

BMCC Assessment Handbook

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INTRODUCTION

The importance of assessment in all areas of higher education continues to grow. There is an increasing desire to ensure that time, effort, and resources at colleges and universities are being deployed in the best way possible. In addition, assessment serves as the foundation for institutional effectiveness, how we ensure we're achieving the institutional mission and goals. At the Borough of Manhattan Community College (BMCC), the Office of Institutional Effectiveness and Analytics provide assessment and program/unit evaluation guidance and expertise to academic departments and AES units to ensure continuous improvement to student learning and the environment for student learning. This handbook was created to support the effective assessment and support of student learning and the environment for student success within the College's academic programs and administrative, educational, and student support services units.

What is Assessment?

Broadly defined, assessment is an ongoing, systematic, and organized process aimed at understanding and improving student learning, the environment for student learning, and all college operations. Assessment is a recurring process used to examine whether day-to-day activities are successful in meeting unit goals and outcomes. It provides evidence that supports claims that institutions are achieving a clearly articulated mission, goals, and student learning outcomes (SLOs) and support outcomes (SOs). Finally, assessment is key to making *data-informed* decisions about activities, programs, and initiatives within a unit, department, or institution regarding improvements. The ongoing nature of this process is illustrated below.

Assessment Cycle



BMCC

Student learning, development, and support for the environment of student learning is at the core of the BMCC's purpose and mission. The interrelationship between the institution's mission and goals and SLO and SO assessment are the core of the College's assessment philosophy. The ability to gauge institutional effectiveness is dependent upon the assessments and activities conducted by academic programs and AES units. Determining how effectively these activities impact student learning and the environment for student success provides the information necessary to determine if goals, institutionally and at the program and unit levels, are being met. Achievement of the goals provides a proxy for institutional effectiveness through the intentional, systematic alignment of mission, goals, and outcomes. Accordingly, assessment is central to this plan.

Assessment at BMCC

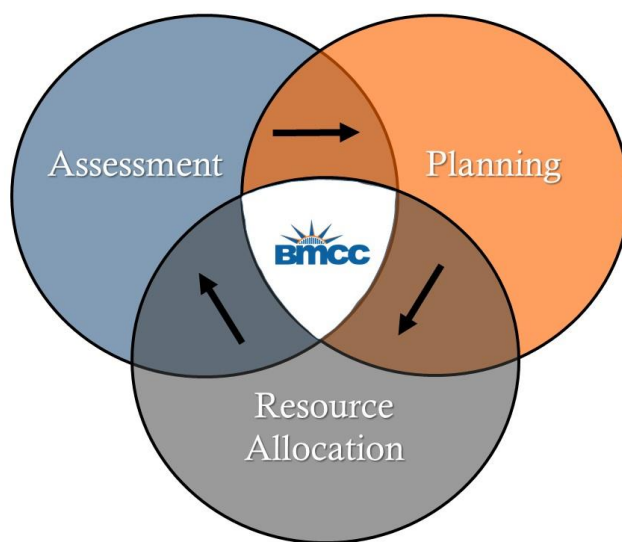
There are three primary levels of assessment at BMCC. These include the following:

- 1) Institutional Level – Assessment is conducted at the institutional level to document the achievement of the college's mission and goals; that is, to gather information that demonstrates in a quantifiable way how well and to what degree the college is achieving its stated aims. In short, assessment at this level is about establishing the College's ability to deliver on its mission, which is its institutional effectiveness. Institutional assessment is a centralized activity led and coordinated by the Office of Institutional Effectiveness and Analytics and the College Assessment Committees.
- 2) Program or Department/Unit Level – Assessment is conducted at the program or department/unit level to understand the degree to which students in each academic program are achieving that program's learning objectives, including the general education program. In addition, each AES unit carries out assessments to gauge success in achieving SLOs and SOs as well ensuring alignment with the College's mission and goals and University targets. Assessment at this level is decentralized to the academic department or AES unit responsible for the program or service being assessed. The information is gathered and utilized primarily by the academic department or AES unit conducting the assessment for making improvements in the program or service. Responsibility for academic program/department assessment planning and implementation rests with the department chairs and their faculty with the administration providing support and resources. Assessment in the AES units is the responsibility of the unit directors and their staffs.

- 3) Course/Activity Level – Course level assessment produces most of the direct evidence of student attainment of intended learning outcomes. “Tangible examples of student learning, such as completed tests, assignments, projects, portfolios, licensure examinations, and field experience evaluations are direct evidence of student learning. Indirect evidence, including retention, graduation, and placement rates and surveys of students and alumni can be vital to understanding the teaching-learning process and student success or challenges, but such information alone is insufficient evidence of student learning unless accompanied by direct evidence. Grades alone are indirect evidence of student learning...but the assignments and evaluations that form the basis for grades can be direct evidence if they are accompanied by clear evaluation criteria [such as test blueprints or scoring rubrics] that have a demonstrable relationship to key learning goals.”¹ Assessment of student learning in individual courses is conducted by department faculty responsible for instruction in those courses.

Assessment, Planning, and Institutional Effectiveness

BMCC has established an institutional effectiveness model guided by the following integrated process that connects assessment, planning, and resource allocation. The following areas are described below.



Institutional Assessment - The primary vehicle for gathering the information necessary to improve student learning and the environment for student learning, as well as for documenting institutional effectiveness, resides within the institutional assessments and evaluations. Assessments reflect regular examinations of how effectively academic programs and AES units are achieving their student learning (SLOs) and support (SOs) outcomes. Focused on continuous improvement, these assessments, which are aligned with the strategic

¹ Middle States Commission (2006). *Characteristics of Excellence*, 12th edition, p. 65.

goals, result in information utilized to make improvements that enhance student success. Evaluations, which are periodic in nature and take place through academic program review (APR) and AES unit review, provide the opportunity to make an overall judgement of effectiveness through the review of assessment results and additional information. Without systematic, yet faculty and staff driven assessments and evaluations, BMCC would not possess the information necessary to document progress towards mission achievement.

Operational planning - Operational planning is so titled because it is premised on operationalizing the strategic plan. In other words, this planning process is based on making documented, annual progress towards achievement of the strategic plan. Given that the assessments and strategic activities are aligned with the strategic goals, planning outcomes, and objectives, they form the basis for operational planning. Using results, academic programs and AES units develop plans that seek to improve the student learning and support outcomes. This process reflects the collection of information as well as the actions put in place to realize enhanced results.

Resource Allocation - While the budget process is central to the resource allocation process, it is not inclusive. In fact, resource allocation is as much about redeployment of existing resources to ensure greater student success. Resources can and often do reflect money, however, people, time, and systems are important resources whose impact should not be underappreciated. Due to conducting assessments or evaluating the impact of strategic activities, units may determine during the planning process that the results necessitate a need for either redeployment of existing or the creation of new resources. The assessment and planning cycle has been aligned with the institutional budget cycle so that department, unit, and division leaders can utilize the information to make a data-impacted request. (See Appendix A for Assessment Terms and Acronyms).

Principles of Good Assessment

Assessment is a tool that can be used to foster institutional improvement. The aim of assessment is to continuously reflect on teaching and service and finding ways to improve. Effective assessment practices organized around a set of principles promote activities and an environment that makes good use of data gained through these efforts. Those engaging with assessment should consider the following principles² to promote good practices.

1. Assessment is not evaluation. Assessment is about the collection, analysis, and interpretation of data and information related to an issue or area of interest, primarily to

² Adopted from the American Association for Higher Education “Principles of Good Practice for Assessing Student Learning”. (1996).

make changes or improvements. On the other hand, evaluation is about rendering a judgment regarding effectiveness or the attainment of a goal, outcome, or objective.

2. Assessment is systematic, not standardized.
3. Assessment requires clear, explicitly stated goals and outcomes.
4. In assessment equal attention is paid to outcomes as to the experiences and events that lead to those outcomes.
5. Assessment is consistent and ongoing, not episodic.
6. Representation and involvement is broad and not focused on or the responsibility of a single individual. .
7. Assessment approaches produce credible, relevant evidence. Consider what information we want to gain from the assessment and why.
8. Assessment activities are undertaken in a supportive environment. Faculty and staff are responsible for the work of assessment in their respective areas.
9. Assessment works best when goals, outcomes, and decisions are developed and defined by faculty and staff in their respective areas.

In summary, assessment processes are most effective and useful when they are useful, cost-effective, reasonably accurate and truthful, planned, and organized, systemic, and sustained.

Middle States & Assessment

The Middle States Commission on Higher Education (MSCHE) is one of six regional institutional accreditation bodies. It is authorized by the Council for Higher Education Accreditation (CHEA) which is recognized by the Department of Education. Accreditation is crucial for institutions because it represents a peer-reviewed process in which higher education institutions are responsible for maintaining an environment where student learning is at the core of the institution's mission and goals. Additionally, it is tied to the federal funding of student financial aid. In 2014, Middle States member institutions voted to accept newly revised standards. These standards reflect a changing emphasis in assessment expectations. Instead of focusing only on assessment of student learning in the classroom, there is an expectation that assessment is used across the institution to assess student learning and the support for the student learning environment (as referenced in the standards below).

“The institution’s student learning programs and opportunities are characterized by rigor, coherence, and appropriate assessment of student achievement throughout the educational offerings, regardless of certificate or degree level or delivery and instructional modality.³”

“An accredited institution possesses and demonstrates 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 periodic assessment of mission and goals to ensure they are relevant and achievable.⁴”

Assessment is evident in all the standards and is expected to be a part of the ongoing functions of all areas within an institution.

Purpose – How to use this manual

The purpose of this handbook is to provide academic programs, and AES units with a resource that provides information on all aspects of assessment and the assessment process. This handbook outlines the role of assessment at BMCC, steps to developing strong assessment plans, assessment of student learning outcomes and unit outcomes, and information about academic program review and unit review. Resources included in this handbook also provide information about various assessment tools and methods. All the College’s assessment timelines and calendars, and information about the College’s assessment management system (PlanningPoint). The Office of Institutional Effectiveness and Analytics is another important resource available to support faculty, staff, and administrators at the College with all assessment-related activities.

³ Middle States Commission on Higher Education. (2014). Standards for Accreditation and Requirements of Affiliation.

⁴ Middle States Commission on Higher Education. (2014). Standards for Accreditation and Requirements of Affiliation.

DEVELOPING AN ASSESSMENT PLAN

For assessment to be useful it must be an ongoing, systematic, and organized process. The following section outlines the general steps for a successful assessment process.

Mission, Goals, Outcomes

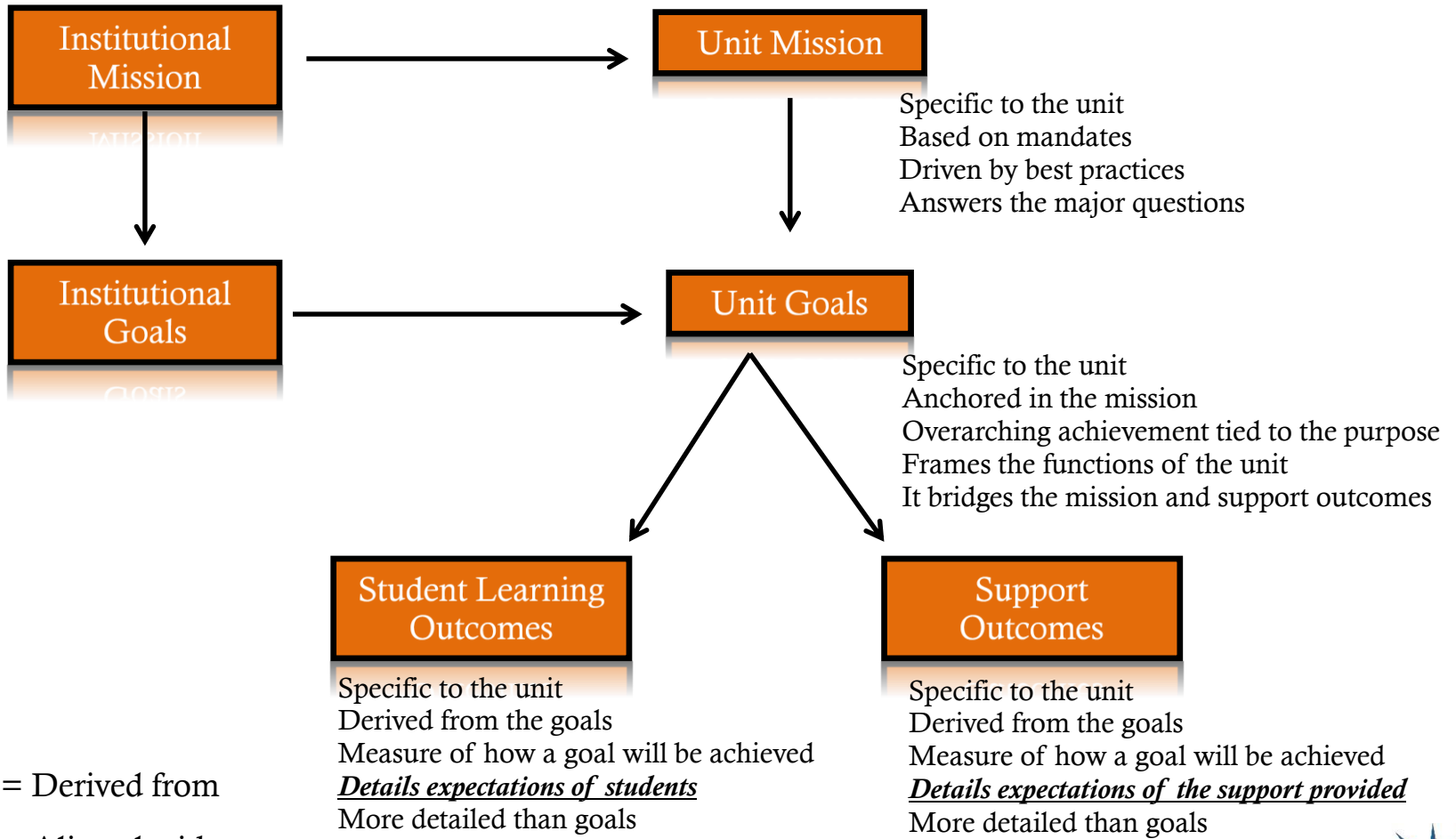
Before beginning an assessment, it should be clear what is being assessed and why. Developing goals and outcomes that are aligned with BMCC's institutional mission and goals (see Appendix B for Strategic Goals) is the foundation for the assessment process. The College's mission is our broad statement of existence and the foundation for all institutional assessment planning. Our institutional goals are clear, meaningful statements of purpose that are anchored in our mission.⁵ The mission, goals, and outcomes of academic programs and AES units stem from these anchors.

Mission – A program or unit's mission should align with the College's mission. The mission also sets the foundation for goals, outcomes, assessments, and evaluation. A mission should be specific to its respective unit or program, driven by best practices, and based on any external or internal mandates. Your mission should answer the question “who do you serve and how?”

Goals – Goals are clear, meaningful statements about the functions of a program or unit. They should be aligned with BMCC's institutional goals and anchored in the program or unit's mission. Goals also serve as a clear link between a broad mission and more specific SLOs or SOs. Your goals should answer the questions: “what are your day-to-day functions?”, “how do these functions support the institutions?”, and “how would you describe what you do to individuals in other units?”

⁵ During the 2015-2020 strategic planning process for *Reaching Greater Levels*, the decision was made to make the institutional goals the strategic plan goals.

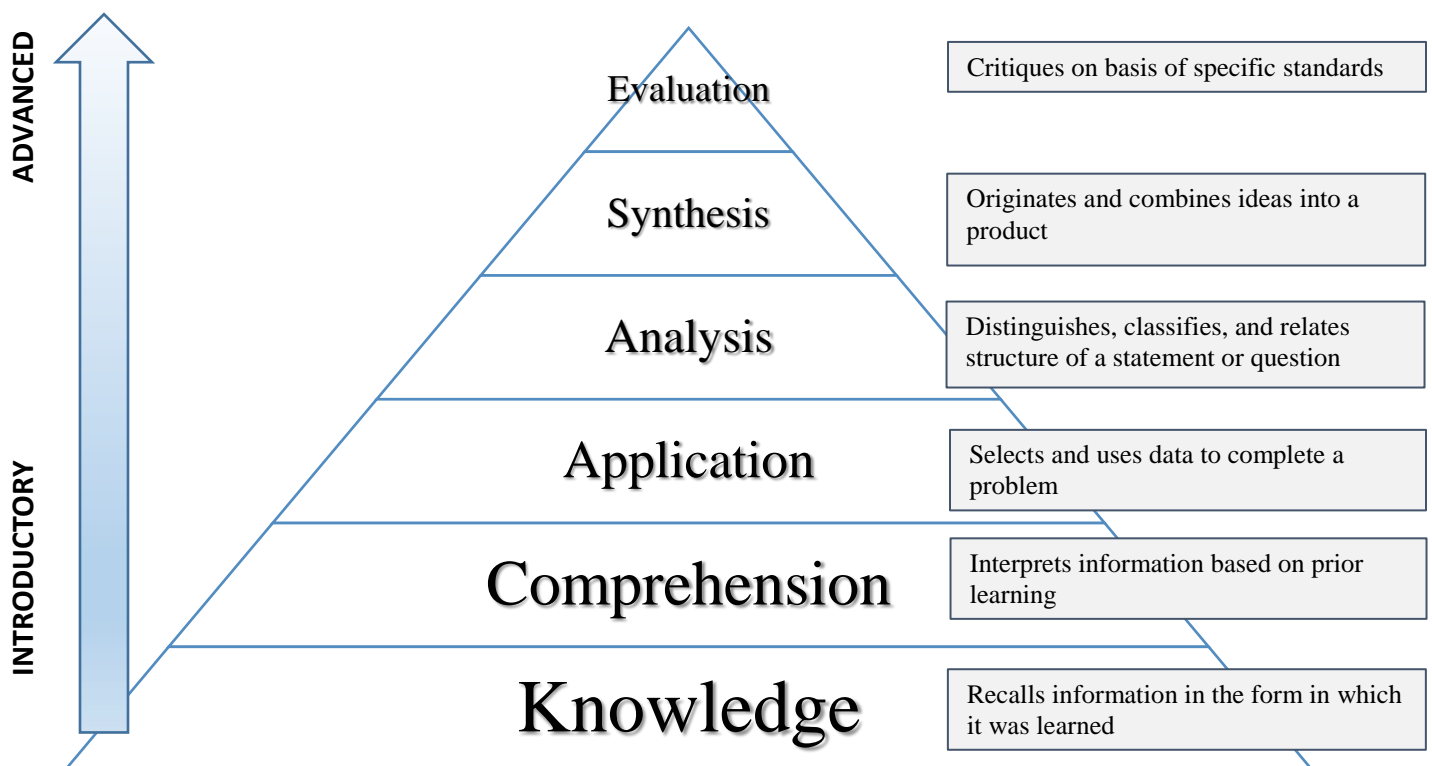
Assessment Framework



Outcomes – At BMCC, there are two different types of outcomes referenced in assessment: student learning outcomes and support outcomes. Further information about developing and writing outcomes is included in later sections of this handbook.

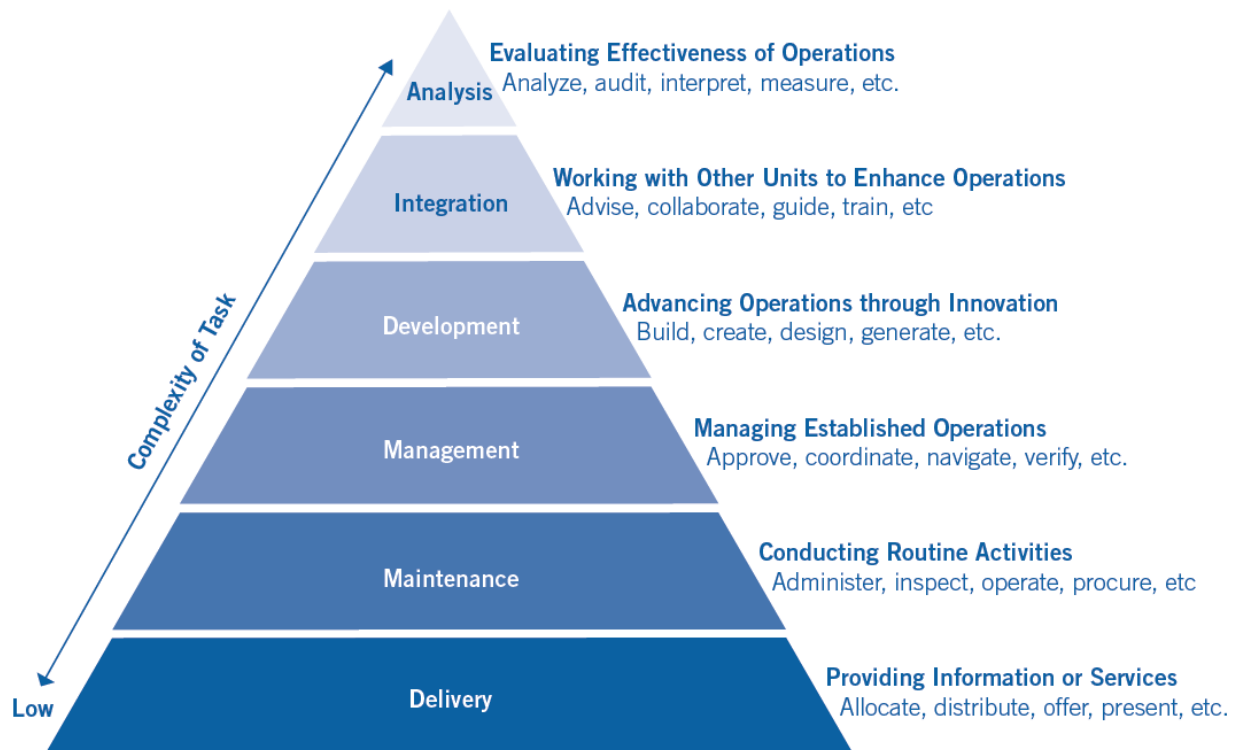
1. Student learning outcomes should clearly articulate expected outcomes of student learning upon completion of participation in a course, academic program, or educationally purposeful activity. SLOs are details expectations for changes in students' knowledge, skills, or disposition. These outcomes describe what new knowledge, skills, or behaviors students will demonstrate. SLOs are a measure of how a goal will be achieved. Academic programs and, when relevant, AES units should refer to Bloom's Taxonomy for Student Learning Outcomes when developing SLOs. Bloom's provides a useful guide for differentiating levels of student learning as well as appropriate verbs that describe learning outcomes.

Bloom's Taxonomy



2. Support Outcomes are specific to individual units or programs, are derived from goals, are a measure of how the goal will be achieved, and details expectations of the delivery of service or support that will be provided. Support outcomes describe effectiveness, quality, efficiency, or accuracy of the services, processes, activities, or functions provided in support of the environment for student learning and to whom. The Shults Dorimé-Williams Taxonomy provides a guide for differentiating levels of administrative task as well as appropriate verbs that describe support outcomes (See illustration below).

 **Shults Dorime Williams Support Outcomes Taxonomy**



Mapping⁶

Curriculum or program mapping is a process that helps track what will be accomplished within a unit, department, or course. Mapping demonstrates when and where outcomes will be met or achieved. Program mapping shows how each outcome aligns with activities of a unit or department. Curriculum mapping shows how content aligns with learning outcomes of a course, program, or department. Another benefit is the process of indexing or diagraming a curriculum to identify and address gaps. Units also engage in a similar process by indexing activities and major tasks to identify and address gaps.

Mapping allows for the identification of redundancies or misalignments to improve the overall coherence of a course of study or functions of a unit and its effectiveness. Curriculum mapping demonstrates how well course content is aligned with the goals of an academic program or department. Comprehensive mapping requires that courses of study align with the College's agreed upon general education learning outcomes⁷. Curriculum maps document the relationships between the components of the curriculum and intended student learning outcomes. Program mapping, similarly, shows the alignment between the services, processes, activities, or functions of a unit and stated goals. They document the relationship between unit or department activities and larger institutional goals, objectives, and outcomes.

The process of mapping is also useful for determining how and where to assess specific outcomes. Templates for curriculum mapping and program mapping are included in this handbook in Appendix C.

Responsibility for Assessment

Faculty and staff are responsible for all assessments conducted within their respective departments and units. Faculty are responsible for all assessment conducted within courses and for assessing student learning. Department chairs and assessment representatives are responsible for conducting annual assessment activities, with support available from IEA. Assessment is often most valuable in academic departments when full-time and adjunct faculty are involved and invested in the process. These responsibilities also apply to non-departmental academic program assessments⁸. AES unit managers and staff are responsible for all assessment conducted within their individual units for assessing student learning and the environment for student learning with support from IEA and the AES Assessment Committee, the unit managers are responsible for conducting the annual assessment activities.

Cabinet members and senior administrators also play a central role in the assessment process. Articulating and providing support and resources to faculty and staff is necessary for the institutional to

⁶ Adapted from Curriculum Mapping, Greater Schools Partnership Glossary of Education Reform (2013). <http://edglossary.org/curriculum-mapping/>

⁷ General education learning outcomes were developed and approved by the BMCC faculty and incorporated into all course syllabi. These do not refer to the Pathways required and flexible core courses.

⁸ Non-departmental academic programs are special academic-focused programs that do not reside within a specific department. Examples include the Writing Across the Curriculum and Honors programs.

implement a sustainable and meaningful assessment process. Assessment is often most valuable when full-time and adjunct faculty are equally involved in the process.

Recommended Timelines

Across the institution, assessments are conducted annually with academic program reviews and AES unit reviews conducted every five years unless otherwise indicated.

- a. Annual Assessments – Academic programs and AES units should determine in the preceding spring semester what outcomes they will assess and where and when the assessment will be conducted during the following academic year.
- b. Academic Program Review – The APR is a comprehensive, multi-year process that is conducted every five years. The general program review schedule and process can be found in the Academic Program Review Guidelines document. The APR is a year and a half process that involves an internal and external review of academic majors at the College. The APR Guidelines document includes the program review schedule, which indicates which programs are being evaluated during specific academic years.
- c. AES Unit Review - The AES Review is a comprehensive, multi-year process that is conducted every five years. The AES Unit Review is a comprehensive one year process. The unit review timeline is available in the AES Unit Review Guidelines document which also includes the full schedule of AES units and when they are to be evaluated.
- d. General Education - The College's seven general education outcomes⁹ are assessed within the academic departments and, as such, departments conduct general education outcomes assessment in addition to ongoing course-level and program-level assessment efforts. The general education curriculum is embedded in all courses at the College. The College's general education outcomes and curriculum are assessed within a four-year cycle and the fifth year culminates with the Liberal Arts program review. The College maintains a calendar of general education assessments to ensure all outcomes are assessed over a 5-year period. (See Appendix D).

⁹ The seven general education student learning outcomes for the College are: Communication Skills, Quantitative Reasoning, Scientific Reasoning, Social & Behavioral Science, Arts & Humanities, Information & Technology Literacy, and Values. A full description of these goals are reviewed in the section on general education. A crosswalk has been established aligning the College's general education student learning outcomes with the eight Pathways content areas.

Methods & Criteria for Success

There is no single method for conducting assessment. Indeed, assessments must be tailored to the programs or activities they are designed to measure. The effectiveness of an assessment depends on its relationship to curriculum, instruction, or operational functions. Student learning and the environment for student success is represented in a myriad of nuanced ways across the institution; the development and implementation of assessments therefore calls for multiple and varied approaches to collecting data and information. Relying on one method also restricts our ability to interpret data and determine how well we are achieving our goals. Combinations of quantitative and qualitative assessment methods can provide a more robust understanding of student learning and the environment that supports student learning at the College. Assessment methods should also include criteria for success. In the same manner that goals are clearly and explicated stated, assessments should have clearly and explicated stated standards for performance. A review of several assessment methods is provided in the following section.

Reporting

Each academic program and AES unit is responsible for annual assessment reporting. This is recorded within PlanningPoint, the College's assessment management software. Early in the fall semester all programs and units submit their assessment plans in PlanningPoint. By the end of the academic year, academic programs and AES units submit their final annual assessment reports. The Assessment Committees, with the use of a rubric, will provide feedback on the previous year's final assessment reports.

Data-informed Decision Making

One of the most important aspects of the assessment process is the use of assessment results to inform decision making and support positive change, student success, and increase organizational effectiveness. The performance of an assessment holds little value if there is no reflection about results and how academic programs and AES units can better achieve stated goals and outcomes. Again, the purpose of assessment is to serve as the foundation for institutional effectiveness, which is how the College ensures it achieving its mission and goals. This is a reflective and iterative process that requires results be used to provide a basis for maintaining, implementing, or removing programs, initiatives, activities and other functions. At the end of an assessment cycle, programs and units should be able to answer the question "Did we see improvement, and how do we know?" because of a completed assessment.

Assessment Methods

Assessment methods are the tools and instruments used to collect information that determines the extent to which we are achieving desired and stated outcomes. There are numerous tools and techniques that can be used to measure student learning outcomes and support outcomes. The following section is not an exhaustive list of all possible assessment strategies, but instead a discussion of more commonly used tools and methods. As you review each potential strategy, consider how it may be used for your specific context and needs. Assessment activities should be ongoing, focused, and manageable. It is also important to ensure that assessment processes are useful, reasonably accurate and truthful, carefully planned, and organized.¹⁰

Direct versus Indirect Assessment Methods

There are various ways to collect information that reflects the degree to which support outcomes and student learning outcomes have been achieved. Methods of assessment should be selected so that they align with the SLOs or SOs they are designed to measure. Capturing the complexity of student learning and the diversity of the work performed by AES units at the college requires assessment methods that can demonstrate – directly and indirectly – evidence of achievement appropriately. Direct assessments¹¹ require a representation, display, or demonstration of learning (knowledge, skills, and behaviors) or work (task and activities) so that it can be assessed and determined how well the observed outcome meets stated expectations. Indirect assessments capture perceptions, opinions, or inferred measures of learning or efficiency and completion of activities. Indirect assessments are often a reflection of learning or task, rather than an actual demonstration. It is important to not confuse direct and indirect assessment with quantitative and qualitative assessment methods. Quantitative assessment method uses structured, predetermined response options that can be summarized into meaningful numbers and analyzed statistically.¹² Qualitative assessment methods involve asking participants broad, general questions, collecting detailed responses from participants in the form of words or images and analyzing the information for descriptions and themes.¹³ The following tools in this section can be used for both direct and indirect assessment. Further examples of direct and indirect assessment methods are presented in the table below.

¹⁰ Middle States Commission on Higher Education (2005). *Assessing Student Learning and Institutional Effectiveness*.

¹¹ Mak, P. (2010). *Assessing for Learning*.

¹² Suskie, L. (2004). *Assessing Student Learning*.

¹³ Creswell, J. (2007). *Qualitative Inquiry & Research Design*.

Direct and Indirect Measures in Assessment

	Direct Measures	Indirect Measures
Course Level	<ul style="list-style-type: none"> * Course and homework assignments * Examinations and quizzes * Standardized tests * Term papers and reports * Observations of field work, internship performance, service learning, or clinical experiences * Research projects * Class discussion participation * Case study analysis * Rubric scores for writing, presentations, and performances * Artistic performances and products 	<ul style="list-style-type: none"> * Course evaluations * Test blueprints (outlines of the concepts and skills covered on tests) * Percent of class time spent in active learning * Number of student hours spent on service learning * Number of student hours spent on homework * Number of student hours spent at intellectual or cultural activities related to the course * Grades that are not based on explicit criteria related to clear learning goals
Program Level	<ul style="list-style-type: none"> * Capstone projects, senior theses, exhibits, or performances * Pass rates or scores on licensure, certification, or subject area tests * Student publications or conference presentations * Employer and internship supervisor ratings of students' performance 	<ul style="list-style-type: none"> * Focus group interviews with students, faculty members, or employers * Registration or course enrollment information * Department or program review data * Job placement * Employer or alumni surveys * Student perception surveys * Proportion of upper-level courses compared to the same program at other institutions * Graduate school placement rates

<p>Institutional Level</p>	<ul style="list-style-type: none"> * Performance on tests of writing, critical thinking, or general knowledge * Rubric (criterion-based rating scale) scores for class assignments in General Education, interdisciplinary core courses, or other courses required of all students * Performance on achievement tests * Explicit self-reflections on what students have learned related to institutional programs such as service learning (e.g., asking students to name the three most important things they have learned in a program). 	<ul style="list-style-type: none"> * Locally-developed, commercial, or national surveys of student perceptions or self-report of activities (e.g., National Survey of Student Engagement) * Transcript studies that examine patterns and trends of course selection and grading * Annual reports including institutional benchmarks, such as graduation and retention rates, grade point averages of graduates, etc.
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Rubrics

A rubric is a document that articulates the expectations of an assignment, task, or activity by listing criteria or priorities, and describing levels of quality.¹⁴ It is also described as a set of criteria specifying the characteristics of an outcome and the levels of achievement in each characteristic.¹⁵ Rubrics are a tool that clearly define expectations for an assignment or a task by describing levels of quality. Rubrics have three key features, evaluation criteria, quality definitions, and a scoring strategy. Scoring strategies involve a scale or common understanding for interpreting judgements of a product. The next page provides a sample rubric from an AES unit’s assessment of an event.

¹⁴ Reddy, Y., Andrade, H. (2010). A review of rubric use in higher education.
¹⁵ Levy, J. 2012. Using Rubrics in Student Affairs: A Direct Assessment of Learning.

Office of Institutional Effectiveness and Analytics – AES Assessment Day Pretest and Posttest Rubric	Exceeds Expectations (4)	Meets Expectations (3)	Approaching Expectations (2)	Does Not Meet Expectations (1)
Institutional Effectiveness	Clearly and accurately describes institutional effectiveness as the way institutional ensures it is achieving mission and what is needed; discusses several ways IE is important; accurately identifies the relationship between units at the College and IE; clearly demonstrates a thorough understanding of IE	Describes institutional effectiveness; somewhat defines relationship of IE to mission; describes one or two ways IE is important; broadly mentions relationship between units at College and IE; has a general understanding of IE	Vaguely describes institutional effectiveness; minimally mentions relationship of IE to mission; makes little or no mention of how IE is important; poor discussion of relationship between units at College and IE; demonstrates a vague understanding of IE	Does not correctly define institutional effectiveness; does not correctly identify the purpose or role of IE at the College; fails to link IE to mission; does not correctly identify relationships of units at College to IE; makes no mention of importance of IE to College; provides no answer/leaves question blank
Assessment	Clearly identifies and describes assessment as ongoing, systematic, organized process; appropriately discusses relationship to day-to-day activities, mission, goals, and outcomes; discusses the need for evidence to demonstrate meeting goals; explains the purpose of assessment for implementing change and using data to inform decisions	Describes assessment as ongoing, systematic, and organized process; Mentions relationship to at least two of the following: day-to-day activities, mission, goals, or outcomes; mentions collecting evidence but may not discuss relationship to meeting goals; describes assessment's relationship to implementing change	Vaguely mentions some aspect of assessment as ongoing, systematic, or organized; Somewhat or briefly mentions or list one or two of the following: relationship to day-to-day activities, mission, goals, or outcomes; list evidence as aspect of assessment but does not mention goals; briefly mentions assessment being related to change	Fails to identify assessment as ongoing, systematic, or organized; does not discuss relationship to day-to-day activities, mission, goals, or outcomes; makes no mention of the need for evidence; does not discuss the use of assessment for implementing change; provides no answer/leaves question blank
Institutional Planning	Clearly identifies institutional planning as a process based on making documented, annual progress, towards achievement of the strategic plan. Mentions the relationship to institutional effectiveness and assessment as the basis for planning; Provides clear explanation or example of how planning is linked to actions of individual units to meet goals	Identifies institutional planning as a process based on making documented, annual progress, towards achievement of the strategic plan. Mentions relationship to institutional effectiveness or assessment; may provide an example of how planning is linked to individual units	Broadly makes a connection between planning and progress towards the achievement of the strategic plan and institutional goals; may not discuss relationship to institutional effectiveness or assessment; loosely describes relationship to the actions of individual units and may mention meeting goals.	Fails to identify institutional planning as a process based on making documented, annual progress, towards achievement of the strategic plan. Does not mention the relationship to institutional effectiveness or assessment. No discussion of how planning is linked to actions of individual units to meet goals
Principles of Effective Assessment	Clearly and adequately list and describes three or more principles of effective assessment	List and generally describes at least three principles of effective assessment	List or describes one or two principles of effective assessment	Fails to list accurately any principles of effective assessment

Surveys

Surveys are a method of gathering information from a sample of individuals.¹⁶ The sample is a small part or fraction of the overall population being studied. Surveys have a variety of purposes and can be conducted in many ways although online surveys are common practice. Information is collected through the use of standardized procedures so that every participant is asked the same questions in the same way. It involves asking people for information in a structured format. Depending on what is being analyzed, the participants being surveyed may be representing themselves, their employer, or some organization to which they belong.¹⁷ The Director of Assessment and OIEA are both available to support faculty and staff in the development, revision, and implementation of surveys.

Juried Peers

Juried peers are colleagues who are also professionals or experts in a particular field. They are generally individuals who are recognized for knowledge or excellence in their field. For example, during a student art exhibition two faculty and two local artists collaboratively create and use a rubric to score student work. Juried peers can provide feedback or recommendations through in-person observations, reports, or results from other forms of assessments or day-to-day activities in a particular academic department or unit. Using juried peers offers another method of getting practical responses to assessment activities.

Portfolio

A portfolio is generally a compilation of work or evidence that is gathered for the purpose of “(1) evaluating coursework quality, learning progress, and academic achievement; (2) determining whether students have met learning standards or other academic requirements for courses, grade-level promotion, and graduation; (3) helping students reflect on their academic goals and progress as learners; and (4) creating a lasting archive of academic work products, accomplishments, and other documentation.”¹⁸ Portfolios are used as a way to assess student learning over a period of time. This method is thought to provide a more in-depth and richer understanding of student learning and measuring outcomes.

Multiple Choice Exams

Multiple choice questions can be another effective and efficient way of assessing outcomes. This form of assessment, when well developed, reliable, and valid, can measure outcomes of a large group consistently over time. It is key that if using multiple choice questions for assessment that they be well developed. Questions that are poorly worded, confusing, or unclear are not effective. In addition, answers

¹⁶ Schreuren, F. (2005). What is a survey.

¹⁷ HRSurvey.com. (2016). What is a survey?

¹⁸ Glossary of Education Reform. (2016). Portfolio.

should also be clear, concise, and avoid “trick” items or questions with two possible right answers. There are several resources available on writing good multiple choice questions in the appendices of this handbook.

Benchmarks

Benchmarks are used in assessment as a measure of whether standards and outcomes are being met. Benchmarks also serve to measure growth or progress towards meeting predetermined standards. Benchmarking can be applied to both academic programs and AES units. In addition to measuring performance internally, using benchmarking and applying industry standards is another useful form of assessment. This process includes examining outcomes based on internal and external standards. One example may include examining best practices from other institutions or from within a professional field.

Academic Assessment of Student Learning

Assessment of student learning requires examining what students should know, how this information will be delivered, and whether stated outcomes are being achieved. Student learning takes place in and outside of the classroom; the following sections focuses explicitly on assessment and measurement of student learning.

Student Learning Outcomes

Student learning outcomes are statements that clearly and explicitly identify what knowledge, skills, or behaviors students will have gained after their interaction within an institution, a department or unit, or course. These outcomes should be directly measurable (i.e., student assignments), although indirect measures are also useful and can be used in addition to direct measures (i.e., student surveys, feedback from student focus groups, course evaluations). Student learning outcomes can exist at various levels: program or activity, initiative, course, academic degree program, academic department, and institutional.

For each outcome, use verbs that make clear to students (and others) what students will be able to do upon the completion of an interaction. The emphasis is on the student and not the faculty or staff. Use verbs such as those contained in typical discussions of “Bloom’s taxonomy.” In writing student learning outcomes, it is best to use active verbs.

Learning outcomes can generally be stated as the following: *Upon completion of this [course, program, workshop, etc.] students will be able to...*

Student will be able to:

- List
- Explain
- Summarize
- Interpret
- Compare/contrast
- Design
- Evaluate

Student learning outcomes should be appropriate to the level of each course, program, or activity. The following diagrams illustrate Bloom’s taxonomy as well as common verbs associated with levels of learning.

Knowledge	Comprehension	Application	Analysis	Synthesis	Evaluation
Define	Translate	Interpret	Distinguish	Create	Judge
Describe	Restate	Apply	Analyze	Design	Recommend
List	Discuss	Employ	Differentiate	Hypothesize	Critique
Name	Describe	Use	Calculate	Invent	Appraise
Recall	Recognize	Demonstrate	Experiment	Develop	Assess
Record	Explain	Practice	Test	Arrange	Argue
Relate	Express	Illustrate	Compare	Assemble	Compare
Repeat	Identify	Operate	Criticize	Prepare	Evaluate
Underline	Locate	Schedule	Diagram	Construct	Estimate
	Report	Shop	Inspect	Compose	Explain
			Relate	Combine	Rate
			Categorize	Revise	Justify
				Summarize	Interpret
					Value

Curriculum mapping

The process of curriculum mapping is focused on alignment of the curriculum with course, program, and institution-level learning outcomes. A curriculum map is a two-dimensional matrix representing courses, programs, or activities on one axis and outcomes on the other. Faculty identify which courses or activities address which learning outcomes. Curriculum maps are also helpful for understanding the nature and role of various courses, course-sequencing, and pre-requisites. These maps help to identify gaps in the curriculum (learning outcomes that are only addressed by only a few courses or no courses). The use and development of curriculum maps also answers several questions:

1. Are all outcomes addressed in a logical order?
2. Do all the key courses assess at least one outcomes?
3. Do multiple sections of the same course address the same outcomes?
4. Are some outcomes covered more than others?
5. Are all outcomes first introduced than reinforced?
6. Do students get practice on all the outcomes before being assess?
7. Do all students, regardless of which electives they choose experience a coherent progression and coverage of all outcomes?

The use of maps provides an overview of the structure of the curriculum or the organization of programming, and the contribution of individual courses and activities to the overall goals of the program or department. Curriculum maps can also be used to help students understand the importance of each of their courses within a program or the overall curriculum.

Annual assessments

The College's academic departments engage in an annual process of assessing student learning that allows for course-embedded assessment to inform faculty about the success of students in achieving the course, program, and institution level SLOs. By utilizing a variety of courses which have course-level SLOs aligned with program level SLOs, the annual assessment of student learning provides useful, relevant, and necessary information that assist faculty and chairs in adjusting designed to improve student learning and the likelihood that students demonstrate achievement of the program level SLOs. Academic departments use curriculum maps and assessment calendars to assist with choosing which courses to assess. These annual assessments are also an important foundation for the periodic program reviews that examine the comprehensive assessment history to help with future planning.

Annually, academic departments determine which outcomes they will assess and in which courses and conduct the assessment during the academic year. In addition to departmental faculty, whose support is

essential for effective academic assessment, there are two groups responsible for providing support to academic departments. The first is the Office of Institutional Effectiveness and Analytics. IEA is responsible for ensuring that academic programs are supported in every phase of assessment – from the decision about the course and SLO assessed to instrument design, analysis, and use of results. Co-chaired by IEA and a faculty member, the committee is constituted by faculty from every academic department. The committee is responsible for reviewing assessments, providing recommendations to departments, and analyzing and evaluating the effectiveness of the Institutional Effectiveness plan. Finally, the Office of Academic Affairs is responsible for final oversight and provides professional development activities to support effective academic assessment.

Levels of Assessment

There are several levels of academic assessment that require consideration from faculty while planning annual assessments: course level, program level, and general education and institution level. The relationship between course, program, and institutional student learning outcomes within a department is illustrated on the next page.

1. Course level assessment - Course level assessment produces most of the direct evidence of student attainment of intended learning outcomes. “Tangible examples of student learning, such as completed tests, assignments, projects, portfolios, licensure examinations, and field experience evaluations, are direct evidence of student learning. Indirect evidence, including retention, graduation, and placement rates and surveys of students and alumni, can be vital to understanding the teaching-learning process and student success (or lack thereof), but such information alone is insufficient evidence of student learning unless accompanied by direct evidence. Grades alone are indirect evidence...but the assignments and evaluations that form the basis for grades can be direct evidence if they are accompanied by clear evaluation criteria [such as test blueprints or scoring rubrics] that have a demonstrable relationship to key learning [outcomes].”¹⁹ Assessment of student learning in individual courses is typically conducted by department faculty responsible for instruction in those courses.
2. Program level assessment - Assessment is conducted at the specific program or department level to learn how well students in each academic program (or major) are achieving that program’s learning outcomes, including the general education learning outcomes. Assessment at this level is ***decentralized*** to the academic department responsible for the program being assessed. The information is gathered and utilized primarily by the academic department conducting the assessment for making improvements in the program. Responsibility for academic

¹⁹ Middle States Commission (2006). Characteristics of Excellence, 12th edition, p. 65.

program/department assessment planning and implementation rests with the department chairs and their faculty with the administration providing support and resources.

3. General education - Ultimately, faculty are responsible for all assessment conducted within courses and for assessing student learning. In partnership with the Office of Institutional Effectiveness and Analytics, the Department Chairs and Assessment Coordinators are responsible for conducting the general education outcomes assessment activities. General education outcomes, which are addressed in the syllabi for each course, are assessed in the same manner as annual assessment of course-level SLOs.

Assessment of General Education

BMCC engages in a continuous assessment of the general education curriculum by conducting assessments across the seven general education outcomes. These outcomes operate as institution-level SLOs and reflect the knowledge, skills, and attitudes that, as determined by faculty, students should possess upon graduation regardless of academic program. Many years ago, the College made the decision to embed at least one general education outcome on each course syllabus. This decision has increased the flexibility of general education assessments as departments can assess any number of courses to meet the expectation. Ultimately, faculty are responsible for all assessment conducted within courses and for assessing student learning. In partnership with the Office of Institutional Effectiveness and Analytics, the Department Chairs and Assessment Coordinators are responsible for conducting the general education outcomes assessment activities. General education outcomes, which are addressed in the syllabi for each course, are assessed in the same manner as annual assessment of SLOs. All information will be input into the College's Assessment Management System (AMS) – PlanningPoint.

The seven general education outcomes are assessed within the academic departments and, as such, the departments conduct general education outcomes assessment between program reviews. Programs utilize the general education outcomes assessment during the Academic Program Review.

General Education Student Learning Outcomes

The Institution Level Student Learning outcomes (SLOs) for the College and for the general education curriculum are as follows:

1. Communication Skills – Students will write, read, listen and speak critically and effectively. Student behaviors include being able to:
 - Express ideas clearly in written form
 - Employ critical reading skills to analyze written material
 - Exhibit active listening skills

- Give an effective oral presentation
2. Quantitative Reasoning – Students will use quantitative skills and the concepts and methods of mathematics to solve problems. Student behaviors include being able to:
 - Use quantitative skills to solve problems
 - Interpret quantitative information
 - Translate problem situations into their symbolic representations
 3. Scientific Reasoning – Students will understand and apply the concepts and methods of the natural sciences. Student behaviors include being able to:
 - Demonstrate scientific literacy
 - Apply the scientific method in a lab setting
 4. Social & Behavioral Sciences – Students will understand and apply the concepts and methods of the social sciences. Student behaviors include being able to:
 - Demonstrate an understanding of the unique theories and methods of a social or behavioral science
 - Analyze and interpret a social, economic, political, cultural, philosophical, or historical issues
 5. Arts & Humanities – Students will develop knowledge and understanding of the arts and literature. Student behaviors include being able to:
 - Critique a particular work of art, music, theatre or literature
 6. Information & Technology Literacy – Students will collect, evaluate and interpret information and effectively use information technologies. Student behaviors include being able to:
 - Conduct research using appropriate research strategies
 - Make effective use of technology
 7. Values – Students will make informed choices based on an understanding of personal values, human diversity, multicultural awareness and social responsibility. Student behaviors include being able to:
 - Demonstrate awareness of one’s own values and beliefs while showing respect for the

ideas, values and beliefs of others

- Demonstrate an appreciation of social and cultural diversity,
- Appreciate personal and social responsibilities
- Demonstrate commitment to lifelong learning

Externally accredited programs

Within the College are several programs that are separately accredited by other external agencies. While these programs report to other organizations, all programs are still responsible for working with the Office of Institutional Effectiveness and Analytics to ensure that there is alignment between all standards that must be met. These programs are:

- a. Nursing - Accreditation Commission for Education in Nursing, Inc (ACEN)
- b. Health Information Technology - Commission on Accreditation for Health Informatics and Information Management Education (CAHIIM)
- c. Paramedic - Commission on Accreditation of Allied Health Education Programs (CAAHEP)
- d. Respiratory Therapy - Commission on Accreditation for Respiratory Care (CoARC)
- e. American Health Information Management Association (AHIMA)?
- f. Committee on Accreditation of Educational Programs for the Emergency Medical Services Profession (CoAEMSP)

Assessment of AES Units

Assessment of student learning has remained central to teaching and learning. The focus on assessment outside of the classroom, however, is more recent. As expectations for systematic and continuous assessment within administrative, educational, and student support (AES) units have increased, the College's goal is to integrate AES assessment into existing assessment structures and cultures. BMCC asserts that AES assessment is as important to supporting and improving student learning as assessment within academic departments. Resources such as the Council for the Advancement of Standards in Higher Education (CAS), a group of professional associations in higher education, promotes the use of its professional standards for the development, assessment, and improvement of quality student learning, programs, and services. (A complete list of CAS standards is included in Appendix E).

Unit Mission, Goals & Support Outcomes and Learning Outcomes

Establishing clear, concise, and descriptive unit missions, goals, and outcomes is the foundation for good assessment. Units should also ensure that their mission, goals, and outcomes are aligned with the College's mission, goals, and strategic plan outcomes and objectives.

A unit's mission is a succinct, broad declaration of purpose, anchored in the institutional mission statement, and establishes a basis for goal and outcomes development as well as assessment, evaluation, and planning. A mission statement answers the questions:

- What is the unit and what does it do?
- Whom does the unit serve and how does it serve them?
- What resources does it provide?

Unit goals are a clear, meaningful statement of the unit's purpose or functions. They stem from the unit mission statement but are also aligned with an institutional goal. Typically, units will have 3-5 goals. Unit goals answer the questions:

- What are the unit's primary, day to day functions?
- What institutional functions are the unit responsible for?

AES units have support outcomes (SOs), although some may also have student learning outcomes (SLOs). SOs are statements of expectation regarding the delivery of services, processes, activities, or functions to students, faculty, or staff. They must be measurable, speak to accuracy, efficiency, effectiveness, or quality. There can be one or more per goal. Outcomes should answer the question:

- What services, processes, or activities are delivered and to whom?

Program mapping

The process of program mapping is focused on alignment of the AES unit activities, task, and functions with unit, division, and institutional level support outcomes and when applicable learning outcomes. A program map is a two-dimensional matrix representing workshops, programs, or activities on one axis and outcomes on the other. Staff are responsible for identifying which activities and task address which support outcomes or learning outcomes. Program maps are also helpful for understanding the nature and role of various programs, activities, initiatives, and AES unit tasks. The use and development of curriculum maps also answers several questions:

- a. Are all outcomes addressed in a logical order?
- b. Are some outcomes covered more than others?
- c. Do students get practice on all the outcomes before being assessed?
- d. Are major programs, activities, tasks, and initiatives aligned with stated unit goals and outcomes?

The use of program maps provides an overview of the structure of a unit and the contribution of activities to the goals of the unit. These maps also help staff to identify gaps in the functions, activities, or programming (outcomes that are only addressed in a few areas). Sample program maps have been included in the appendices for reference.

Unit Goals & Support Outcomes

Non-departmental programs or initiatives should establish clear mission, goals, and outcomes like academic departments or AES units. Their mission, goals, and outcomes should be aligned with the College's mission, goals, and strategic plan outcomes and objectives. These serve as the foundation for strong assessment, improved alignment, and increased institutional effectiveness. Like Academic programs and AES Units, Non-departmental programs should have a mission that is a succinct, broad declaration of purpose, anchored in the institutional mission statement, and establishes a basis for goal and outcomes development as well as assessment, evaluation, and planning. A mission statement answers the questions: What is the program and what does it do? Whom does the program serve and how does it serve them? What resources does it provide? Goals are a clear, meaningful statement of the program's purpose or functions. They stem from the mission statement but are also aligned with an institutional goal. Typically there are 3-5 goals. Goals answer the questions: What institutional functions are the program responsible for? Non-departmental programs may have support outcomes (SOs), although some may also have (student/faculty/staff) learning outcomes (LOs). SOs are statements of expectation regarding the delivery of services, processes, activities, or functions to students, faculty, or staff. They must be measurable, speak to accuracy, efficiency, effectiveness, or quality. There can be one or more per goal. Outcomes should answer the question: What services, processes, or activities are delivered and to whom?

Learning Outcomes

Similar to the academic program assessment of student learning that takes place in academic departments, non-departmental programs or initiatives should have clearly established and defined student learning outcomes or faculty/staff learning outcomes when appropriate. See “Student Learning Outcomes” on page 25 for further information on writing and developing learning outcomes.

Annual AES Unit Assessment

The College’s AES Units engage in an annual process of examining methods for supporting learning and the environment for student learning through the assessment of SLOs and SOs. Over a four-year process between AES Unit reviews, the units assess each outcome at least once with the intention of using the results to improve student learning, the environment for student learning, and help the College achieve its mission. By engaging in this process, units are also able to determine how effectively they are achieving their unit goals and, by extension, their unit mission. These annual assessments are also an important foundation for the periodic AES unit reviews that examine the comprehensive assessment history to help plan for the future. Ultimately, AES unit managers and staff are responsible for all assessment conducted within their individual units for assessing student learning and the environment for student learning. In partnership with the Office of Institutional Effectiveness and Analytics, the unit managers are responsible for conducting the annual assessment activities.

Annually, AES units determine which outcome(s) they will assess and then complete the assessment during the year. In addition, units will complete the action plan developed from the previous year’s assessment. There are two groups most responsible for providing support to the units. The first is the Office of Institutional Effectiveness and Analytics. IEA is responsible for ensuring that AES units are supported in every phase of assessment – from the decision about the SLO or SO assessed to instrument design, analysis, and use of results. Another important resource for the AES units is the AES Assessment Committee. Co-chaired by IEA and a unit director, the committee is constituted by a representative body from the AES divisions. The committee is responsible for reviewing assessments, providing recommendations to units, and continually analyzing and evaluating the effectiveness of the Institutional Effectiveness plan.

Institutional Assessment

Assessment is conducted at the institutional level to document the achievement of the college's mission and goals; that is, to gather information that demonstrates in a quantifiable way how well and to what degree the college is achieving its stated aims. In short, assessment at this level is about establishing the College's ability to deliver on its mission, which is its institutional effectiveness. Institutional assessment is a centralized activity led and coordinated by the Office of Institutional Effectiveness and Analytics and the College Assessment Committees.

Appendix A - Institutional Effectiveness and Assessment Glossary

Academic Assessment Committee – Gathers and reviews information on assessment at the institutional, program and course levels, including for General Education, as well as Academic Program Review; monitor implementation of and assess the effectiveness of the Institutional Effectiveness Plan; works with academic departments in the development and implementation of departmental assessment plans; reviews assessment reports and facilitate college-wide discussions on assessment

Academic Program – A degree granting program within an academic department at the College

Academic Program Review - The Academic Program Review is an evaluative process that allows academic programs to review assessments and the effectiveness of the program in order to propose changes that will continue to enhance student learning. In addition to reviewing assessment results, programs will examine student outcomes, the curriculum map, emerging trends, SWOT results, facilities, adequacy of support, and other factors. An added, beneficial component of the APR is the external review. Upon completion of the internal portion of the review, two external content experts within the discipline or an affiliated discipline will review the documentation, participate in a site visit, and provide a formal report that, in conjunction with the internal recommendations, will result in an action plan. This process allows programs, with support from Academic Affairs and the Office of Institutional Effectiveness and Analytics, to make a judgement on progress and move forward with improvements. The process takes approximately 2.5 years, including preparation.

Administrative, Educational, Student Support Services (AES) Unit – Defined units at the College that support student learning and the environment for student learning, includes areas that provide backbone support to the functioning of the Institution.

AES Unit Review - The unit review provides an opportunity for units to stop and determine the meaning of the various assessments, to gauge progress, examine philosophies and visions, and establish a plan of action for success in the future. Rather than engaging in assessments, AES units meet internally with staff in the unit, collaborate with colleagues whom they work with regularly, and receive input from external parties regarding their effectiveness and current direction. A template, which is housed in the College's assessment management system (AMS), PlanningPoint, is provided to help guide the process. Additionally, staff from IEA are available and will help facilitate the SWOT, assist with logistics, and will attend internal committee meetings to provide guidance. The AES Unit Review allows units to take approximately 18 months to examine how effectively they have been meeting goals and making progress towards achieving their unit mission.

AES Assessment Committee – Gathers and reviews information on assessment and AES Unit Reviews; monitor implementation of and assess the effectiveness of the Institutional Effectiveness Plan; works with AES in the development and implementation of unit assessment plans; reviews assessment reports and facilitate college-wide discussions on assessment

Assessment – Assessment is a recurring process of inquiry and improvement in which clearly articulated SLOs and SOs, aligned with appropriate institutional, program, and unit missions and goals, are measured against pre-established performance criteria. Assessment results may meet or exceed expectations, fall short in

some way, or uncover unanticipated learning or unexpected outcomes. Disparities between performance expectations and actual assessment results form the basis for dialogue and possible action.

Assessment Management System/PlanningPoint – The online PlanningPoint system is a data management tool designed to meet assessment and planning needs and to overcome common assessment obstacles. This tool is used by the College to store, record, and show alignment between assessment activities across the institution, institutional mission and goals, and ensure institutional effectiveness. It has been implemented to ensure a systemic, organized, and ongoing assessment process is implemented at the College.

Direct Assessment – Direct assessments require a representation, display, or demonstration of learning (knowledge, skills, and behaviors) or work (task and activities) so that it can be assessed and determined how well the observed outcome meets stated expectations. Indirect assessments capture perceptions, opinions, or inferred measures of learning or efficiency and completion of activities.

Indirect Assessment – Indirect assessments are often a reflection of learning or task, rather than an actual demonstration. It is important to not confuse direct and indirect assessment with quantitative and qualitative assessment methods.

Institutional Effectiveness – Institutional effectiveness, at its core, is about documenting evidence that the College is progressing towards achievement of its mission. Making the case for achievement of the mission requires not only a planning-based mission statement, but also goals that are derived from the statement. These institutional goals act as proxies for achievement of the mission. BMCC's commitment to delivering upon its mission to ensure, enhance, and fully support student success. The College engages in comprehensive and systematic assessment, evaluation, and planning processes aligned with the institutional goals and, more specifically, with the strategic planning outcomes and strategic objectives that emerged through the strategic planning process. Through annual assessments, periodic evaluations, and planning within all academic programs and administrative, educational, and student support (AES), units, the College tracks progress and ensures continuous improvement.

General Education Curriculum (Pathways) – Pathways courses align with the College's institution-level SLOs and the general education requirements across CUNY. Pathways also ensures general education requirements fulfilled at the institution will carry over seamlessly if a student transfers to another CUNY college.

General Education Outcomes – The seven general education outcomes that operate as institution-level SLOs and reflect the knowledge, skills, and attitudes that, as determined by faculty, students should possess upon graduation regardless of academic program; at least one general education outcome should be embedded on each course syllabus.

Goals – Clear, meaningful statements of the unit's purpose (functions); they stem from the unit mission statement, but are also aligned with an institutional goal

Mission – A succinct, broad declaration of purpose; an anchor for evaluation of institutional effectiveness

Office of Institutional Effectiveness and Analytics - The Office of Institutional Effectiveness and Analytics (IEA) is responsible for and provides support in ensuring the implementation of the College's Institutional

Effectiveness plan, which provides BMCC with evidence of progress towards achievement of its mission and institutional goals. In this role, IEA provides institutional oversight, guidance, and support for strategic and operational planning, expertise and support to academic departments and administrative, educational, and student support (AES) units regarding the use of assessment results for the enhancement of student learning, research design and methodology guidance, and the information and analyses that support the College's planning, assessment, and operational functions and enhance program, departmental, and institutional decision-making.

Outcomes – Student learning outcomes (SLOs) are statements of what students will know, think, or do because of unit efforts; Support outcomes (SOs) are statements of expectation regarding the delivery of services, processes, activities, or functions to students, faculty, or staff.

Appendix B – Strategic Goals

Strategic Goals

1. Strengthen college readiness and improve the effectiveness of developmental offerings.
2. Improve the student experience.
3. Facilitate timely degree completion, graduation, and transfer.
4. Prepare students for 21st century careers and contribute to workforce development in New York City.
5. Cultivate institutional transformation, innovation, and sustainability.

Appendix C – Sample Curriculum & Program Maps

Curriculum Map

Required Course	Program-Level Student Learning Outcome 1	Program-Level Student Learning Outcome 2	Program-Level Student Learning Outcome 3	Program-Level Student Learning Outcome 4	Program-Level Student Learning Outcome 5	Program-Level Student Learning Outcome 6	Program-Level Student Learning Outcome 7
Course A	1	1	1	1			
Course B			1			1	1
Course C			2		1		
Course D	2		2	2	2		2
Course E						2	
Course F		2	2	2	2		
Course G	2		3			3	3
Course H	3	3	3	3	3	3	3

Legend:
 1 = Introduced
 2 = Practiced
 3 = Mastery

Program Map

Major Unit Activities	Unit Outcome 1	Unit Outcome 2	Unit Outcome 3	Unit Outcome 4	Unit Outcome 5	Unit Outcome 6	Unit Outcome 7
Activity A	X	X		X			
Activity B			X			X	X
Activity C				X	X		
Activity D	X				X		X
Activity E			X		X	X	
Activity F		X	X				
Activity G	X			X		X	X
Activity H		X	X		X	X	X

Appendix D – General Education Assessment Schedule

	Communication 2017-2018	Arts & Humanities 2017-2018	Quantitative 2018-2019	Social & Behavioral Sciences 2019-2020	Scientific Reasoning 2018-2019	Values 2019-2020	Information & Technology Literacy 2020-2021
English Department	X						
Science Department					X		
Math Department			X				
Music & Art Department		X					
Speech, Communication, & Theater Arts						X	
Media Arts & Technology Department		X				X	
Social Science Department				X			
Academic Literacy & Linguistics							X
Center for Ethnic Studies				X			
Modern Languages Department							X

*Departments that do not have courses within the general education curriculum should align their general education assessments with the College schedule when possible.

Appendix E – CAS Standards

National Council for the Advancement of Standards (CAS) in Higher Education

For many AES units, the National Council for the Advancement of Standards (CAS) in Higher Education are a useful resource when looking to develop benchmarks, or establish unit goals and outcomes and complete unit reviews or assessments. CAS focuses on promoting standards in student affairs, student services, and student development programs. CAS creates and delivers, credible standards, guidelines, and Self-Assessment Guides that are designed to lead to a quality programs and services. CAS also aims to foster and enhance student learning, development, and achievement.²⁰ CAS Standards also represent many higher education organizations focused on professional and student development and outcomes. CAS has developed 45 sets of functional area standards for higher education programs and services. The CAS standards fulfill a three-fold purpose:

- a. to foster and enhance student learning and development;
- b. to recognize and promote fundamental and indispensable standards of practice and the assessment of related programmatic and student outcomes; and
- c. to provide a foundation to develop, guide, assess, and improve programs and services.

The general CAS Standards can be found on the OIEA Assessment website or by using the following link:

[CAS General Standards](#).

²⁰ Council for the Advancement of Standards in Higher Education. (2016). <http://www.cas.edu/>