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2016 Student Learning Outcomes Assessment Reports
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2016 Student Learning Outcomes Assessment Reports
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Executive Summary

For the 2016 cycle of the Student Learning Outcomes Assessment Report (SLOAR), Maryland's public higher education institutions completed a brief survey and submitted narrative reports focusing on the colleges and universities' assessment activities of their institution, their general education curriculum, and their student learning. The survey centered on the role of undergraduate student learning outcomes assessment at their institutions.

Major findings from the survey and report analysis reveal:

- Almost all of Maryland's public colleges and universities have implemented a common set of learning outcomes that apply to all undergraduate students across all majors.
- For most institutions, all academic departments, schools, and/or majors have clearly stated learning goals and outcomes.
- The large majority of institutions have one or more faculty members or administrators dedicated to overseeing assessment of learning outcomes on their campuses.
- Institutions indicate that the primary drivers of student learning assessment are tied to accreditation and an institutional commitment to improving undergraduate education.
- Public four-year institutions report that activities tied to specialized accreditation, which focuses on programs in a specific discipline within an institution, plays a very large role in their assessment efforts; this is less so for the community colleges.
- The most common assessment method utilized by the colleges and universities is the rubric, which is used at the course level to interpret and grade students' work against established criteria and standards. Other frequently used methods include incoming student placement exams, national student surveys, and alumni surveys.
- Differences exist between the four-year institutions and community colleges regarding the ways assessment results are used to affect change; these differences seem to be, in part, a byproduct of differences in the students they serve and their distinctive missions.
- Faculty are central to successful efforts in assessing student learning.
- Administrators and faculty face challenges in ensuring the results of student learning outcomes assessment are used effectively and efficiently to inform institutional practice, teaching, and learning.

Recommendations tied to student learning outcomes assessment include ensuring faculty are central to the planning and implementation process and to the collection of data necessary to inform teaching and learning. Key administrators, including assessment staff and institutional leadership, are vital for keeping assessment an integral, high-quality endeavor at the department, program, and institutional level.

Accrediting bodies continue to play a significant role in guiding institutions on their assessment effort, and likely will be a predominant driver of continued changes to assessment in the coming years.

Introduction

Over the past twenty years, Maryland public colleges and universities have submitted periodic reports on the assessment of learning outcomes to the Maryland Higher Education Commission (MHEC). These reports are aggregated and published as the Student Learning Outcomes Assessment Report (SLOAR).

Since the publication of the 2011 edition of SLOAR, the role of assessment of student learning outcomes has become even more salient and central to the institutions' missions. This is driven, in part, by external stakeholders such as accrediting bodies who play an ever-increasing role in ensuring colleges and universities focus on student learning outcomes assessment at the institutional, program, department, and course level.

The Middle States Commission on Higher Education (MSCHE), which is the regional accrediting body governing Maryland colleges and universities, oversees an accreditation process that follows a ten-year cycle. In the interim, MSCHE reviews institutions through either on-site evaluation or other reports. Accreditation is continued only as a result of periodic reviews and evaluations through assessment of institutional achievements.

MSCHE holds institutions to a set of 14 standards that serve as a guide for all aspects of accreditation. Of these standards, the ones that most closely align with the goals of SLOAR include Standard 7, Standard 12, and Standard 14.[1] They are defined below.

- Standard 7: Institutional Assessment - The institution has developed and implemented an assessment process that evaluates its overall effectiveness in achieving its mission and goals and its compliance with accreditation standards.
- Standard 12: General Education - The institution's curricula are designed so that students acquire and demonstrate college-level proficiency in general education and essential skills, including at least oral and written communication, scientific and quantitative reasoning, critical analysis and reasoning, and technological competency.
- Standard 14: Assessment of Student Learning - Assessment of student learning demonstrates that, at graduation, or other appropriate points, the institution's students have knowledge, skills, and competencies consistent with institutional and appropriate higher education goals.

As such, MHEC required institutional reports to summarize their student learning outcomes' assessment activities in reference to these three MSCHE standards. Requiring institutions to report on their assessment activities tied to these three standards provided MHEC with a common set of questions to ask all institutions and afforded institutions an opportunity to use materials directly tied to their accreditation process (e.g., self-study reports, follow up reports) to supplement their SLOAR content.

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[1] *Characteristics of Excellence in Higher Education: Requirements of Affiliation and Standards for Accreditation.* Philadelphia, PA: Middle States Commission on Higher Education, 2011.

Background

Before 1996, the accountability process for Maryland public colleges and universities required each institution to develop a plan for the assessment of learning outcomes and to submit an annual progress report on the plan to MHEC. These reports were aggregated and published as SLOAR. In 1996 the Commission adopted a new accountability framework, including narrative reports and benchmarked indicators which were to be provided annually. In conjunction with this change, the SLOAR would no longer be required annually, but periodically. Upon the advice of the Commission's Segmental Advisory Council, the Commission requested reports every three years, the first of which was published in 1998.

Upon receiving the 2001 report, the Commission asked the Secretary of Higher Education to convene an intersegmental workgroup to identify standard measures for learning outcomes, in the hope that standard measures would more easily identify improvements in teaching and learning. This workgroup concluded that an emphasis on results at the institutional level, rather than on standard measures across segments and systems, would allow campuses to focus more on making improvements than on aligning measures, and therefore result in greater improvements in learning. In addition, the workgroup determined that campuses would benefit if the learning outcomes assessment report were closely connected to the material that institutions provide to MSCHE as part of their regular accreditation process. In particular, the workgroup recommended that the report focus on the "essential skills" identified as minimum skills to be developed in general education, in accordance with Middle States' Standard for Accreditation on General Education (Standard 12). These recommendations served as the basis for the SLOAR in 2004 and 2007.

In 2007 the Commission requested the formation of another intersegmental workgroup to revise the guidelines. This workgroup completed its work in 2011 and sent revised guidelines to colleges and universities. Among other suggestions, the workgroup recommended that, because it often takes a considerable amount of time for the results of new assessment efforts to become evident, the Commission should shift from a three-year reporting cycle to a five-year reporting cycle. This 2016 report is the first in the new cycle.

This report has two volumes. Volume I is divided into two sections. The first section summarizes the findings from a student learning outcomes assessment survey MHEC administered to Maryland's 29 public colleges and universities. The second section provides analysis of the institutional SLOAR submissions with an emphasis on the colleges and universities' assessment activities of their institution, their general education curriculum, and their overall student learning. The report concludes with a summary of findings and recommendations.

Volume II contains institutions' SLOAR submissions presented unedited by Commission staff. These reports focus on institutional assessment results and how assessment activities have been leveraged to improve teaching and learning and support student success. They focus on changes and developments since the 2011 report cycle.

Findings from the Institutional Survey

For the 2016 cycle of SLOAR all 29 of Maryland's public higher education institutions completed a brief survey on the role of undergraduate student learning outcomes assessment at their institutions. The six-item survey included questions on the scope of student learning assessment, how institutions use the results of assessment activities, and the primary drivers of assessment at their campuses.[2]

Almost all institutions (93.1%) report having one or more staff or faculty member charged with coordinating or implementing student learning outcomes assessment as all or part of their work responsibilities. Although some campuses have teams of four to eight staff and faculty committed to this work, the average number of full-time staff whose responsibilities include campus-wide assessment is 1.9. The two institutions that do not have specific staff or faculty members charged with coordinating or implementing campus-wide assessment have, instead, team-based or decentralized efforts across the institution.

Survey results reveal that 28 of the 29 of institutions surveyed have a common set of student learning outcomes that apply to all undergraduate students across all majors. The one institution that does not is primarily a graduate institution with a small number of undergraduate students enrolled in specific programs (e.g., nursing, dentistry) and no common general education requirements.

In addition, 93.1% of the institutions report that all their departments, schools, or majors have created tailored learning goals or learning outcomes. The remaining two institutions indicate that some of their departments, schools, or majors have clearly defined learning outcomes for their students. An analysis of SLOAR submissions from these two institutions reveals that they are in the midst of creating learning goals for all programs, and their responses reflect this transition.

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[2] Survey items were used with permission from the University of Illinois.

When asked to prioritize the top three drivers[3] of assessment on their campuses, the majority of survey respondents indicated that their institutions' commitment to improve undergraduate education (89.7%) and the requirements of regional accreditation (79.3%) were the most important drivers (see Figure 1). Institutional commitment can be demonstrated by such activities as strategic planning or other campus-wide initiatives aimed at setting large, long-term goals tied to the core mission of the institution. Regional accreditation drives assessment through such requirements as the institutional self-study and periodic reports due to MSCHE.

Figure 1: Primary Drivers of Assessment - Maryland Public Institutions
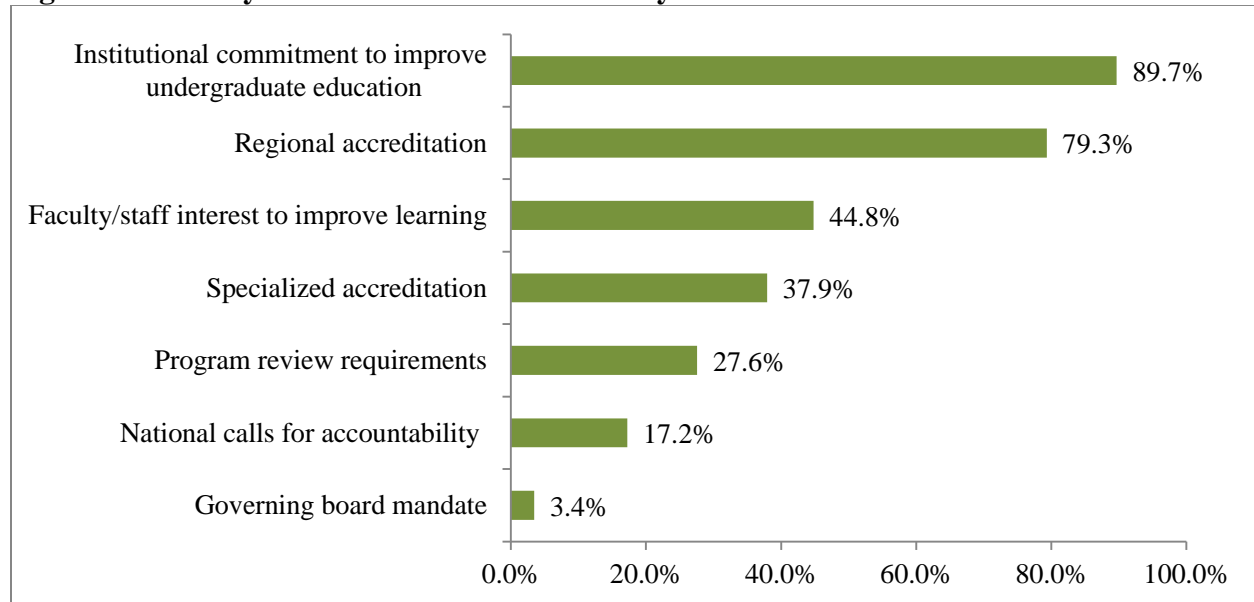
Analysis of the remaining institutional priorities reveals less agreement on the third primary driver. Almost 45 percent (44.8%) of all respondents selected faculty and staff interest in improving learning as a primary driver, and over one-third (37.9%) selected specialized accreditation. Specialized accreditation processes focus on programs in a specific discipline within an institution, but do not include an evaluation of the institution as a whole. These accrediting bodies are for such fields of study as law, medicine, and education.

The items least selected – national calls for accountability (17.2%), governing board mandates (3.4%), and institutional membership initiatives (0.0%) – reveal that institutions are primarily motivated by an institutional desire to improve and accreditor expectations rather than by external pressure placed on them from governing boards or professional organizations.

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[3] The survey offered institutions eight responses plus a space to provide additional responses not listed in the survey.

Figures 2 and 3 show that, when disaggregating the data on the primary drivers of assessment by type of institution, differences arise in some responses. For example, public four-year institutions respond more frequently (46.2%) than community colleges (31.3%) that specialized accreditation is a driver of institutional assessment. Conversely, over half (56.3%) of community colleges rate faculty and staff interest in improving learning as a top driver of assessment while approximately one-third (30.8%) of public four-year institutions say the same.

Figure 2: Primary Drivers of Assessment – Maryland Public Four-Year Institutions
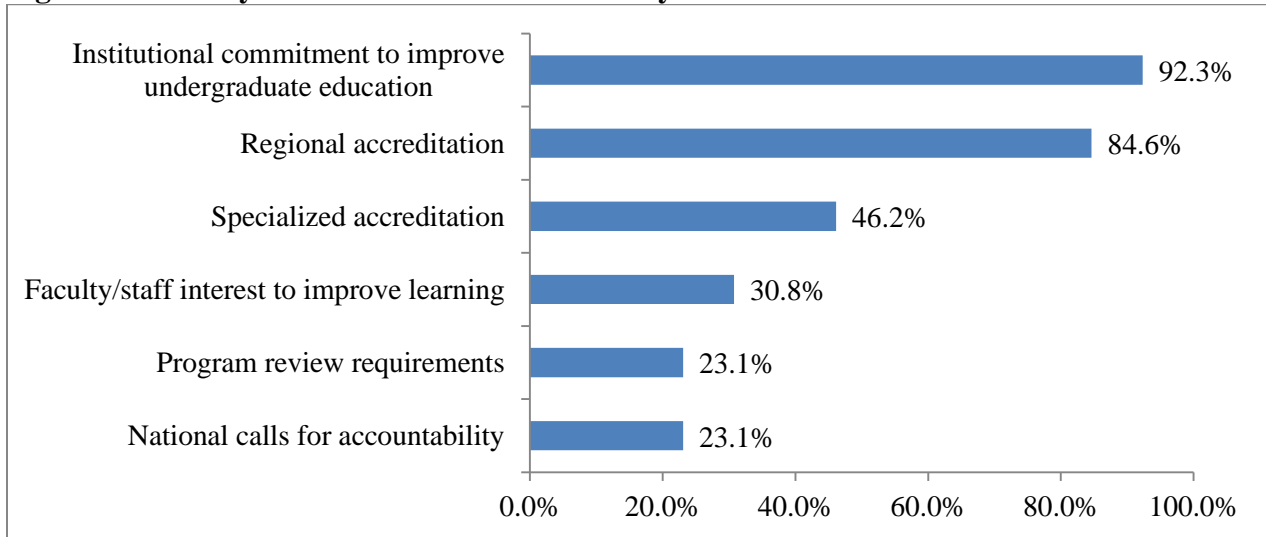
**Figure 3: Primary Drivers of Assessment – Maryland Community Colleges**
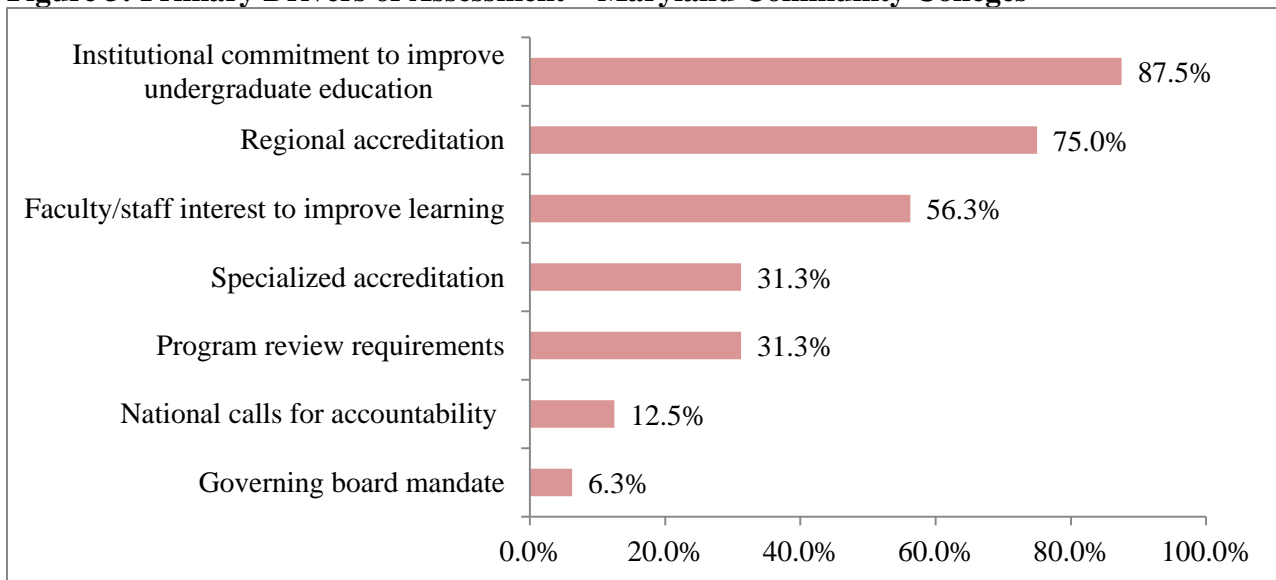
In sum, these results show that an institutional commitment to improve undergraduate education and the responsibilities tied to accreditation (both regional and specialized) drive the colleges and universities to focus resources on student learning outcomes assessment efforts. Few institutions are motivated primarily by reactive drivers of change.

In the survey, respondents were asked about the myriad ways their institutions used the results of student learning outcomes to steer the institutions' priorities and goals. Using a Likert scale (with the options "very much," "quite a bit," "some," and "not at all") institutions responded to 18 statements in the survey. As reflected in Figure 4, the most commonly reported uses for student learning outcomes include preparing for self-studies for institutional accreditation (93.1% responded very much or quite a bit), and preparing for self-studies for program or specialized accreditation (89.7% responded very much or quite a bit).

Figure 4: Institutions' Use of Assessment Results –Maryland Public Institutions
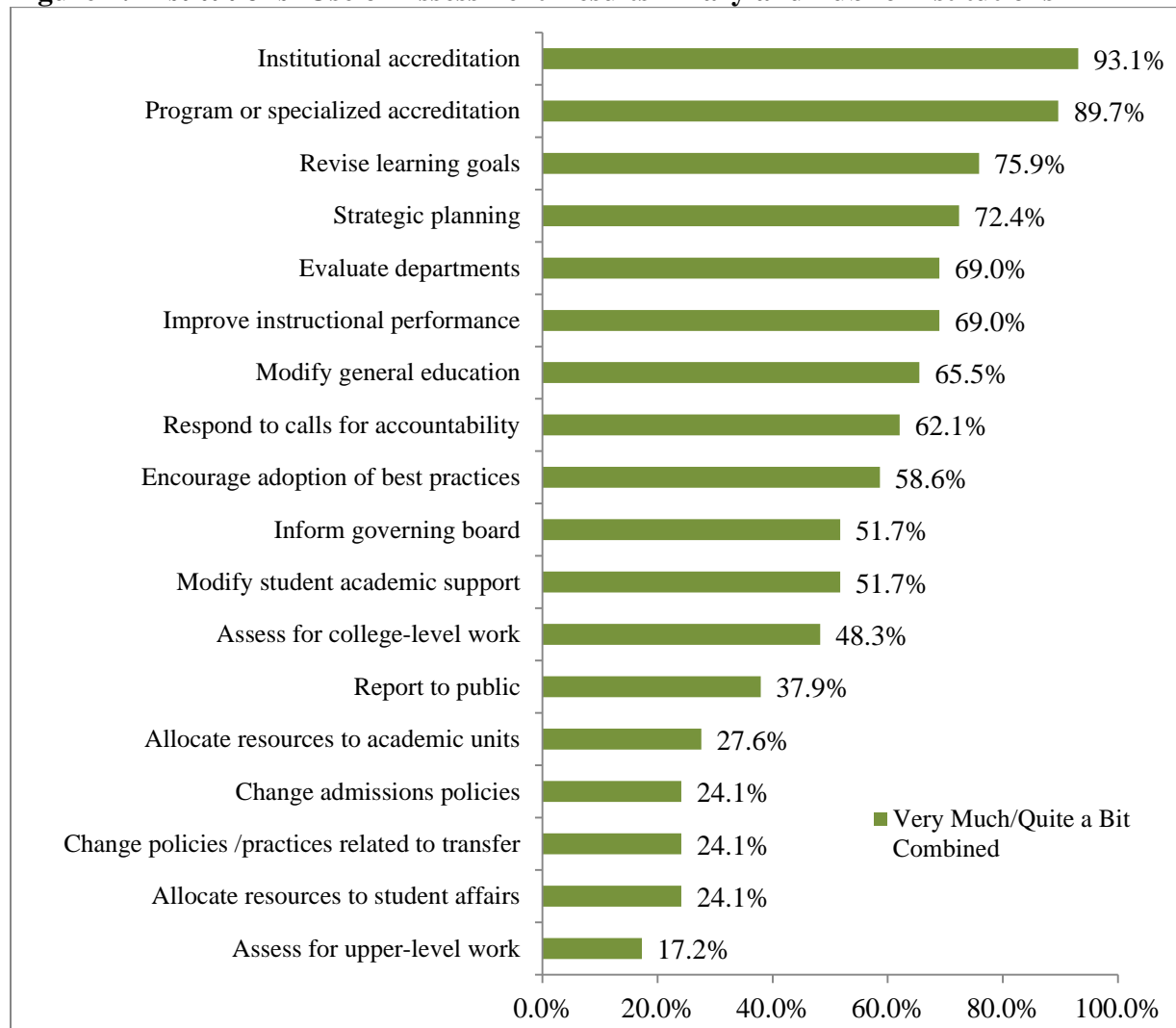
Other common uses of assessment results were to revise student learning goals (75.9%), to inform strategic planning (72.4%), to improve instructional performance (69.0%), and to evaluate departments (69.0%). More than half of the institutions reported using student learning outcomes to modify the institution's general education requirements (65.5%), respond to calls for accountability from internal and external stakeholders (62.1%), and to encourage program- or institution-wide adoption of assessment best practices (58.6%).

These overall results align with the data described earlier in the report and show that the use of student learning outcomes data primarily informs accreditation and the institutions' plans both on the macro level (strategic planning and calls for accountability) and the micro level (evaluating departments, modifying general education and learning goals).

As Figure 5 shows, the public four-year colleges and universities' assessment results are most commonly used in preparing for program or specialized accreditation (100.0% reported very much or quite a bit) followed closely by preparation for institutional accreditation (92.3%). The remaining responses from the survey had less overall institutional agreement, with 69.2% (or nine of 13) of public four-year institutions reporting that they use assessment frequently to improve instructional performance, evaluate departments, and implement strategic planning.

Figure 5: Institutions' Use of Assessment Results – Maryland Public Four-Year Institutions

Use	Very Much/Quite a Bit Combined
Program or specialized accreditation	100.0%
Institutional accreditation	92.3%
Strategic planning	69.2%
Evaluate departments	69.2%
Improve instructional performance	69.2%
Encourage adoption of best practices	61.5%
Revise learning goals	61.5%
Respond to calls for accountability	53.8%
Modify student academic support	53.8%
Inform governing board	46.2%
Modify general education	46.2%
Report to public	30.8%
Assess for college-level work	23.1%
Change admissions policies	15.4%
Assess for upper-level work	15.4%
Change policies and practices related to transfer	7.7%
Allocate resources to student affairs	7.7%
Allocate resources to academic units	7.7%

Among the 13 public four-year institutions, there is even less agreement regarding the remaining uses listed in Figure 5. No clear patterns emerge as to whether these differences are driven by type of institution (e.g., comprehensive versus research institutions) or other factors (size, student body, location), making further generalizations difficult.

Comparatively, Figure 6 reveals that community colleges report using assessment outcomes most frequently in relation to preparing for institutional accreditation (93.8% reported quite a bit or very much). These institutions also commonly use assessment to inform learning goals (87.5%), modify general education requirements (81.3%), prepare for program or specialized accreditation (81.3%), and shape the institution's strategic plan (75.0%).

Figure 6: Institutions' Use of Assessment Results – Maryland Community Colleges

| Category	Very Much/Quite a Bit Combined
Institutional accreditation	93.8%
Revise learning goals	87.5%
Program or specialized accreditation	81.3%
Modify general education	81.3%
Strategic planning	75.0%
Respond to calls for accountability	68.8%
Evaluate departments	68.8%
Improve instructional performance	68.8%
Assess for college-level work	68.8%
Encourage adoption of best practices	56.3%
Inform governing board	56.3%
Modify student academic support	50.0%
Report to public	43.8%
Allocate resources to academic units	43.8%
Allocate resources to student affairs	37.5%
Change policies and practices related to transfer	37.5%
Change admissions policies	31.3%
Assess for upper-level work	18.8%

In addition, eleven of 16 community colleges (68.8%) use assessment results frequently to assess for college-level work (e.g. assess for remedial education) improve instructional performance, evaluate departments, and respond to calls for accountability. The remaining selections from the survey show greater agreement among community colleges regarding the uses of assessment results than was found in the public four-year institutions' responses. For example, 11 of the 16

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institutions report using student learning outcomes assessment results a great deal (selecting "very much" and "quite a bit" in the survey) to guide eight or more of the institutions' priorities and goals.

This phenomenon may be driven, in part, by the commonalities among the community colleges' missions and goals. As open access institutions serving their local communities, the community colleges may see assessment results as central to such diverse aspects of the institution as placements for developmental education to benchmark reports provided to their governing boards.

Institutions were asked to select the assessment approaches they used at the institutional level to represent undergraduate student learning (see Figure 7).[4] Twenty-six of the 29 respondents (or 89.7%) indicated rubrics were most commonly used, followed closely by incoming student placement exams (86.2%), alumni surveys (82.8%), and national student surveys (82.8%).

Figure 7: Institutional-level Assessment Methods Used – Maryland Public Institutions
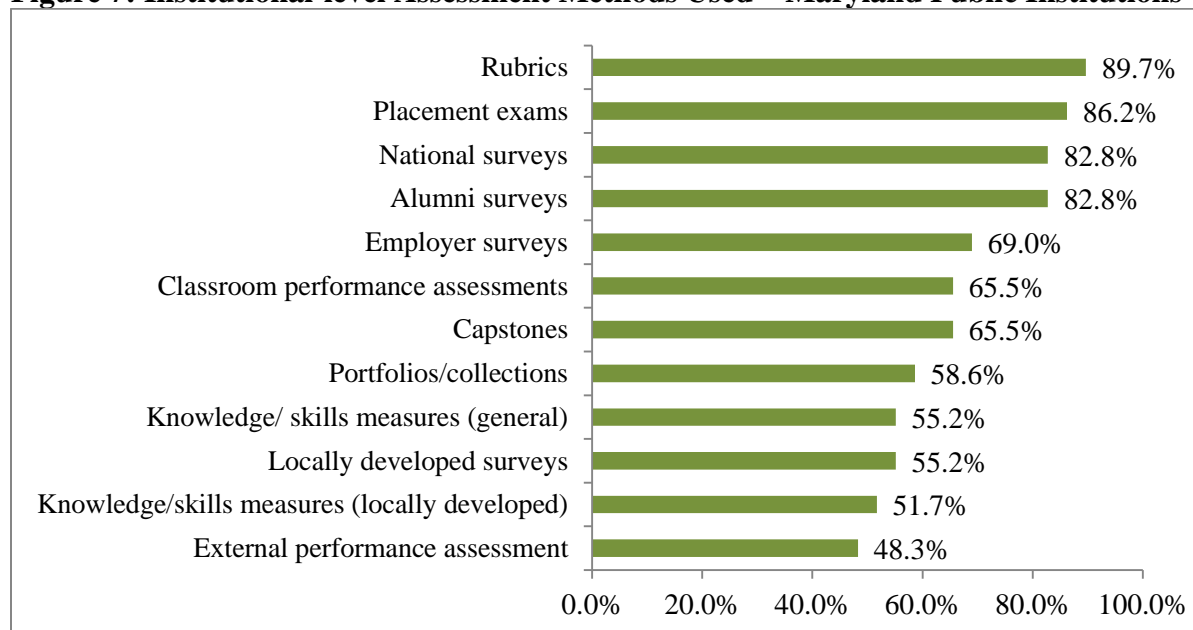
Rubrics serve as a tool to help instructors assess and articulate specific components and expectations of an assignment, and are typically used at the course level. Placement exams are used widely by institutions to assess the level at which students should be placed for coursework within the general education curriculum. For public four-year institutions this can mean using a combination of SAT/ACT scores and results from placement exams to determine where students are placed within the language, math and writing courses. For community colleges, placement tests, such as ACCUPLACER, can help determine if students are ready for college-level work.

Alumni surveys provide important feedback on the perceptions of the quality of the undergraduate experience, and more specifically graduated students' feelings of the relevance

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[4] Within the survey, institutional-level was defined as across the entire institution or with valid samples representing the institution.

and quality of their education in relation to their current employment and career aspirations. National student surveys such as the National Survey of Student Engagement (NSSE) and the Community College Survey of Student Engagement (CSSE) both provide information on student engagement, a key indicator of student learning and retention. The results from these surveys can be used as a tool for benchmarking against national norms, assessing areas of improvement, and monitoring institutional effectiveness over time.

Twenty of the 29 institutions (69.0%) report using employer surveys to assess student learning, and slightly fewer (19 of 29 or 65.5%) identify capstone experiences and classroom-based performance assessments as useful. Capstones can be in the form of such curricular offerings as a course, a research project, field work, or thesis. These experiences typically occur toward the end of a student's tenure (e.g. final semester or final year). Capstones require students to consolidate and synthesize learning from their courses and co-curricular experiences to demonstrate their proficiency in applying this knowledge. Performance-based assessments require students to solve a real-world problem or to create, perform, or produce something with real-world application. They allow an instructor to assess how well students are able to use essential skills and knowledge, think critically and analytically, or develop a project.

One common characteristic of the lesser-used methods is the time-intensive nature of them. For example, institutionally developed surveys or knowledge and skills measures require faculty and administrators to create the tools, test them for validity and reliability, make appropriate adjustments, and repeat testing and modifications as needed. This can be a challenging process, especially with the demands other forms of assessment might already place on faculty and staff.

When the results of this analysis are broken down by type of institution, differences again emerge. Maryland's public four-year institutions place slightly different priority on some institution-wide assessment methods than community colleges.

Figure 8 shows that the four-year colleges and universities rely most heavily on alumni surveys (84.6%), rubrics (76.9%), incoming student placement exams (76.9%), and national surveys (76.9%) to assess undergraduate student learning. There is less agreement among the public four-year institutions on the remaining eight assessment methods listed in Figure H. These institutions report smaller percentages on the use of these eight methods overall.

Figure 8: Institutional-level Assessment Methods Used – Maryland Public Four-Year Institutions
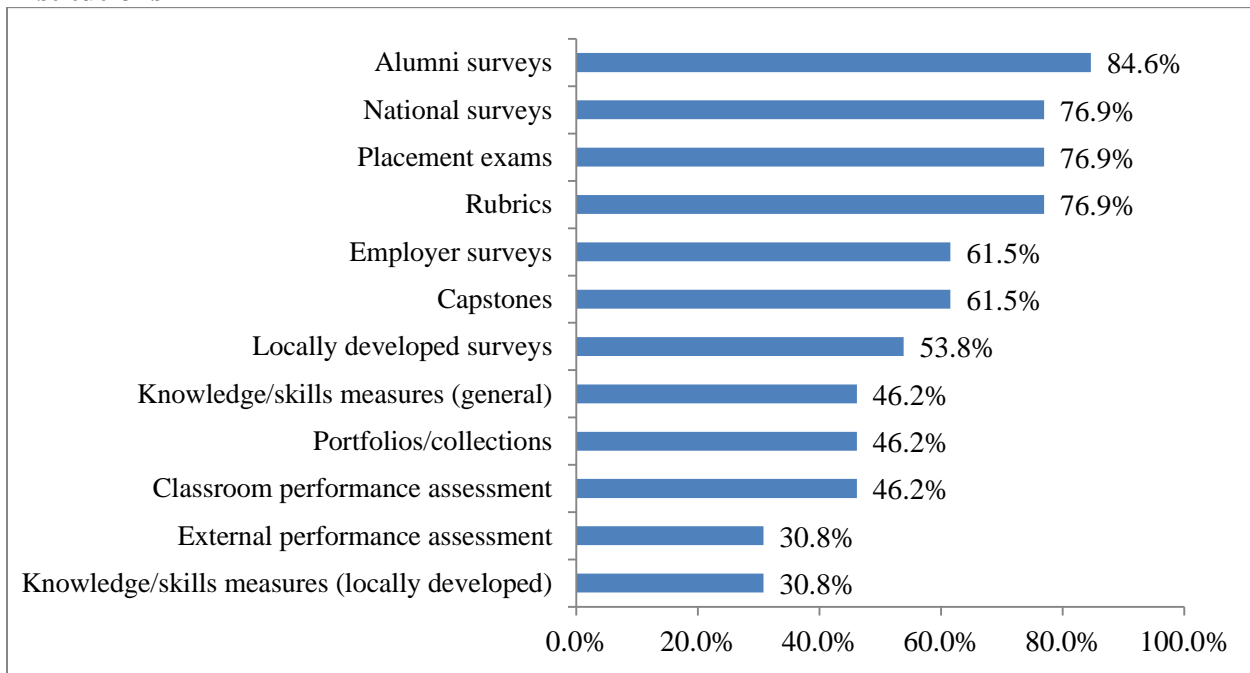
On average, the public four-year institutions use 6.9 types of assessment methods. Data reveal that four of the public four-year institutions employ only three or four of the 12 methods listed in the survey. Of the methods these institutions rely on, only the use of alumni surveys and incoming student placement exams are most commonly selected. Five of the 13 public four-year institutions selected nine to 12 of the methods listed in the survey, indicating that they rely on a breadth of methods to assess student learning The MHEC survey administered for this report allowed institutions to submit alternative responses, and only one of the institutions indicated other means of assessment used.[5]

These results show that some institutions rely heavily on a few assessment methods to measure student learning across the entire institution. It is possible that a wider variety of methods may be used at some institutions, but these methods are program-specific and therefore do not cross the entire institution Additional analysis by type (e.g., comprehensive, research intensive),

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[5] The University of Maryland, Baltimore indicated that clinical evaluation by an instructor was an additional institutional-level assessment method used.

geographic location, size or other similar institutional factors do not reveal any clear patterns or common characteristics.

As Figure 9 shows, all of Maryland's community colleges rely on rubrics to assess student learning. In addition, they report that incoming student placement exams (93.8%), national student surveys (87.5%), classroom-based performance assessment (81.3%), and alumni surveys (81.3%) are commonly used, institution-wide assessment methods.

A cross-analysis of the data from the community colleges shows that a greater number of assessment methods are used overall at the community colleges, with these institutions reporting an average of nine assessment methods. In fact, 14 of the 16 institutions use eight or more of the methods listed in the survey, and two of them responded that they use all 12. There are two outliers to these data; these community colleges selected two or three of the 12 methods listed. As with the survey to the public four-year institutions, the community colleges could list alternative methods, but none did. Again, it can be speculated that these institutions rely heavily on a few methods for their institution-wide assessment, and that program-specific methods may be employed in addition to these campus-wide ones.

Figure 9: Institutional-level Assessment Methods Used – Maryland Community Colleges
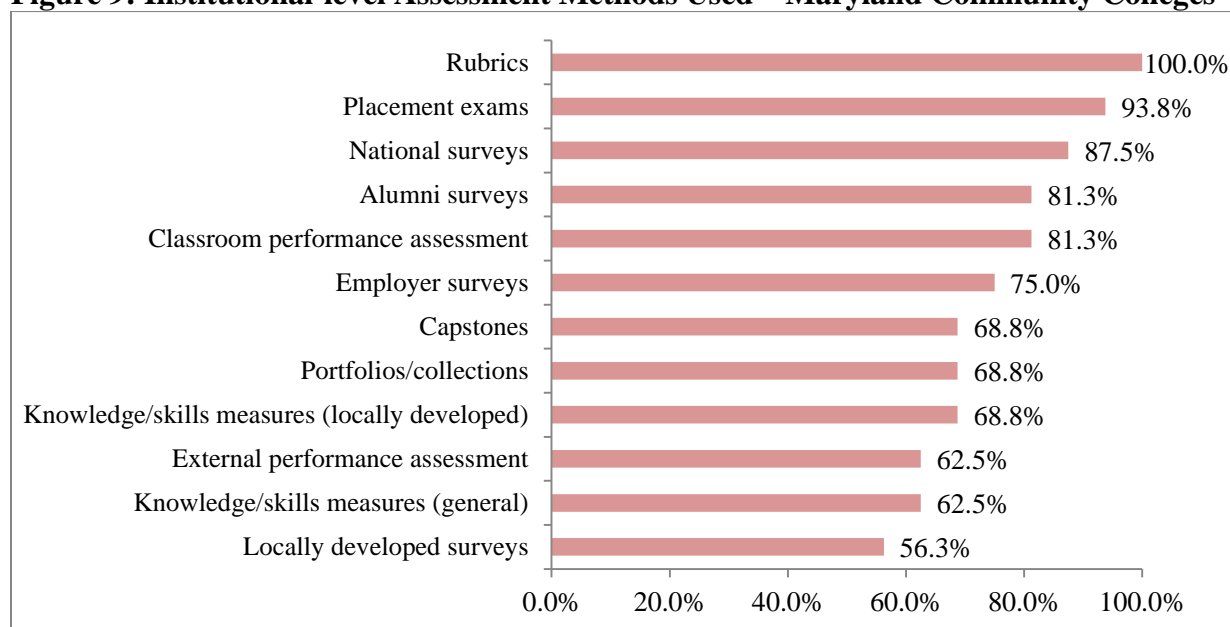
In sum, the results from analysis of the survey data reveal that assessment of student learning outcomes is being implemented at all of Maryland's public colleges and universities. Institutions rely on such methods as rubrics, surveys, and placement exams to assess student learning outcomes. The primary drivers of assessment are the institutions' commitment to improving undergraduate education and regional and specialized accreditation activities. These results show the central role that accreditation can play at institutions.

These findings are reinforced by the institutional responses on how they use the results of student learning outcomes assessment. They most commonly use the outcomes to inform the self-study

process tied to accreditation (both regional and specialized). Student learning outcomes are also central to institution-wide activities such as the strategic planning process and modifications to general education. They also inform program-, department-, and course-based activities such as revising learning goals and evaluating departments.

Lastly, survey findings show that there are some differences within and among the public four-year institutions and the community colleges, which is to be expected. These differences mirror the varying institutional missions and diverse student bodies of Maryland's public colleges and universities.

Findings from the Student Learning Outcomes Assessment Reports (SLOAR)

The 2016 SLOAR submissions received by MHEC included the following aspects of student learning outcomes assessment: (1) a summary of all institutional assessment activities, guidelines used, and the organizational structure and institutional leadership dedicated to assessment activities, (2) summaries and examples of modifications and adjustments to assessment plans and activities since 2011, and, if applicable (3) a detailed summary of any issues institutions faced with accreditation in relation to institutional assessment or student learning outcomes assessment. In the materials distributed to the institutions for the 2016 SLOAR, MHEC strongly encouraged institutions to borrow heavily from the reports and other documents they have already produced for the Middle States Commission on Higher Education.

Institutions were asked to submit reports summarizing their activities tied to MSCHE's Standards 7, 12, and 14 and provide examples of assessment activities and planning since the 2011 SLOAR submissions. In addition to summary reports, institutions had to describe any further actions tied to Standards 7, 12, and/or 14 that MSCHE required of them. These actions required by the accrediting body help ensure an institution's continued compliance to accreditation standards and can provide information to keep MSCHE informed of institutional developments. In the most severe cases, MSCHE's required actions are instituted because an institution does not meet one or more accreditation standards. The most egregious of these puts an institution's accreditation at risk until the institution can demonstrate compliance. Once compliance is demonstrated, an institution is returned to good standing.

Twelve of the 29 institutions reported on further actions tied to Standards 7, 12, and/or 14. All maintained accreditation throughout their efforts to address the issues found by MSCHE, and many have found resolution, returning to full compliance. The majority of institutions had to provide additional reports with evidence of systemic and sustained efforts to use assessment outcomes to improve teaching and learning (Standards 12 and 14). A few were required to further document the comprehensive and sustained process of evaluation in place that informs institutional planning, resource allocation, and institutional renewal (Standard 7).

What follows is a summary of the findings from institutions' narrative submissions. The summary is organized around the core areas addressed by the narrative reports: institutional assessment, the assessment of general education, and the assessment of student learning.

Institutional Assessment

Assessing an institution's effectiveness helps an institution answer the question "Are we fulfilling our mission and achieving our goals?" Therefore institutional assessment is shaped by the institution's mission and deployed through its strategic plan.

As the institutions' narrative submissions show, all institutions conduct institutional-level assessment. Though their methods and processes differ, there are a number of common characteristics for all.

First, all institutions reported the use of strategic plans and other planning documents to guide their goals, objectives, and measures. All institutions pointed to such items as the 2013 - 2017 Maryland State Plan for Postsecondary Education, *Maryland Ready*, the University of Maryland System goals (for USM institutions), MHEC'S Performance Accountability Report cycle, and the Department of Budget and Management's Measuring for Results (MFR) annual process as complementary planning documents that guide the institutions' goal setting.

Since 2011most institutions have completed a strategic planning cycle, and some are in the midst of creating the goals and objectives for a new plan. The strategic plan serves as a means by which to enact the mission and goals of the institution and ideally includes actionable and measurable goals and benchmarks. Often reflected in such measures as Key Performance Indicators (KPIs) or SMART goals (Specific, Measurable, Attainable, Realistic, Timely), these institutional-wide objectives guide budgeting, resource allocation, and planning priorities.

Another common characteristic among the institutions was the cyclical nature of institutional assessment. While strategic planning encompasses a longer time horizon, all institutions discussed annual activities such as unit and institutional reports, board meetings, and budget setting that allowed for regular monitoring of goal achievement and corresponding resource allocation. These shorter time lines allowed institutions to pivot, if needed, in an effort to stay in alignment with strategic goals.

Institutions also reported the centrality of collecting and analyzing data to monitor outcomes. Most institutions rely on formal data systems and warehouses with features such as dashboards and reports so faculty and administrators can use the data to inform decisions at the course, program, department, and institutional level.

Lastly, the organizational structure and institutional leadership for assessment activities for all institutions includes some important elements. For all institutions, the institution's president and chief academic officer (e.g., provost, vice president for academic affairs) lead the effort, with the help of assessment and institutional research staff, deans, department chairs, faculty, and administrators from throughout the institution. For many institutions, one or more people are responsible for student learning and other forms of institutional assessment as part (or all) of their work responsibilities. These staff or faculty can guide the process of assessment, ensuring that cycles of assessment are adhered to and issues are being addressed in relation to such priorities as accreditation, strategic planning, and annual planning. Assessment leaders also work

with teams of faculty and administrators who create procedures, guidelines, reporting structures, and systems of data analysis. In addition, the staff or faculty dedicated to assessment help guide the overall evaluation process, facilitate the interpretation evaluation data collected, and use the results of evaluation findings to aid with continuous improvement and long-term planning.

The following are examples of how Maryland's public colleges and universities utilize assessment to achieve institution-wide goals and objectives.

- The College of Southern Maryland formed the "African-American Student Success Initiative Committee" to address identified achievement gaps in students' graduation and transfer rates. The committee used institutional data from sources such as IPEDS, strategic plan key performance indicators, and results from the CCSSE to identify differences in performance or perceptions between African American students and the larger student body. The committee held focus groups, the results of which were synthesized into the data analysis to form a set of recommendations for institution-wide change. These changes were reflected in subsequent yearly planning goals.
- The University of Maryland University College, through the use of a vendor platform and institutional data, developed predictive models to identify students at risk of dropping or stopping out. Over time, the university was able to achieve a statistically significant increase in undergraduate course completion rates by using the information generated from the predictive model.
- In an effort to improve graduation rates, Bowie State University conducted a regression analysis to identify the factors tied to student completion. The results served as an impetus for the provost to include specific targets tied to the regression study for the academic year's institutional goals and objectives related to retention, progression, re-enrollment, and developmental math student success.
- The associate provost, institutional effectiveness staff, and the web development office at Salisbury University collaborated to create an online interface aimed at improving efficiencies around requesting and approving funding tied to initiatives related to the institution's strategic plan. The format requires the requestor to link the request to the strategic plan's goal(s), identify key performance indicators, map out milestones, and estimate costs. If approved, progress is monitored via the interface, with users having to provide data on goals accomplished and actual costs. This allows senior administrators to ensure initiatives are aligned with the strategic goals and allocated appropriately in the budget.

Assessment of General Education

Colleges and universities are charged with, among other things, ensuring that their students demonstrate college-level proficiency in general education and essential skills. For Maryland's colleges and universities, general education competency areas include written and oral communication, scientific and quantitative reasoning, critical analysis and reasoning, technological competency, information literacy, ethics, and cultural awareness. Through these capacities, institutions can ensure that students develop the skills necessary to be competitive in the workplace and be prepared to contribute to the larger society.

Students are expected to meet the standards set by the institution for these competencies regardless of major or area of study; the skills and knowledge developed through the general

education curriculum should complement the depth of learning obtained through a major. The skills can be taught or developed as part of courses in the major or through separate courses. Through advising and other tools, institutions guide students through the process of selecting courses that meet one or more of the general education requirements.

Most of Maryland's institutions have a set of faculty and staff dedicated to overseeing the general education program. Often working as committees, these groups dedicate the time and resources to ensure that the measures are clear, obtainable, and appropriate to the institution's mission. They are often charged with reviewing all courses, curriculum, rubrics, and course outcomes to monitor student progress in general education and make recommendations of changes to implement.

Reports also reflect that institutions often use externally derived instruments such as the Collegiate Learning Assessment and the Proficiency Profile to measure skills in competency areas such as critical thinking and written communication. Typically the measures are administered to students in their first and last years of enrollment (e.g., freshman and senior years for students at public four-year institutions) to assess change in these skills over time. Institutions can also benchmark, using comparator groups of peer institutions or national norms to inform their results.

What follows are several specific examples of how general education requirements are assessed at Maryland's public institutions with an eye for improvement.

- After establishing a set of core general education requirements, a committee of faculty at Harford Community College partnered with college deans and a learning assessment committee to create an assessment framework for general education. The plan includes a schedule for when each general education goal will be reviewed by the committee, a rubric for scoring the goals across multiple disciplines, and a draft of the criteria that will be given to the learning assessment committee and the vice president for academic affairs to solicit their feedback. This is a shift from the decentralized manner in which general education assessment was conducted in the past. Anticipated results from this work include creating consistency across programs and divisions regarding the assessment of student learning, aligning general education goals, and identifying possible gaps among the goals and learning outcomes.
- Wor-Wic Community College revised a general education goal for an English course, and data collected for several subsequent semesters showed that students were not meeting the benchmark set for this revised learning goal. Course coordinators restructured lesson plans and assignments to improve student performance yet students still appeared to be underperforming. Further review revealed the rubric categories used in assessment did not reflect the modified learning outcome, and a more specific rubric was implemented to align better with the benchmark. New data revealed students met the benchmark.
- The University of Baltimore streamlined its general education assessment process, whittling its student learning outcome goals from 56 among nine areas of study to 12 outcome goals for five areas of study; this will increase the agility of the programs to respond to identified deficiencies, simplify assessment, and make processes clearer to students.

- Using a nationally normed general education learning assessment tool, the University of Maryland, Eastern Shore tested its students in their first and last years of enrollment to identify changes of students' knowledge around the institution's general education core competencies over time. The institution's freshman had scores comparable to peer institutions, but the inter-institutional comparison for seniors showed that they performed below the national mean for some competencies .These results helped identify gaps in the general education curriculum for UMES to address.

Assessment of Student Learning

The results of assessing student learning should help institutions answer the question "Are our students learning what we want them to learn?" Attempting to answer this question drives the student learning assessment cycle. This cycle begins by clearly articulating learning goals, objectives, and outcomes regarding the knowledge, skills, and competencies that students should exhibit at the end of a course, program, or major. Course and program design should incorporate the means by which students will achieve the set outcomes. In turn, the students are assessed on the key learning outcomes and the results of the assessment are used to improve teaching and learning.

This process should be organized, sustainable, and iterative. This ensures assessment remains central to the institution's operations and provides benefit to the current and future students. Because the majority of student learning assessment is happening in the classroom or within coursework and because the results of the assessment directly affect the teaching process, it is imperative that faculty are central to this effort.

No single assessment measure is a perfect tool to measure learning, therefore institutions incorporate multiple measures – both direct and indirect – to assess student learning. Direct methods include completed assignments, test results, licensure exams, and portfolios. Indirect methods include retention and graduation rates, course pass rates, and student and alumni surveys, which alone cannot provide evidence of student learning but can complement the results of the direct methods.

The narrative submissions show that institutions are implementing direct and indirect methods of assessing student learning, using those results to inform teaching and learning, and ensuring that assessment is central to the institutions' operations. The survey results confirm that institutions have staff dedicated to driving the assessment process, and multiple methods of assessment are being used to measure student learning outcomes.

Below are several examples from the institutional narrative submissions that reflect the ways that they employ assessment methods and the results of assessment to adapt courses or programs.
- Prince George's Community College reviewed the results of a final exam for a developmental English course. Students were consistently underperforming on the multiple choice section of the exam, which assessed students' ability to correctly identify parts of sentences (e.g., nouns, verbs). The department determined poor student performance was a result of misalignment of class instruction and exam content. A course redesign focused on having students strengthen their writing skills and apply knowledge

- of sentence structure directly to their writing. Faculty revised course outcomes to reflect the move to writing instruction, and the exam was altered to assess the quality of student writing.
- An analysis of student learning outcomes assessment data by Baltimore City Community College's Computer Aided Drafting and Design (CADD) faculty resulted in program changes. These included the hiring graduate students to serve as tutors and the purchase and implementation of new 3D software and printers. Subsequent assessment measures showed improvement for all of the course outcomes.
- In response to a charge from a professional nursing organization to innovate nursing education programs, the nursing program director at Carroll Community College led her faculty through a complete redesign of the nursing curricula with the aim to both strengthen the student experience and improve passing rates for the board exams. Outcomes data on the affected cohorts were studied, some benchmarks were still not met, and additional changes were made to the program as a result.
- The Media and Communications Studies faculty at University of Maryland, Baltimore County identified, through the analysis of student writing assignments, a gap in student ability to engage with source material. As a result, a media literacy course was added, and subsequent course outcomes show the added course had a positive effect.
- The psychology program at Coppin State University determined that a gateway psychology course could benefit from a redesign. Outcomes showed students were meeting only 70% of the learning competencies, with many students receiving a failing grade. The course redesign analysis found: content varied among different sections of the same course, technology was used inconsistently by instructors, online, ancillary materials were not being incorporated by all instructors, and too many course sections were being taught by adjunct faculty. These issues were addressed, and the redesigned course was delivered during the fall 2014 semester. Results include: improved pass rates for students, consistency among all instructors on content delivery methods and materials used, and increased collegiality and collaboration among faculty.

General Findings

What follow are some general findings from the institutions' SLOAR submissions that are universal among the institutions.

Assessment efforts take time.
It is important to stress that the institutions' assessment efforts take time. SLOAR submissions include numerous examples of institutions' multi-year efforts to complete some assessment cycles. These longer timelines are often a result of the resources – such as the faculty, staff, time, and data – needed to complete a thorough process. In addition, the cycle itself can be lengthy. Once student learning outcomes are established (at the institutional, program, major, and/or course level), assessment measures are selected to best determine whether the outcome(s) has been met. Data (e.g., grades, test scores, rubric scores, results of a national survey) are collected and analyzed. Analysis involves assessment staff, faculty, deans, department heads, and other administrators (e.g., student affairs staff, provost, academic affairs personnel). The results of

analysis may spur additional alterations and improvements to the course curriculum, the materials, the instruction, or other aspects of the teaching and learning process.

The majority of institutions reported an assessment cycle which details the timeline for course- and program-level assessment. Typically active courses are assessed in a cycle of every two to four years, and programs are reviewed less frequently (e.g., five to six years). Course and program review entails many steps including data collection, review of course materials such as rubrics, syllabi, assignments. Sometimes this timeline can be shortened if the identified alterations can be performed quickly; these might include edits to a syllabus, addition of course material. But otherwise, adaptations to courses and programs can take a number of semesters to address.

Many institutions expedite assessment planning and implementation efforts by establishing day- or multi-day-long retreats or trainings where faculty and staff gather to discuss student learning outcomes, learn about assessment methods others are employing, and plan for the coming year. This kind of intense, focused work allows faculty and staff to dedicate time and energy to assessment and can help guide the annual planning for the coming academic year.

Faculty may need additional help learning how to develop rubrics, learning goals, and objectives; collect and enter data in a data warehouse; and the other steps central to assessment. Some institutions have created dedicated assessment "coach" or "mentor" positions within departments or programs. These staff members are trained in student learning outcomes assessment and serve as resident experts. Often faculty themselves, they may be able to take on this role with an accompanying reduced teaching load or other incentives.

For those institutions under additional scrutiny from accrediting bodies (and possibly at risk of losing accreditation), the timeline for changing assessment practices is accelerated due to pressure from these external stakeholders. Those institutions facing threats to their Middle States accreditation or specialized accreditation reported very short timelines (lasting weeks or a few months) where staff and faculty focused their efforts on addressing the issue or issues of concern to the accrediting body. While abbreviated timelines for change are not sustainable in the long run for institutions, they show that dedicated time, effort, and resources can advance the assessment efforts.

There are no perfect assessment tools or strategies.
MSCHE standards state that institutions should use assessment processes that yield "reasonably accurate and truthful" results. This illuminates the challenge facing institutions in that there is no magic bullet when it comes to measuring outcomes. Therefore, institutions are well-served to use a variety of methods – both direct and indirect – in an effort to gather data to inform decision making and resource allocation. By relying on a number of measures and triangulating the results, institutions can obtain a more holistic picture of student learning and teaching.

Institutions report that these multiple methods pose challenges to time and other institutional resources, as each assessment method can require attention from faculty and administrators in addition to the day-to-day work of teaching and managing the institution. The dedicated

assessment staff, mentioned earlier in the report, can aid institutions in keeping assessment a central activity.

There are myriad assessment resources available through professional organizations and statewide networks.
There are a number of external organizations that engage institutions in thoughtful conversations around assessment. These include the American Association of Colleges and Universities (AAC&U), the National Institute for Learning Outcomes Assessment (NILOA), and Achieving the Dream (for community colleges only). These organizations provide institutions with resources, training, and support tied to assessing student learning and are able to disseminate information on best practices institutions can use to measure student learning outcomes.

There is also evidence that Maryland's public institutions share resources and information on student learning outcomes assessment with each other. These appear to happen less formally than the systematic ways the professional organizations encourage dialog, but there are working groups among Maryland's colleges and universities. For example, the USM institutions receive training and guidance on outcomes assessment from the Center for Academic Innovation, and the community colleges have an affinity group for institutional researchers who meet regularly.

These connections to professional networks are essential for institutions' efforts to develop, implement, and measure their student learning outcomes assessment efforts. It is through these connections that institutions can receive the guidance they need to take best practices in assessment back to their campuses and tailor them to meet their needs. Doing so ensures that assessment is high-quality, effective and provides the information needed to improve teaching and learning.

Data and technology are key components of successful assessment.
All institutions reported on the centrality of their data systems to assist in their assessment efforts. Many indicated that since the 2011 report they had adopted software specifically designed to assist with assessment. This assessment software can centralize collection of student learning assessment data and allow for faculty and administrators campus-wide to access and use the data frequently and easily. Results of assessment at the course, program, department, and institution level are stored in these systems for planning and reporting purposes. Often these systems have dashboards that allow the user to tailor the reports generated for his or her needs. Other tools of this management software allow for curriculum mapping, creating and accessing rubrics, and completing program evaluations.

Although installation and training require significant initial investment, the institutions report that once these hurdles are crossed the new systems allow for more integrated assessment efforts. By delivering data in real time to users, these software systems enable faster and more responsive planning and decision making tied to assessment.

In sum, the institutions report that their assessment efforts can have long time horizons in terms of seeing whether changes and adaptations are paying off. Institutions achieving the greatest benefits from ongoing assessment efforts have systems in place for collecting data, analyzing the data, using the data to make informed alterations, and beginning the cycle of assessment again

with an eye for continuous improvement. Institutions rely on the formal and informal networks of assessment experts to guide their work, tailoring the best practices to meet the needs of their unique institution.

Recommended Actions

The findings from analysis of the 2016 SLOAR submissions suggest that institutions should continue to seek ways to use to assessment results to inform institution-wide goal setting, decision making, and resource allocation. Results of assessment also have a direct effect on improving teaching and learning. To make advances in the assessment of student learning outcomes, institutions should focus efforts in the following ways:

1) **Faculty** are central to the collection and use of student learning outcomes data, should be integral to institutional planning and the implementation of measures, and should have the greatest influence over the process and interpretation of the assessment results. By dedicating resources specifically to faculty, institutions can assist them in engaging and participating fully in student learning. These institutional resources can be in the form of such things as additional training on how to incorporate learning assessment into their curriculum, time (e.g., course release) to serve on committees and workgroups, or budgeted funds to incentivize course redesign.

2) **Institutional administrators** in areas such as student affairs can bring professional expertise and new perspectives to the assessment of student learning within the overall student experience. Although institutions focus much of their efforts on student learning outcomes achieved in the classroom or educational setting, there is great value in assessing the students' engagement at the institution. Student engagement is a key component to student persistence and completion and should not be overlooked in the assessment of more specific learning outcomes.

3) **Assessment and institutional research staff** can build upon the work they are already doing on their campuses and continue to identify new, valid methods of assessing student learning and to guide faculty and staff in their assessment efforts. Often the sole personnel focused on assessment, these individuals are critical to determining whether teaching and learning approaches are having the desired effect. Their expertise is needed to ensure results of assessment are understandable and useable for faculty, administrators, board members, and other stakeholders.

4) **Institutional leaders** such as presidents, provosts, and vice presidents must ensure assessment is a top priority worthy of institution-wide focus. Through active engagement in the process and directed leadership, these individuals can help allocate resources to areas in need of additional assessment attention. By advocating for assessment and demonstrating the use of the results for campus-wide decision making, these leaders can reinforce the utility and value of assessment to internal and external stakeholders.

Conclusion

Starting in 2017-2018, MSCHE will require institutions to adhere to new accreditation processes that align with revised standards. As these and other events unfold, MHEC will monitor relevant changes and, if needed, alter its processes for future institutional submissions of SLOAR. Student learning outcomes assessment will likely endure ongoing scrutiny by both accrediting

bodies and the federal government. Regardless, MHEC will continue to work with institutions in order to ensure that teaching and learning are continuously improving. This, in turn, will lead to better outcomes for students.