WASC

PROGRAM REVIEW

Rubric for Assessing the Integration of Student Learning Assessment into Program Reviews

Criterion	Initial	Emerging	Developed	Highly Developed
Required Elements of the Self-Study	Program faculty may be required to provide a list of program-level student learning outcomes.	Faculty are required to provide the program's student learning outcomes and summarize annual assessment findings.	Faculty are required to provide the program's student learning outcomes, annual assessment studies, findings, and resulting changes. They may be required to submit a plan for the next cycle of assessment studies.	Faculty are required to evaluate the program's student learning outcomes, annual assessment findings, bench-marking results, subsequent changes, and evidence concerning the impact of these changes. They present a plan for the next cycle of assessment studies.
Process of Review	Internal and external reviewers do not address evidence concerning the quality of student learning in the program other than grades.	Internal and external reviewers address indirect and possibly direct evidence of student learning in the program; they do so at the descriptive level, rather than providing an evaluation.	Internal and external reviewers analyze direct and indirect evidence of student learning in the program and offer evaluative feedback and suggestions for improvement. They have sufficient expertise to evaluate program efforts; departments use the feedback to improve their work.	Well-qualified internal and external reviewers evaluate the program's learning outcomes, assessment plan, evidence, benchmarking results, and assessment impact. They give evaluative feedback and suggestions for improve-ment. The department uses the feedback to improve student learning.
Planning and Budgeting	The campus has not integrated program reviews into planning and budgeting processes.	The campus has attempted to integrate program reviews into planning and budgeting processes, but with limited success.	The campus generally integrates program reviews into planning and budgeting processes, but not through a formal process.	The campus systematically integrates program reviews into planning and budgeting processes, e.g., through negotiating formal action plans with mutually agreed-upon commitments.
Annual Feedback on Assessment Efforts	No individual or committee on campus provides feedback to departments on the quality of their outcomes, assessment plans, assessment studies, impact, etc.	An individual or committee occasionally provides feedback on the quality of outcomes, assessment plans, assessment studies, etc.	A well-qualified individual or committee provides annual feedback on the quality of outcomes, assessment plans, assessment studies, etc. Departments use the feedback to improve their work.	A well-qualified individual or committee provides annual feedback on the quality of outcomes, assessment plans, assessment studies, benchmarking results, and assessment impact. Departments effectively use the feedback to improve student learning. Follow-up activities enjoy institutional support
The Student Experience	Students are unaware of and uninvolved in program review.	Program review may include focus groups or conversations with students to follow up on results of surveys	The internal and external reviewers examine samples of student work, e.g., sample papers, portfolios and capstone projects. Students may be invited to discuss what they learned and how they learned it.	Students are respected partners in the program review process. They may offer poster sessions on their work, demon-strate how they apply rubrics to self-assess, and/or provide their own evaluative feedback.

How Visiting Team Members Can Use the Program Review Rubric

Conclusions should be based on a review of program-review documents and discussion with relevant campus representatives, such as department chairs, deans, and program review committees.

The rubric has five major dimensions:

1. **Self-Study Requirements**. The campus should have explicit requirements for the program's self-study, including an analysis of the program's learning outcomes and a review of the annual assessment studies conducted since the last program review. Faculty preparing the self-study should reflect on the accumulating results and their impact; and they should plan for the next cycle of assessment studies. As much as possible, programs should benchmark findings against similar programs on other campuses. Questions: Does the campus require self-studies that include an analysis of the program's learning outcomes, assessment studies, assessment results, benchmarking results, and assessment impact, including the impact of changes made in response to earlier studies? Does the campus require an updated assessment plan for the subsequent years before the next program review?
2. **Self-Study Review**. Internal reviewers (on-campus individuals, such as deans and program review committee members) and external reviewers (off-campus individuals, usually disciplinary experts) should evaluate the program's learning outcomes, assessment plan, assessment evidence, benchmarking results, and assessment impact; and they should provide evaluative feedback and suggestions for improvement. Questions: Who reviews the self-studies? Do they have the training or expertise to provide effective feedback? Do they routinely evaluate the program's learning outcomes, assessment plan, assessment evidence, benchmarking results, and assessment impact? Do they provide suggestions for improvement? Do departments effectively use this feedback to improve student learning?
3. **Planning and Budgeting**. Program reviews should not be *pro forma* exercises; they should be tied to planning and budgeting processes, with expectations that increased support will lead to increased effectiveness, such as improving student learning and retention rates. Questions. Does the campus systematically integrate program reviews into planning and budgeting processes? Are expectations established for the impact of planned changes?
4. **Annual Feedback on Assessment Efforts**. Campuses moving into the culture of evidence often find considerable variation in the quality of assessment efforts across programs, and waiting for years to provide feedback to improve the assessment process is unlikely to lead to effective campus practices. While program reviews encourage departments to reflect on multi-year assessment results, some programs are likely to require more immediate feedback, usually based on a required, annual assessment report. This feedback might be provided by an Assessment Director or Committee, relevant Dean or Associate Dean, or others; and whoever has this responsibility should have the expertise to provide quality feedback. Questions: Does someone have the responsibility for providing annual feedback on the assessment process? Does this person or team have the expertise to provide effective feedback? Does this person or team routinely provide feedback on the quality of outcomes, assessment plans, assessment studies, benchmarking results, and assessment impact? Do departments effectively use this feedback to improve student learning?
5. **The Student Experience**. Students have a unique perspective on a given program of study: they know better than anyone what it means to go through it as a student. Program review should take advantage of that perspective and build it into the review. Questions: Are students aware of the purpose and value of program review? Are they involved in preparations and the self-study? Do they have an opportunity to interact with internal or external reviewers, demonstrate and interpret their learning, and provide evaluative feedback?

WASC

PORTFOLIOS

Rubric for Assessing the Use of Portfolios for Assessing Program Learning Outcomes

Criterion	Initial	Emerging	Developed	Highly Developed
Clarification of Students' Task	Instructions to students for portfolio development provide insufficient detail for them to know what faculty expect. Instructions may not identify outcomes to be addressed in the portfolio.	Students receive some written instructions for their portfolios, but they still have problems determining what is required of them and/or why they are compiling a portfolio.	Students receive written instructions that describe faculty expectations in detail and include the purpose of the portfolio, types of evidence to include, role of the reflective essay (if required), and format of the finished product.	Students in the program understand the portfolio requirement and the rationale for it, and they view the portfolio as helping them develop self-assessment skills. Faculty may monitor the developing portfolio to provide formative feedback and/or advise individual students.
Valid Results	It is not clear that valid evidence for each relevant outcome is collected and/or individual reviewers use idiosyncratic criteria to assess student work.	Appropriate evidence is collected for each outcome, and faculty have discussed relevant criteria for assessing each outcome.	Appropriate evidence is collected for each outcome; faculty use explicit criteria, such as agreed-upon rubrics, to assess student attainment of each outcome. Rubrics are usually shared with students.	Assessment criteria, e.g., in the form of rubrics, have been pilot-tested and refined over time; they are shared with students, and student may have helped develop them. Feedback from external reviewers has led to refinements in the assessment process. The department also uses external benchmarking data.
Reliable Results	Those who review student work are not calibrated to apply assessment criteria in the same way, and there are no checks for inter-rater reliability.	Reviewers are calibrated to apply assessment criteria in the same way or faculty routinely check for inter-rater reliability.	Reviewers are calibrated to apply assessment criteria in the same way, and faculty routinely check for inter-rater reliability.	Reviewers are calibrated; faculty routinely find that assessment data have high inter-rater reliability.
Results Are Used	Results for each outcome are collected, but they are not discussed among the faculty.	Results for each outcome are collected and discussed by the faculty, but results have not been used to improve the program.	Results for each outcome are collected, discussed by faculty, and used to improve the program.	Faculty routinely discuss results, plan needed changes, secure necessary resources, and implement changes. They may collaborate with others, such as librarians or Student Affairs professionals, to improve student learning. Students may also participate in discussions and/or receive feedback, either individual or in the aggregate. Follow-up studies confirm that changes have improved learning.
If e-Portfolios Are Used	There is no technical support for students or faculty to learn the software or to deal with problems.	There is informal or minimal formal support for students and faculty.	Formal technical support is readily available and proactively assists in learning the software and solving problems.	Support is readily available, proactive, and effective. Tech support personnel may also participate in refining the overall portfolio process.

How Visiting Team Members Can Use the Portfolio Rubric

Portfolios can serve many purposes besides assessment; in fact, these other purposes are actually much more common. Portfolios may be compiled so students can share their work with family and friends. They may be designed to build students' confidence by showing development over time or by displaying best work. They may be used for advising and career counseling, or so students can show their work during a job interview. The first thing a team needs to do is determine that the portfolios are used for *assessment*, and not for another purpose.

Conclusions about the quality of the assessment process should be based on discussion with relevant department members (e.g., chair, assessment coordinator, faculty, students) and a review of the program's written portfolio assignment. Two common types of portfolios are:

- Showcase portfolios—collections of each student's best work
- Developmental portfolios—collections of work from early, middle, and late stages in the student's academic career that demonstrate growth

Faculty generally require students to include a reflective essay that describes how the evidence in the portfolio demonstrates their achievement of program learning outcomes. Sometimes faculty monitor developing portfolios to provide formative feedback and/or advising to students, and sometimes they collect portfolios only as students near graduation. Portfolio assignments should clarify the purpose of the portfolio, what kinds of evidence should be included, and the format (e.g., paper vs. e-portfolios); and students should view the portfolio as contributing to their personal development.

***The rubric has five major dimensions and a fifth dimension limited to e-portfolios*:**

1. **Clarification of Students' Task**. Most students have never created a portfolio, and they need explicit guidance. Questions. Does the portfolio assignment provide sufficient detail so students understand the purpose, the types of evidence to include, the learning outcomes to address, the role of the reflective essay (if any), and the required format? Do students view the portfolio as contributing to their ability to self-assess? Do faculty use the developing portfolios to assist individual students?
2. **Valid Results**. Sometimes portfolios lack valid evidence for assessing particular outcomes. For example, portfolios may not allow faculty to assess how well students can deliver oral presentations. Judgments about that evidence need to be based on well-established, agreed-upon criteria that specify (usually in rubrics) how to identify work that meets or exceeds expectations. Questions: Do the portfolios systematically include valid evidence for each targeted outcome? Are faculty using well-established, agreed-upon criteria, such as rubrics, to assess the evidence for each outcome? Have faculty pilot tested and refined their process? Are criteria shared with students? Are they collaborating with colleagues at other institutions to secure benchmarking (comparison) data?
3. **Reliable Results**. Well-qualified judges should reach the same conclusions about a student's achievement of a learning outcome, demonstrating inter-rater reliability. If two judges independently assess a set of materials, their ratings can be correlated. Sometimes a discrepancy index is used. How often do the two raters give identical ratings, ratings one point apart, ratings two points apart, etc.? Data are reliable if the correlation is high and/or if discrepancies are small. Raters generally are calibrated ("normed") to increase reliability. Calibration usually involves a training session in which raters apply rubrics to pre-selected examples of student work that vary in quality, then reach consensus about the rating each example should receive. The purpose is to ensure that all raters apply the criteria in the same way so that each student's product would receive the same score, regardless of rater. Questions: Are reviewers calibrated? Are checks for inter-rater reliability made? Is there evidence of high inter-rater reliability?
4. **Results Are Used**. Assessment is a process designed to monitor and improve learning, so assessment findings should have an impact. Faculty should reflect on results for each outcome and decide if they are acceptable or disappointing. If results do not meet their standards, faculty should determine what changes should be made, e.g., in pedagogy, curriculum, student support, or faculty support. Questions: Do faculty collect assessment results, discuss them, and reach conclusions about student achievement? Do they develop explicit plans to improve student learning? Do they implement those plans? Do they have a history of securing necessary resources to support this implementation? Do they collaborate with other campus professionals to improve student learning? Do follow-up studies confirm that changes have improved learning?
5. **If e-Portfolios Are Used.** Faculty and students alike require support, especially when a new software program is introduced. Lack of support can lead to frustration and failure of the process. Support personnel may also have useful insights into how the portfolio assessment process can be refined. Questions: What is the quality and extent of technical support? Of inclusion in review and refinement of the portfolio process? What is the overall level of faculty and student satisfaction with the technology and support services?

GENERAL EDUCATION ASSESSMENT
Rubric for Evaluating General Education Assessment Process

Criterion	Initial	Emerging	Developed	Highly Developed
GE Outcomes	GE learning outcomes have not yet been developed for the entire GE program; there may be one or two common ones, e.g., writing, critical thinking.	Learning outcomes have been developed for the entire GE program, but list is problematic (e.g. too long, too short, unconnected to mission and values). Outcomes do not lend themselves to demonstrations of student learning.	The list of outcomes is a well-organized set of reasonable outcomes that focus on the most important knowledge, skills, and values of the GE program. Outcomes express learning can be demonstrated. Work to define levels of performance is beginning.	The list of outcomes is reasonable and appropriate. Outcomes describe how students can demonstrate learning. Faculty have agreed on explicit criteria, such as rubrics, for assessing students' mastery and have identified exemplars of student performance at varying levels for each outcome.
Curriculum Alignment with Outcomes	There is no clear relationship between the outcomes and the GE curriculum. Students may not have opportunity to develop each outcome adequately.	Students appear to have reasonable opportunities to develop each of the GE outcomes. Curriculum map may indicate opportunities to acquire outcomes. Sequencing and frequency of opportunities may be problematic	The curriculum is explicitly designed to provide opportunities for students to learn and to develop increasing sophistication with respect to each outcome. Design may be summarized in a curriculum map that shows "beginning," "intermediate" and "advanced" treatment of outcomes.	GE curriculum, pedagogy, grading, advising, etc. explicitly aligned with GE outcomes. Curriculum map and rubrics in use well known and consistently used. Co-curriculum and relevant student support services are also viewed as resources for GE learning and aligned with GE outcomes.
Assessment Planning	There is no formal plan for assessing each GE outcome. There is no coordinator or committee that takes responsibility for the program or implementation of its assessment plan.	GE assessment relies on short-term planning, such as selecting which outcome(s) to assess in the current year. Interpretation and use of findings for improvement are implicit rather than planned or funded. There is no individual or committee "in charge."	The campus has a reasonable, multi-year assessment plan that identifies when each GE outcome will be assessed. The plan includes specific mechanisms for interpretation and use of findings for improvement. A coordinator or committee is charged to oversee the program and its assessment.	The campus has a fully articulated, sustainable, multi-year assessment plan that describes when and how each outcome will be assessed. A coordinator or committee leads review and revision of the plan, as needed, based on experience and feedback from internal & external reviewers. The campus uses some form of comparative data (e.g., own past record, aspirational goals, external benchmarking).

Assessment Implementation	It is not clear that potentially valid evidence for each GE outcome is collected and/or individual reviewers use idiosyncratic criteria to assess student work.	Appropriate evidence is collected and faculty have discussed relevant criteria for assessing each outcome. Reviewers of student work are calibrated to apply assessment criteria in the same way, and/ or faculty check for inter-rater reliability.	Appropriate evidence is collected and faculty use explicit criteria, such as rubrics, to assess student attainment of each outcome. Reviewers of student work are calibrated to apply assessment criteria in the same way, and faculty routinely check for inter-rater reliability.	Assessment criteria, such as rubrics, have been pilot-tested and refined over time; and they usually are shared with students. Reviewers of student work are calibrated, and faculty routinely find high inter-rater reliability. Faculty take comparative data into account when interpreting results and deciding on changes to improve learning.
Use of Results	Results for GE outcomes are collected, but relevant faculty do not discuss them. There is little or no collective use of findings. Students are unaware of, uninvolved in the process.	Results for each GE outcome are collected and discussed by relevant faculty; results have been used occasionally to improve the GE program. Students are vaguely aware of outcomes and assessments to improve their learning.	Results for each outcome are collected, discussed by relevant faculty and others, and regularly used to improve the GE program. Students are very aware of and engaged in improvement of their GE learning.	Relevant faculty routinely discuss results, plan improvements, secure necessary resources, and implement changes. They may collaborate with others, such as librarians, student affairs professionals, students, to improve the program. Follow-up studies confirm that changes have improved learning.

How Visiting Team Members Can Use the GE Assessment Rubric

Conclusions should be based on review of the GE program's written assessment record and discussion with relevant campus representatives (e.g., GE chair, GE Assessment Coordinator, faculty who teach GE courses). Discussion should validate that the reality matches the written record.

The rubric has five major dimensions:

1. **GE Outcomes**. The set of GE learning outcomes should be a comprehensive list of the most important knowledge, skills, and values students learn in the GE program. There is no strict rule concerning the optimum number of outcomes, but quality is more important than quantity. Faculty should not confuse learning processes (e.g., completing a science lab) with learning outcomes (what is learned in the science lab, such as ability to apply the scientific method). Outcome statements should specify what students do to demonstrate their learning. For example, an outcome might state that "Students who complete the GE program can explain major concepts and theories in at least two social science disciplines." This outcome is assessable because faculty can rate the quality of students' explanations. Criteria for assessing student work usually are specified in rubrics, and faculty should identify examples of varying levels of student performance, such as work that does not meet expectations, that meets expectations, and exceeds expectations. Questions. Is the list of outcomes reasonable and appropriate? Do the outcomes express how students can demonstrate learning? Have faculty agreed on explicit criteria, such as rubrics, for assessing each outcome? Do they have exemplars of work representing different levels of mastery for each outcome?

2. **Curriculum Alignment**. Students cannot be held responsible for mastering learning outcomes unless the GE program systematically supports their development. The GE curriculum should be explicitly designed to provide opportunities for students to develop increasing sophistication with respect to each outcome. This design often is summarized in a curriculum map—a matrix that shows the relationship between GE courses and GE learning outcomes. Pedagogy and grading should align with outcomes to foster growth and provide students helpful feedback on their development. Relevant student services (e.g., advising and tutoring centers) and the co-curriculum (e.g., student clubs and campus events) should also be designed to support development of the learning outcomes, since learning occurs outside the classroom as well as within it. Questions. Is the GE curriculum explicitly aligned with program outcomes? Do faculty select effective pedagogies and use grading to promote learning? Are student support services and the co-curriculum explicitly aligned to promote student development of GE learning outcomes?

3. **Assessment Planning**. Faculty should develop explicit, sustainable plans for assessing each GE outcome. They need not assess every outcome every year, but they should have a plan to cycle through the outcomes over a reasonable period of time, such as the period for program review cycles. Experience and feedback from external reviewers should guide plan revision. Questions. Does the campus have a GE assessment plan? Does the plan clarify when, how, and how often each outcome will be

assessed? Will all outcomes be assessed over a reasonable period of time? Is the plan sustainable? Supported by appropriate resources? Are plans revised, as needed, based on experience and feedback from external reviewers? Does the plan include collection of comparative data?

4. **Assessment Implementation**. GE assessment data should be valid and reliable. A valid assessment of a particular outcome leads to accurate conclusions concerning students' achievement of that outcome. Sometimes campuses collect assessment data that do not have the potential to be valid. For example, a multiple-choice test may not collect information that allows faculty to make judgments about students' ability to explain phenomena. Assessment requires the collection of valid evidence and judgments about that evidence that are based on agreed-upon criteria that specify how to identify work that meets or exceeds expectations. These criteria usually are specified in rubrics. Well-qualified judges should reach the same conclusions about individual student's achievement of a learning outcome, demonstrating inter-rater reliability. If two judges independently assess a set of materials, their ratings can be correlated. Sometimes a discrepancy index is used. How often do the two raters give identical ratings, ratings one point apart, ratings two points apart, etc.? Data are reliable if the correlation is high and/or if the discrepancies are small. Raters generally are calibrated ("normed") to increase reliability. Calibration usually involves a training session in which raters apply rubrics to pre-selected examples of student work that vary in quality; then they reach consensus about the rating each example should receive. The purpose is to ensure that all raters apply the criteria in the same way so that each student's product would receive the same score, regardless of rater. Faculty may take external benchmarking data or other comparative data into account when interpreting results. Questions: Do GE assessment studies systematically collect valid evidence for each targeted outcome? Do faculty use agreed-upon criteria such as rubrics for assessing the evidence for each outcome? Do they share the criteria with their students? Are those who assess student work calibrated in the use of assessment criteria? Does the campus routinely document high inter-rater reliability? Do faculty pilot test and refine their assessment processes? Do they take external benchmarking (comparison) data into account when interpreting results?

5. **Use of Results**. Assessment is a process designed to monitor and improve learning, so assessment findings should have an impact. Faculty should reflect on results for each outcome and decide if they are acceptable or disappointing. If results do not meet faculty standards, faculty (and others, such as student affairs personnel, librarians, tutors) should determine which changes should be made, e.g., in pedagogy, curriculum, student support, or faculty support. Questions: Do faculty collect assessment results, discuss them, and reach conclusions about student achievement? Do they develop explicit plans to improve student learning? Do they implement those plans? Do they have a history of securing necessary resources to support this implementation? Do they collaborate with other campus professionals to improve student learning? Do follow-up studies confirm that changes have improved learning?

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CAPSTONES

Rubric for Assessing the Use of Capstone Experiences for Assessing Program Learning Outcomes

Criterion	Initial	Emerging	Developed	Highly Developed
Relevant Outcomes and Lines of Evidence Identified	It is not clear which program outcomes will be assessed in the capstone course.	The relevant outcomes are identified, e.g., ability to integrate knowledge to solve complex problems; however, concrete plans for collecting evidence for each outcome have not been developed.	Relevant outcomes are identified. Concrete plans for collecting evidence for each outcome are agreed upon and used routinely by faculty who staff the capstone course.	Relevant evidence is collected; faculty have agreed on explicit criteria statements, e.g., rubrics, and have identified examples of student performance at varying levels of mastery for each relevant outcome.
Valid Results	It is not clear that potentially valid evidence for each relevant outcome is collected and/or individual faculty use idiosyncratic criteria to assess student work or performances.	Faculty have reached general agreement on the types of evidence to be collected for each outcome; they have discussed relevant criteria for assessing each outcome but these are not yet fully defined.	Faculty have agreed on concrete plans for collecting relevant evidence for each outcome. Explicit criteria, e.g., rubrics, have been developed to assess the level of student attainment of each outcome.	Assessment criteria, such as rubrics, have been pilot-tested and refined over time; they usually are shared with students. Feedback from external reviewers has led to refinements in the assessment process, and the department uses external benchmarking data.
Reliable Results	Those who review student work are not calibrated to apply assessment criteria in the same way; there are no checks for inter-rater reliability.	Reviewers are calibrated to apply assessment criteria in the same way or faculty routinely check for inter-rater reliability.	Reviewers are calibrated to apply assessment criteria in the same way, and faculty routinely check for inter-rater reliability.	Reviewers are calibrated, and faculty routinely find assessment data have high inter-rater reliability.
Results Are Used	Results for each outcome may or may not be are collected. They are not discussed among faculty.	Results for each outcome are collected and may be discussed by the faculty, but results have not been used to improve the program.	Results for each outcome are collected, discussed by faculty, analyzed, and used to improve the program.	Faculty routinely discuss results, plan needed changes, secure necessary resources, and implement changes. They may collaborate with others, such as librarians or Student Affairs professionals, to improve results. Follow-up studies confirm that changes have improved learning.
The Student Experience	Students know little or nothing about the purpose of the capstone or outcomes to be assessed. It is just another course or requirement.	Students have some knowledge of the purpose and outcomes of the capstone. Communication is occasional, informal, left to individual faculty or advisors.	Students have a good grasp of purpose and outcomes of the capstone and embrace it as a learning opportunity. Information is readily avail-able in advising guides, etc.	Students are well-acquainted with purpose and outcomes of the capstone and embrace it. They may participate in refining the experience, outcomes, and rubrics. Information is readily available.

How Visiting Team Members Can Use the Capstone Rubric

Conclusions should be based on discussion with relevant department members (e.g., chair, assessment coordinator, faculty). A variety of capstone experiences can be used to collect assessment data, such as:

- courses, such as senior seminars, in which advanced students are required to consider the discipline broadly and integrate what they have learned in the curriculum
- specialized, advanced courses
- advanced-level projects conducted under the guidance of a faculty member or committee, such as research projects, theses, or dissertations
- advanced-level internships or practica, e.g., at the end of an MBA program

Assessment data for a variety of outcomes can be collected in such courses, particularly outcomes related to integrating and applying the discipline, information literacy, critical thinking, and research and communication skills.

***The rubric has five major dimensions*:**

1. **Relevant Outcomes and Evidence Identified**. It is likely that not all program learning outcomes can be assessed within a single capstone course or experience. Questions: Have faculty explicitly determined which program outcomes will be assessed in the capstone? Have they agreed on concrete plans for collecting evidence relevant to each targeted outcome? Have they agreed on explicit criteria, such as rubrics, for assessing the evidence? Have they identified examples of student performance for each outcome at varying performance levels (e.g., below expectations, meeting, exceeding expectations for graduation)?
2. **Valid Results**. A valid assessment of a particular outcome leads to accurate conclusions concerning students' achievement of that outcome. Sometimes faculty collect evidence that does not have the potential to provide valid conclusions. For example, a multiple-choice test will not provide evidence of students' ability to deliver effective oral presentations. Assessment requires the collection of valid evidence and judgments about that evidence that are based on well-established, agreed-upon criteria that specify how to identify low, medium, or high-quality work. Questions: Are faculty collecting valid evidence for each targeted outcome? Are they using well-established, agreed-upon criteria, such as rubrics, for assessing the evidence for each outcome? Have faculty pilot tested and refined their process based on experience and feedback from external reviewers? Are they sharing the criteria with their students? Are they using benchmarking (comparison) data?
3. **Reliable Results**. Well-qualified judges should reach the same conclusions about individual student's achievement of a learning outcome, demonstrating inter-rater reliability. If two judges independently assess a set of materials, their ratings can be correlated. Sometimes a discrepancy index is used. How often do the two raters give identical ratings, ratings one point apart, ratings two points apart, etc.? Data are reliable if the correlation is high and/or if the discrepancies are small. Raters generally are calibrated ("normed") to increase reliability. Calibration usually involves a training session in which raters apply rubrics to pre-selected examples of student work that vary in quality, then reach consensus about the rating each example should receive. The purpose is to ensure that all raters apply the criteria in the same way so that each student's product receives the same score, regardless of rater. Questions: Are reviewers calibrated? Are checks for inter-rater reliability made? Is there evidence of high inter-rater reliability?
4. **Results Are Used**. Assessment is a process designed to monitor and improve learning, so assessment findings should have an impact. Faculty should reflect on results for each outcome and decide if they are acceptable or disappointing. If results do not meet faculty standards, faculty should determine which changes should be made, e.g., in pedagogy, curriculum, student support, or faculty support. Questions: Do faculty collect assessment results, discuss them, and reach conclusions about student achievement? Do they develop explicit plans to improve student learning? Do they implement those plans? Do they have a history of securing necessary resources to support this implementation? Do they collaborate with other campus professionals to improve student learning? Do follow-up studies confirm that changes have improved learning?

The Student Experience. Students should understand the purposes different educational experiences serve in promoting their learning and development and know how to take advantage of them; ideally they should also participate in shaping those experiences. Thus it is essential to communicate to students consistently and include them meaningfully. Questions: Are purposes and outcomes communicated to students? Do they understand how capstones support learning? Do they participate in reviews of the capstone experience, its outcomes, criteria, or related activities?

WSC

PROGRAM LEARNING OUTCOMES

Rubric for Assessing the Quality of Academic Program Learning Outcomes

Criterion	Initial	Emerging	Developed	Highly Developed
Comprehensive List	The list of outcomes is problematic: e.g., very incomplete, overly detailed, inappropriate, disorganized. It may include only discipline-specific learning, ignoring relevant institution-wide learning. The list may confuse learning processes (e.g., doing an internship) with learning outcomes (e.g., application of theory to real-world problems).	The list includes reasonable outcomes but does not specify expectations for the program as a whole. Relevant institution-wide learning outcomes and/or national disciplinary standards may be ignored. Distinctions between expectations for undergraduate and graduate programs may be unclear.	The list is a well-organized set of reasonable outcomes that focus on the key knowledge, skills, and values students learn in the program. It includes relevant institution-wide outcomes (e.g., communication or critical thinking skills). Outcomes are appropriate for the level (undergraduate vs. graduate); national disciplinary standards have been considered.	The list is reasonable, appropriate, and comprehensive, with clear distinctions between undergraduate and graduate expectations, if applicable. National disciplinary standards have been considered. Faculty have agreed on explicit criteria for assessing students' level of mastery of each outcome.
Assessable Outcomes	Outcome statements do not identify what students can do to demonstrate learning. Statements such as "Students understand scientific method" do not specify how understanding can be demonstrated and assessed.	Most of the outcomes indicate how students can demonstrate their learning.	Each outcome describes how students can demonstrate learning, e.g., "Graduates can write reports in APA style" or "Graduates can make original contributions to biological knowledge."	Outcomes describe how students can demonstrate their learning. Faculty have agreed on explicit criteria statements, such as rubrics, and have identified examples of student performance at varying levels for each outcome.
Alignment	There is no clear relationship between the outcomes and the curriculum that students experience.	Students appear to be given reasonable opportunities to develop the outcomes in the required curriculum.	The curriculum is designed to provide opportunities for students to learn and to develop increasing sophistication with respect to each outcome. This design may be summarized in a curriculum map.	Pedagogy, grading, the curriculum, relevant student support services, and co-curriculum are explicitly and intentionally aligned with each outcome. Curriculum map indicates increasing levels of proficiency.
Assessment Planning	There is no formal plan for assessing each outcome.	The program relies on short-term planning, such as selecting which outcome(s) to assess in the current year.	The program has a reasonable, multi-year assessment plan that identifies when each outcome will be assessed. The plan may explicitly include analysis and implementation of improvements.	The program has a fully-articulated, sustainable, multi-year assessment plan that describes when and how each outcome will be assessed and how improvements based on findings will be implemented. The plan is routinely examined and revised, as needed.
The Student Experience	Students know little or nothing about the overall outcomes of the program. Communication of outcomes to students, e.g. in syllabi or catalog, is spotty or nonexistent.	Students have some knowledge of program outcomes. Communication is occasional and informal, left to individual faculty or advisors.	Students have a good grasp of program outcomes. They may use them to guide their own learning. Outcomes are included in most syllabi and are readily available in the catalog, on the web page, and elsewhere.	Students are well-acquainted with program outcomes and may participate in creation and use of rubrics. They are skilled at self-assessing in relation to the outcomes and levels of performance. Program policy calls for inclusion of outcomes in all course syllabi, and they are readily available in other program documents.

How Visiting Team Members Can Use the Learning Outcomes Rubric

Conclusions should be based on a review of learning outcomes and assessment plans. Although you can make some preliminary judgments about alignment based on examining the curriculum or a curriculum map, you will have to interview key departmental representatives, such as department chairs, faculty, and students, to fully evaluate the alignment of the learning environment with the outcomes.

The rubric has five major dimensions:

1. **Comprehensive List**. The set of program learning outcomes should be a short but comprehensive list of the most important knowledge, skills, and values students learn in the program, including relevant institution-wide outcomes such as those dealing with communication skills, critical thinking, or information literacy. Faculty generally should expect higher levels of sophistication for graduate programs than for undergraduate programs, and they should consider national disciplinary standards when developing and refining their outcomes, if available. There is no strict rule concerning the optimum number of outcomes, but quality is more important than quantity. Faculty should not confuse learning processes (e.g., completing an internship) with learning outcomes (what is learned in the internship, such as application of theory to real-world practice). Questions. Is the list reasonable, appropriate and well-organized? Are relevant institution-wide outcomes, such as information literacy, included? Are distinctions between undergraduate and graduate outcomes clear? Have national disciplinary standards been considered when developing and refining the outcomes? Are explicit criteria – as defined in a rubric, for example – available for each outcome?
2. **Assessable Outcomes**. Outcome statements should specify what students can do to demonstrate their learning. For example, an outcome might state that "Graduates of our program can collaborate effectively to reach a common goal" or that "Graduates of our program can design research studies to test theories and examine issues relevant to our discipline." These outcomes are assessable because faculty can observe the quality of collaboration in teams, and they can review the quality of student-created research designs. Criteria for assessing student products or behaviors usually are specified in rubrics, and the department should develop examples of varying levels of student performance (i.e., work that does not meet expectations, meets expectations, and exceeds expectations) to illustrate levels. Questions. Do the outcomes clarify how students can demonstrate learning? Have the faculty agreed on explicit criteria, such as rubrics, for assessing each outcome? Do they have examples of work representing different levels of mastery for each outcome?
3. **Alignment**. Students cannot be held responsible for mastering learning outcomes unless they have participated in a program that systematically supports their development. The curriculum should be explicitly designed to provide opportunities for students to develop increasing sophistication with respect to each outcome. This design often is summarized in a curriculum map—a matrix that shows the relationship between courses in the required curriculum and the program's learning outcomes. Pedagogy and grading should be aligned with outcomes to foster and encourage student growth and to provide students helpful feedback on their development. Since learning occurs within and outside the classroom, relevant student services (e.g., advising and tutoring centers) and co-curriculum (e.g., student clubs and campus events) should be designed to support the outcomes. Questions. Is the curriculum explicitly aligned with the program outcomes? Do faculty select effective pedagogy and use grading to promote learning? Are student support services and the co-curriculum explicitly aligned to promote student development of the learning outcomes?
4. **Assessment Planning**. Faculty should develop explicit plans for assessing each outcome. Programs need not assess every outcome every year, but faculty should have a plan to cycle through the outcomes over a reasonable period of time, such as the period for program review cycles. Questions. Does the plan clarify when, how, and how often each outcome will be assessed? Will all outcomes be assessed over a reasonable period of time? Is the plan sustainable, in terms of human, fiscal, and other resources? Are assessment plans revised, as needed?
5. **The Student Experience**. At a minimum, students should be aware of the learning outcomes of the program(s) in which they are enrolled; ideally, they should be included as partners in defining and applying the outcomes and the criteria for levels of sophistication. Thus it is essential to communicate learning outcomes to students consistently and meaningfully. Questions: Are the outcomes communicated to students? Do students understand what the outcomes mean and how they can further their own learning? Do students use the outcomes and criteria to self-assess? Do they participate in reviews of outcomes, criteria, curriculum design, or related activities?