport	
Scientific World	Flexible	ANTH 2205 Forensic Anthropology	
Scientific World	Flexible	CHEM 1011 Pharmaceutical Research, Development, and Approval	
Scientific World	Flexible	CHEM 1012 Chemistry in the Arts and Archaeology	
Scientific World	Flexible	CHEM 1037 Studies in Forensic Science	Cross-listed: ANTH 1205
Scientific World	Flexible	CISC 1003 Exploring Robotics	
Scientific World	Flexible	EESC 1050 Society and the Ocean	
Scientific World	Flexible	EESC 1060 Exploring Issues in Sustainable Water Resources Management	
Scientific World	Flexible	EESC 1101 Introduction to Earth Science	STEM Variant
Scientific World	Flexible	HNSC 1100 Personal and Community Health	
Scientific World	Flexible	HNSC 1200 Fundamentals of Nutrition	
Scientific World	Flexible	LING 2001 Introduction to Linguistics	STEM Variant
Scientific World	Flexible	MCHC 2001 Science and Technology in New York City	Macaulay course
Scientific World	Flexible	PHYS 1040 The Making of the Atomic Bomb	
Scientific World	Flexible	PHYS 1070 Cosmology	
Scientific World	Flexible	PHYS 1080 Energy Use and Climate Change	
Scientific World	Flexible	PHYS 1100 General Physics I	STEM Variant
Scientific World	Flexible	PHYS 1150 Calculus-based General Physics	STEM Variant
U.S. Experience in Its Diversity	Flexible	AFST 3265 (Re)presenting Black Men	
U.S. Experience in Its Diversity	Flexible	AMST 1010 American Identities	
U.S. Experience in Its Diversity	Flexible	AMST 3212 Decade in Crisis: The 1960s	
U.S. Experience in Its Diversity	Flexible	ANTH 3135 The American Urban Experience: Anthropological Perspectives	

Competency	Competency Category	Course	Note
U.S. Experience in Its Diversity	Flexible	ENGL 2001 Literature, Ethnicity, and Immigration	
U.S. Experience in Its Diversity	Flexible	FILM 2124 American Film Comedy	
U.S. Experience in Its Diversity	Flexible	HIST 1201 American Pluralism to 1877	
U.S. Experience in Its Diversity	Flexible	HIST 1202 American Pluralism Since 1877	
U.S. Experience in Its Diversity	Flexible	JUST 2047 American Jewish History	
U.S. Experience in Its Diversity	Flexible	JUST 2085 Jews of New York	
U.S. Experience in Its Diversity	Flexible	MUSC 3101 Music in Global America	Qualifies as an Inter-Cultural Competency (ICC) course
U.S. Experience in Its Diversity	Flexible	MCHC 1002 Peopling of New York City	Macaulay course
U.S. Experience in Its Diversity	Flexible	POLS 1230 People, Power, and Politics	
U.S. Experience in Its Diversity	Flexible	PRLS 1001 Introduction to Puerto Rican and Latino Studies	
U.S. Experience in Its Diversity	Flexible	PRLS 3203 Latin@ Diasporas in the United States	
U.S. Experience in Its Diversity	Flexible	SEED 1001 Critical Issues in U.S. Education	
U.S. Experience in Its Diversity	Flexible	SOCY 1201 Sociology of Hip Hop	
U.S. Experience in Its Diversity	Flexible	SPCL 3000 LGBTQ Youth in Educational Contexts	
U.S. Experience in Its Diversity	Flexible	WGST 1001 Introduction to Women's Studies: Sex, Gender, and Power	
World Cultures and Global Issues	Flexible	AFST 3135 Black Political Identity in a Transnational Context	
World Cultures and Global Issues	Flexible	ANTH 1105 Comparative Studies in Cultures and Transformation	
World Cultures and Global Issues	Flexible	ARTD 3105 The Development of the Silk Road	

Competency	Competency Category	Course	Note
World Cultures and Global Issues	Flexible	ARTD 3134 Subject, Creator, Consumer: Women and African	
World Cultures and Global Issues	Flexible	CLAS 1110 Tyranny, Democracy, Empire: Classical Cultures	
World Cultures and Global Issues	Flexible	CLAS 3245 Contemporary Identity Politics	Qualifies as an Inter-Cultural Competency (ICC) course
World Cultures and Global Issues	Flexible	ENGL 2004 Literature and Film	Cross-listed: CLAS 2104
World Cultures and Global Issues	Flexible	ENGL 2007 The Emergence of the Modern	
World Cultures and Global Issues	Flexible	ENGL 2008 The Quest for Ethnic, Cultural, and National Identities in Literature	
World Cultures and Global Issues	Flexible	ENGL 2009 Introduction to Literary Studies	
World Cultures and Global Issues	Flexible	HIST 1101 The Shaping of the Modern World	
World Cultures and Global Issues	Flexible	JUST 1145 Classical Jewish Texts	
World Cultures and Global Issues	Flexible	PRLS 3105 Puerto Rican and Latin@ Cultural Formations	Qualifies as an Inter-Cultural Competency (ICC) course
Inter-Cultural Competency	College Option	AFST 3247 Literature of the African Diaspora	
Inter-Cultural Competency	College Option	AFST 3349 Caribbeanization of North America	
Inter-Cultural Competency	College Option	ANTH 1100 Culture and Society	
Inter-Cultural Competency	College Option	ANTH 1300 People and Language	
Inter-Cultural Competency	College Option	ARTD 3124 Foundations of Islamic Art	
Inter-Cultural Competency	College Option	ARTD 3169 Global Contemporary Art	
Inter-Cultural Competency	College Option	CASD 1619 Intercultural Communication	
Inter-Cultural Competency	College Option	CLAS 3030 Black Classicism	

Competency	Competency Category	Course	Note
Inter-Cultural Competency	College Option	CLAS 3113 English Professional Language: Its Greek and Latin Tools	
Inter-Cultural Competency	College Option	CLAS 3209 After Alexander: A Confluence of Cultures	
Inter-Cultural Competency	College Option	CLAS 3245 Comparative Identity Politics: The Ancient Mediterranean and the Modern World	Also satisfies Pathways Flexible Core World Cultures and Global Issues
Inter-Cultural Competency	College Option	ITAL 2510 The Italian Cultural Heritage	
Inter-Cultural Competency	College Option	JUST 1025 Jewish Diaspora	
Inter-Cultural Competency	College Option	LING 3029 Sociolinguistics	Cross-listed: ANTH 3390/ENGL 3524
Inter-Cultural Competency	College Option	MLAN 2150 Intercultural Literacy and Competence	
Inter-Cultural Competency	College Option	MLAN 4500 Critical Theories in Translation Studies	
Inter-Cultural Competency	College Option	MUSC 3101 Music in Global America	Also satisfies Pathways Flexible Core U.S. Experience in Its Diversity
Inter-Cultural Competency	College Option	PRLS 2105 New York Latin@ Culture and the Arts	
Inter-Cultural Competency	College Option	PRLS 3105 Puerto Rican and Latin@ Cultural Formations	Also satisfies Pathways Flexible Core World Cultures and Global Issues

Appendix C: A Budgetary Ranking Template for Improvement Strategies

Appendix Table C1: Template for Ranking of Budgetary Considerations for Outcomes Improvement

Rank of Importance	Planned Improvement	Associated Program Outcome <i>List outcome in full</i>
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		

Appendix D: CUNY IRB and FERPA Policies

Appendix D1: CUNY HRPP Procedures: Human Subjects Research Exempt from IRB Review

1. Applicability

These procedures apply to CUNY research involving human subjects that meets the criteria for exemption from IRB review, as outlined in the federal regulations at 45 CFR 46.101(b).

2. Determination of Exemption

The HRPP Coordinator, not the Principal Investigator (PI), determines whether a research study meets the criteria for exemption from IRB review. Please refer to Section 7 below for submission and review procedures. Researchers may not initiate exempt research until and unless they have received a determination of exemption from the local HRPP Office.

3. Exemption Criteria

Research that falls within one of the following categories may qualify for exemption from IRB review:

(1) Research conducted in established or commonly accepted educational settings, involving normal educational practices, such as (i) research on regular and special education instructional strategies, or (ii) research on the effectiveness of or the comparison among instructional techniques, curricula, or classroom management methods.

(2) Research involving the use of educational tests (cognitive, diagnostic, aptitude, achievement),

survey procedures, interview procedures or observation of public behavior, unless: (i) information obtained is recorded in such a manner that human subjects can be identified, directly or through identifiers linked to the subjects; and (ii) any disclosure of the human subjects' responses outside the research could reasonably place the subjects at risk of criminal or civil liability or be damaging to the subjects' financial standing, employability, or reputation. [NOTE: See Section 4.1 for limitations on this exemption category for research involving children.]

(3) Research involving the use of educational tests (cognitive, diagnostic, aptitude, achievement),

survey procedures, interview procedures, or observation of public behavior that is not exempt under paragraph (2), if: (i) the human subjects are elected or appointed public officials or candidates for public office; or (ii) federal statute(s) require(s) without exception that the confidentiality of the personally identifiable information will be maintained throughout the research and thereafter.

(4) Research involving the collection or study of existing data, documents, records, pathological specimens, or diagnostic specimens, if these sources are publicly available or if the information is recorded by the investigator in such a manner that subjects cannot be identified, directly or through identifiers linked to the subjects. [NOTE: In order to be eligible for this exemption, all of the materials have to exist at the time the research is proposed.]

(5) Research and demonstration projects which are conducted by or subject to the approval of federal department or agency heads, and which are designed to study, evaluate, or otherwise examine: (i) Public benefit or service programs; (ii) procedures for obtaining benefits or services under those programs; (iii) possible changes in or alternatives to those programs or procedures; or (iv) possible changes in methods or levels of payment for benefits or services under those programs.

(6) Taste and food quality evaluation and consumer acceptance studies, (i) if wholesome foods without additives are consumed; or (ii) if a food is consumed that contains a food ingredient at or below the level and for a use found to be safe, or agricultural chemical or

environmental contaminant at or below the level found to be safe, by the Food and Drug Administration or approved by the Environmental Protection Agency or the Food Safety and Inspection Service of the U.S. Department of Agriculture.

4. Limitations on Exemptions

4.1. Children.

Under exemption #2, research involving survey or interview procedures or observations of public behavior with children does not qualify for exemption, except for research involving observations of public behavior when the investigator does not participate in the activities being observed. The other five exemptions apply to research involving children as human subjects in the same way that they apply to research involving adults.

4.2. Prisoners.

Research involving prisoners does not qualify for exemption.

4.3. FDA.

Exemption Criteria Category 6 (Taste and food quality evaluation as described in section 3 above) is the only allowable category that is exempt from the requirements of FDA regulations for IRB review. For research that falls within FDA's oversight, if category 6 does not apply, the study cannot be considered as exempt from IRB review.

4.4. Belmont Report Applies.

Although exempt research does not require IRB review, this research is not exempt from the ethical guidelines of the Belmont Report. The individual making the determination of exemption has the authority to require additional protections for subjects in keeping with the guidelines of the Belmont Report, even though the research falls within an exempt category.

5. Validity of the Determination of Exemption

Determinations of exemptions are valid until the expiration date noted on the Exempt Determination Letter, up to a maximum of three years from the decision date. Investigators wishing to continue exempt research beyond the period specified on the determination of exemption must submit a Request for Extension of Exemption Determination.

6. Amendments to Exempt Research

6.1. Investigators shall not implement any changes to the exempt protocol without prior review and new determination of exemption from the local HRPP Office, even if the changes are planned for the period for which approval has already been given.

6.2. If the HRPP Office determines that, with the proposed changes, the research continues to meet the criteria for exemption from IRB review, the HRPP Office shall issue an Exemption Determination Letter for the amendment.

6.3. If the HRPP Office determines that the research no longer meets the criteria for exemption from IRB review, the submission shall be forwarded to the IRB for expedited or convened IRB review, as appropriate.

7. Process for Submission and Determination of Exempt status

7.1. Researchers shall submit a Request for Exemption in IRB Net. Detailed instructions for registering and submitting in IRB Net are available in the Researcher Manual for Using IRB Net available at <http://www.cuny.edu/research/compliance/human-subjects-research-1.html>.

7.2. The HRPP Coordinator of the PI's primary campus reviews the submission for completion and determines whether the research qualifies for exemption from IRB review.

7.3. The HRPP Office issues an Exempt Determination Letter to the PI, which conveys whether the research qualifies for exemption from IRB review.

7.4. If the research does not qualify for exemption from IRB review, the PI must re-submit the research using the Initial Application Submission form.

Appendix D2: Guidance and Procedures for Requesting and Using Data from CUNY Educational Records for Research Purposes in Compliance with FERPA

I. Background and Purpose

The Family Educational Rights and Privacy Act (FERPA) 20 U.S.C. § 1232(g) is a federal law that aims to keep student educational records private and accessible only by the student or their designee. This guidance and procedures document is designed to ensure compliance with FERPA when using educational records for research purposes, and sets forth the procedures to be followed by CUNY faculty, staff, post-doctoral associates, students and non-CUNY researchers who seek to obtain data from CUNY educational records for research purposes (“researchers”).

II. Entities Authorized to Release Data from Educational Records for Research Purposes

A. Data from educational records (whether identifiable or de-identified) may be released for research purposes by the following entities only:

- CUNY Office of Institutional Research (OIR) at the CUNY Central Office
- Office of Institutional Research at a CUNY college or school

B. Researchers who have access to educational records in their capacity as a CUNY faculty or staff member are not authorized to extract data from such records for research purposes.

III. Personally-Identifiable Student Information (PII)

Federal regulations consider data to be personally identifiable if it contains the student’s name, address, social security number, date or place of birth, mother’s maiden name or any other information that would allow a reasonable person in the school community to identify the student with reasonable certainty.

IV. Use of PII For Research Purposes

There are two ways that a researcher can use PII for research purposes:

1. For any type of research with a FERPA Release (or consent) signed by the student(s) – refer to Section V below.
2. For specific types of research without a FERPA Release (or consent) – refer to Section VI below.

V. Obtaining PII For Research Purposes Through FERPA Release

The best practice with respect to obtaining PII from CUNY student records is to have such students execute a FERPA release that details the information to be accessed by the researcher and the purposes of the research. Researchers should use the CUNY FERPA Release Forms for this purpose.

VI. Obtaining PII For Research Purposes Without Consent (Studies Exception)

A researcher may request PII without student consent from the OIR at a CUNY campus or at the Central Office under certain limited circumstances pursuant to the “studies exception” to FERPA.

The OIR may approve a request to provide PII if the study is meant to develop predictive tests, help administer student aid programs, or improve instruction, and it is primarily for CUNY’s benefit rather than the researchers’ benefit.

A. Types of Research that Qualify for the Studies Exception

Researchers may obtain PII if they are conducting a study for the purpose of developing, validating, or administering predictive tests; administering student aid programs; or improving instruction. A study designed to “improve instruction” has been broadly defined as a study done to ascertain the effectiveness of educational activities and subsequently refine programs and practices to improve outcomes for students.

B. Conditions for Release

Federal regulations establish certain conditions to the release of PII under this FERPA exception: The study must be conducted in a manner that does not permit personal identification of parents and students by individuals other than the researcher and the research team, and the information must be destroyed when no longer needed for the purposes for which the study was conducted.

C. Requirement of a Written Agreement Before Release

Researchers (both internal and external to CUNY) who wish to use data from student records under this exception must enter into a written agreement with CUNY that includes the following elements: the agreement must specify the purpose, scope and duration of the study and the information to be disclosed; require the researcher to use PII only to meet the purposes of the study; require the researcher to conduct the study in a manner that does not permit personal identification of parents and students by anyone other than the researcher or people working with the researcher with legitimate interests; and require the researcher to destroy all PII when the information is no longer needed.

VII. Procedural Steps to Follow

1. If you are a CUNY researcher seeking student PII, ask students to sign a FERPA Release Form.
2. If obtaining a FERPA Release Form is not feasible, or if you are an external researcher, contact the Office of Institutional Research (OIR) at the CUNY campus or at the Central Office to discuss obtaining PII.
3. After you receive approval from the OIR, execute the written Data Transfer and Non-Disclosure Agreement provided by the OIR.
4. If CUNY is engaged in human subject research activities related to the use of requested data, provide a copy of the executed Agreement to the Human Research Protection Program (HRPP) with your HRPP/IRB application.
5. Abide by all conditions of the Agreement.
6. Destroy all PII as soon as practicable after the completion of the study or return to CUNY for destruction.

