

“Celebrating Student Learning”

Assessment Handbook



What do you want your students to know and be able to do?

How will you know what your students have learned?

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Assessment Handbook

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Preface - Assessment of Student Learning at Western Michigan University

Western Michigan University (WMU) is committed to the success of our students. That success is predicated on the idea that students graduate from the university having added to the knowledge they had entering WMU. Assessment of student learning is crucial to ensuring and documenting that students get the added value they should expect from the institution.

Assessment at WMU is an outcome-based process and occurs in both academic and learner support units. Units determine the learning outcomes they desire when a student completes either an individual course or program of study or services they provide. Various assessment tools are used to measure the degree to which the outcomes have been achieved. Benchmarks are established for each outcome and the data obtained through various assessment tools is compared to the benchmarks. If the results show that students are not reaching the stated learning outcomes at an acceptable level, the faculty or staff members of the unit make changes in the course/program. Assessment is then used to determine if the changes result in an increased number of students reaching the desired outcome(s).

Assessment plans have been written for academic units and learner support units. Since no single educational or process outcome is common to all units, the plans show the diversity across campus. Different units use various assessment tools as they apply. Assessment plans are not static and can change and evolve as the unit discovers what activities are effective and which are not.

This Assessment Handbook is designed to help units carry out their assessment activities. It contains information, (from both internal and external sources), on how to write good assessment outcomes, answers to frequently asked assessment questions, resources available on campus, and some sample assessment tools, among other things. This handbook will evolve over time in the same manner as assessment plans. It is hoped that the handbook will aid units in better assessing the learning achieved by our students.

Celebrating student learning,

Karen Stokes Chapo

Program Manager Assessment

Section 1 - What you need to know about assessment

Why do we assess student learning or development?

Western Michigan University touts itself as a student-centered research university. As such, students are the main focus of our mission. We must be continually concerned with what our students learn and do what we can to improve. Assessment is at the core of the process by which we measure student learning and improve programs. Students should receive clear learning objectives so they know what they are expected to learn. Data should be collected that measures that learning, and most importantly, that data should be used to make improvements. The use of the data to improve student learning is the essence of assessment. In addition to contributing to the improvement of student learning, assessment results are used to address standards and requirements of professional and regional accreditation agencies. While "assessment for accountability" is often used as a driving factor for initiating assessment activities, on-going assessment is key for instructional planning and program development.

How will assessment improve learning or development?

Gathering assessment data is in itself simply data collection. Assessment occurs when that data is analyzed to determine areas in which desired student learning is not occurring, or not occurring to the desired degree. Assessment in itself does not improve learning; it is the processes put in place due to the analysis of the data that improves learning.

Who should do assessment? Is this something extra for me to do?

Faculty and staff use assessment results when planning instruction, evaluating programs, and proposing curricular change. Assessment results provide information about the extent to which students have attained the intended learning outcomes and possess the knowledge, skills, and dispositions required for subsequent learning or professional practice.

How does assessment of student learning or development help faculty and staff?

Faculty and staff are deeply concerned that students leave their courses/programs with knowledge they didn't possess when they entered. Assessment gives us the answer to this question and suggests areas in which improvement can be made. In this way, faculty and staff become engaged in the learning process of their students.

Do assessment results affect faculty/staff evaluation?

WMU has stated from the outset that assessment results will not be used to evaluate faculty or staff. Doing this defeats the purpose. If faculty thinks that results will be used against them, they will be hesitant to do assessment. In reality, faculty who are doing effective assessment should be rewarded no matter what the outcome of the data.

It is important for students to know how they are being assessed. How can learning outcome assessment methods be communicated to students?

The easiest and possibly best way is to include this on the courses syllabus and discuss this during the first day of class or share with students prior to the start of a co-curricular program. It is always a good idea to link the specific learning outcomes of the course/program to the assessment methods being used. Faculty may feel that including this on the syllabus will make it too long. In that case, a short discussion of the assessment and how this relates to the learning outcomes can be given to the students as assignments are made.

How do faculty/staff within a unit identify student learning or development outcomes?

In some programs, an outside accreditation body dictates the learning outcomes. When this is not the case, the faculty or staff of a particular unit can develop the outcomes. A simple way to develop these outcomes is to think about the skills or knowledge you want students to possess when they complete your program. Ideally, these would be skills or knowledge they do not have when they begin the program. An outcome could enhance a skill of knowledge the student has when they enter the program, however.

Aren't course grades enough assessment?

The fact that a student gets a grade at the end of the course, or receives grades on particular assignments and exams, usually is not effective assessment and often doesn't supply much useful data. If a student gets a B in a class with 5 learning outcomes, it is impossible to tell how well the student achieved each one. One could assume that they learned each of the 5 at a B level, but this is only an assumption based upon no facts. It could be that the student achieved 4 of the 5 at an A level and flunked the fifth learning objective. The final grade of B does not indicate that the student did not achieve one of the learning outcomes. The same applies to grades on individual exams/assignments unless the exam/assignment is set up to assess only one learning objective.

What is the difference between direct and indirect assessment?

Direct assessment is characterized by the use of a particular tool used to measure how well a student has achieved a particular learning outcome. Examples of direct assessment are rubrics, embedded exam questions, and evaluation of portfolio material. Indirect assessment occurs when impressions of learning are obtained. Indirect methods usually consist of a student or employer survey. Most accreditation bodies prefer direct methods of assessment.

What is the definition of formative and summative assessment?

Formative assessment refers to low-stakes tools that identify misconceptions, struggles, and learning gaps. These tools provide a means to give feedback to students on their learning at a certain point in time and can help instructors to improve their teaching.

Summative assessments evaluate student learning, knowledge, proficiency or success at the conclusion of an instructional period, like a unit, course, or program. [Click on this link](#) to visit the Carnegie Mellon University Eberly Center website for more in-depth information.

How can I assess attitudes or other non-quantifiable outcomes?

Not all assessment tools need to result in a numerical evaluation. It is fine to develop an objective way to measure certain outcomes as long as the assessment is as consistent as possible from student to student. In many cases, for example, portfolios are an excellent assessment tool. The material within a portfolio can be assessed in an objective way using specific learning outcomes. Judgments can be made about how well the student achieved the learning outcomes using non-numerical ratings.

Why do we do assessment reports?

Assessment reports help to show what assessment activities have occurred, what actions have been taken because of those activities, and if the actions had the desired outcome. They also provide information about how results were used to make improvements. Periodically completing an assessment report can be a catalyst for reflecting and acting upon assessment planning efforts including:

- Determining the current relevance of outcomes
- Thinking about new ways to assess outcomes (if needed)
- Providing time to ponder assessment results to help determine where to focus efforts for improvement

and

- Creating an action plan to address areas that have been found to need improvement.

Where can we get help with assessment?

There are many resources available on campus for help with assessment. Karen Stokes Chapo (karen.stokeschapo@wmich.edu) is available for assistance and to answer questions. This handbook contains numerous internal and external online resources. There are also people available to consult with departments, programs, and/or individuals, as well as provide more formal presentations on assessment-related topics. To request a visit and for more information, contact the Office of Institutional Effectiveness at: #387-3867.

Section 2 - Tools for assessment

Outcomes

Tips on writing student learning outcomes and operational outcomes

Learning outcomes can be at the university, program or course level. They may be defined as the change in a student's knowledge or skills as a result of the student's experience. The focus of the learning outcomes should be on the results of learning, and not on the process used to accomplish the learning. The learning outcomes should be communicated with students so they understand the expectations. Having too many outcomes can be confusing and hard to achieve and assess. It is often advantageous to keep it simple with a core set of learning outcomes that make sense and have clear benefits for the students.

Try keeping the following questions in mind when developing learning outcomes.

- What are your goals? What knowledge or skills do you want students to possess when they finish the course/program?
- How will you know when a change in the student's knowledge or skills has occurred? What specifically will be different about the students?
- How will you assess the degree to which the students have achieved the learning outcome?

Resources for developing outcomes

Guide to writing learning outcomes - a resource worksheet from Anthology (formerly Campus) that will walk you the key components of outcome statements and provide some practice exercises.

Bloom's Taxonomy - may be helpful if you are writing outcomes for knowledge. It breaks down learning into six levels. Each level is defined in the flower-shaped table and sample verbs are given that may be used in writing the learning outcomes. You may want to decide which level of learning is desired for each learning outcome you are developing. Once you have decided that, the sample verbs may help you write the specific language.

Bloom's Taxonomy of the Cognitive Domain

Categories	Definition	Sample Verbs
Knowledge	Students can remember previously learned material. This may be small or large amounts of information, but students simply need to recall the information, they don't transform it in any way.	Defines, describes, identifies, labels, lists, matches, names, outlines, reproduces, selects, states
Comprehension	Students grasp the meaning of the material and can re-state it in their own words and interpret it by explaining or summarizing.	Converts, defends, distinguishes, estimates, explains, extends, generalizes, gives examples, infers, paraphrases, rewrites, summarizes
Application	Students can use the learned material in new and concrete situations. They can apply rules or formulas to problems they haven't previously encountered.	Changes, computes, demonstrates, manipulates, modifies, operates, predicts, prepares, produces, relates, solves
Analysis	Students can break down information or concepts into their component parts and describe the relationships among those parts. They can recognize the organizational principles involved in the material they have learned.	Breaks down, diagrams, differentiates, discriminates, distinguishes, illustrates, outlines, relates
Synthesis	Students can put parts together to form a new whole. They write papers or speeches, put together research proposals, and develop new classification schemes.	Categorizes, combines, composes, creates, designs, generates, reconstructs, writes
Evaluation	Students can judge the value of material (essays, novels, research reports, etc.) Their judgments are based on stated criteria, either criteria provided for the student or criteria selected by the student.	Appraises, concludes, criticizes, justifies, supports

Psychomotor Domain - useful for thinking about skill development

Simpson's interpretation of Psychomotor Domain (description and suggested verbs) - As with the Bloom's Taxonomy, once you decide the level of the skill desired, you can use the suggested verbs in the table to aid you in writing the learning outcome.

Level in Taxonomy	Sample Outcomes	Suggested Verbs
Perception (Including the translation of perceived cues into action)	"recognizes a malfunction by the sound of the machine." "relates the taste of food to the need for seasoning."	Choose, describe, detect, differentiate, distinguish, identify, isolate, relate, select, separate
Set (Readiness to take a particular type of action, including mental set, physical set, and emotional set)	"demonstrates proper bodily stance for batting a ball." "describes the steps in administering an injection."	Begin, display, explain, move, proceed, react, respond, show, start, volunteer
Guided Response (Early stages of learning a complex skill and includes imitation and trial & error)	"applies a first aid bandage as demonstrated" "determines best sequence for preparing a meal"	Assemble, build, calibrate, construct, dismantle, display, dissect, manipulate, measure, organize
Mechanism (Learned responses have become habitual and the skill can be performed with competence and proficiency)	"sets up laboratory equipment" "operates a caliper"	Same list as for guided response, with the skill being demonstrated independently and at a higher level of proficiency
Complex Overt Response (Skillful performance of motor acts that involve complex patterns)	"operates a power saw safely and accurately" "demonstrates correct form in the butterfly stroke"	Same list as above, again with greater skill, independence, and fluidity
Adaptation (Skills that are developed to the extent that the student is able to adapt to meet changing or new circumstances)	"adjusts pressure of massage to muscle tenderness" "modifies swimming stroke to counteract rough water"	Adapt, alter, change, rearrange, reorganize, revise, vary
Origination (Creating new movement patterns to fit situation or new problems)	"designs new dress style" "creates new exercise for physical therapy patient"	Arrange, combine, compose, construct, create, design, originate

Assessment Plan Resources

Resources for writing and revising an assessment plan

Assessment terms and resources for writing measurable outcomes

UASC template for writing an assessment plan

Writing Learning Outcomes Worksheet (developed by Anthology formerly Campuslabs)

Videos

2-Minute Video, "Writing Student Learning Outcomes"

"How to Write a Learning Outcome" (Anthology formerly Campuslabs website)

Writing Learning Outcomes Using Bloom's Taxonomy"

Websites useful for developing learning outcomes/objectives and other assessment-related resources

Indiana University-Purdue University Indianapolis (Writing Student Learning Outcomes)

University of Connecticut (Aligning to Course Objectives)

University of Rhode Island

University of West Florida

Rubrics

Rubrics are scoring tools that provide specific descriptions of expected student performance. They are especially helpful when assessing activities or assignments that appear “subjective” rather than “objective.” For example, when we say that we want to assess a student’s ability to think critically, a rubric can provide the specific expectations for “critical thinking.” Rubrics help students understand the scope of an assignment, the criteria for acceptable performance, and the range of performances possible. Rubrics assist teachers in defining criteria for grading or assessment. Rubrics typically consist of a list of required elements of an assignment along with descriptions of expectations for student work on each element. Below are links to several websites that will help to define the types of rubrics, provide guidance on how to build them, and numerous examples.

All about rubrics (Brown University, Harriet W. Sheridan Center for Teaching and Learning)

Tips on designing grading rubrics, (Brown University, Harriet W. Sheridan Center for Teaching and Learning)

AAC&U’s VALUE (Valid Assessment of Learning in Undergraduate Education project) rubrics

Online rubric generators: iRubric and RubiStar

Sample rubrics from a variety of disciplines and kinds of assignments, (from the University of North Carolina Wilmington)

WMU Essential Studies outcome rubrics

Teaching tools (Office of Faculty Development website)

WMUx instructional support

Section 3 - Technology for Assessment

Cognos Reports

Nuventive Improve (Formerly called TracDat)

Nuventive Improve is a web-based tool for storing departmental or program assessment plans. As some have called it, “It’s the garage to store your assessment information.” This tool houses the historical progress of assessment for any department or unit. Nuventive Improve is a flexible, easy-to-use, and web-based solution that provides the critical framework for University-wide assessment, strategic planning, accreditation, and quality improvement processes.

This tool helps us track data for program improvement and enables follow-up to ensure that program changes that are made have the intended effect. Learning evidence and results can be easily retrieved. By using this tool departments and/or units can tie program assessment to University-wide assessment. The pre-formatted reports are dynamically available at any time to share electronically

All departmental or unit assessment plans are to be entered into Nuventive Improve. If you would like to set up an account or need assistance with using the tool contact please contact Karen Stokes Chapo at: karen.stokeschapo@wmich.edu

Login to Nuventive Improve:

<https://itent-tracdat.cc.wmich.edu:8443/tracdat/>

[WMU Nuventive Improve Version 5.5 Userguide](#)

WMU’s Assessment Website: <http://www.wmich.edu/assessment>

The above site contains information about all things assessment at WMU, including information about securing funding for assessment grants, assessment recognition/awards, institutional assessment participation, course evaluation system, resources and more.

[WMU Essential Studies assessment in Elearning](#)

Section 4 – WMU Essential Studies assessment resources

Faculty resources

Outcome rubrics

Section 5 - Programs and Assistance

Assessment Mentor Program

The Assessment Mentor Program is designed to provide help for those would like assistance in learning more about assessment of student learning, developing an assessment plan, restructuring and/or rewriting student learning outcomes and more. The University Assessment Steering Committee has identified several mentors who are available for faculty, staff and departments to work with to assist them with their assessment efforts. If you are interested, please contact the Office of Institutional Effectiveness and we can connect you with a mentor: uaus-info@wmich.edu

WMU Assessment in Action (AIA) Conference

The Assessment in Action Conference is an annual collaborative program sponsored by the Office of Institutional Effectiveness to provide the WMU community with a venue to learn and share ideas about assessment. This event provides access to assessment resources, time to network with colleagues, as well as focused skill-building learning in areas of assessment. Breakout session topics differ each year and topics will be chosen based on the needs of constituents. The WMU Assessment in Action Conference is held on a Friday each year in March or early April.

2021 AIA Conference session recordings

The link above will take you the sight to view the recordings of the sessions held at the April 9, 2021 virtual conference.

Section 6 - Assessment contacts

- College of Arts and Sciences - James Cousins
- College of Aviation - Ray Thompson
- Haworth College of Business - Devrim Yaman
- College of Education and Human Development - Marcia Feters
- College of Engineering and Applied Sciences - Matthew Cavalli
- College of Fine Arts - Scott Irelan
- College of Health and Human Services - Ron Cisler
- Division of Student Affairs - Ciji Heiser
- Office of Institutional Effectiveness - Karen Stokes Chapo
- The Graduate College: Christine Byrd-Jacobs
- University College - Ewa Urban

Section 7 - University assessment committees

University Assessment Steering Committee

Purpose

- Collaborate with campus stakeholders to develop and support a culture of assessment for continuous improvement with an emphasis on student learning outcomes.
- Guide assessment programs for both academic and learner support units to help improve the overall learning experience of WMU students.
- Aid faculty, department chairs, college administrators and staff in developing useful and precise tools of assessment in their classes, programs and colleges.
- Promote and support assessment by providing education in best practices, recognition, information, research support and funding, and faculty/staff development opportunities.
- Lead and support a periodic and university-wide assessment of programs to help improve the educational experience and make recommendations to the academic departments, learner support units, the Faculty Senate and the provost on areas for improvement.
- Seek to align assessment, accreditation and program review processes and support WMU's departments with accreditation institutions/bodies where appropriate.

Click the following link for more information: [UASC Purpose, Activities and Guidelines](#)

Assessment in Action planning committee

Assessment in Action is a subcommittee of the University Assessment Steering Committee that supports the University community in assessment to provide information, training, and support. This committee implements ideas from the UASC including organizing workshops on assessment for the university, supporting assessment technology and resources, and historically publishing the online Assessment Matters @ WMU newsletter (replaced by the Office of Institutional Effectiveness newsletter in fall 2020).

Section 8 - Grants and awards

Assessment Mini Grants

The Office of Institutional Effectiveness, in collaboration with the University Assessment Steering Committee, was pleased to offer the 2021 Assessment Mini Grant Program for the purpose of supporting assessment-related projects to help advance departments, programs and units at Western Michigan University to the next stage of the student learning outcomes assessment cycle. Funding of \$10,000 was available this fiscal year, (March 22 through June 30, 2021), with a maximum award of \$1000.

Assessment Fellows Grants

The University Assessment Steering Committee Assessment Fellows Grant program is designed to provide financial support to faculty and staff at Western Michigan University who are interested in developing a project based on student learning outcomes assessment. The program has been put on hold for now, but we are hopeful that we can continue with it in the future.

Western Michigan University Assessment Excellence Awards

These annual awards are presented by the University Assessment Steering Committee to acknowledge and celebrate assessment work that has led to verifiable improvements in academic or learner support programs. We are always excited to learn about and honor the great work that is being done to use assessment results for continuous improvement of learning and student success at WMU. Click on the guidelines linked below for more information. For questions, contact Karen Stokes Chapo at karen.stokeschapo@wmich.edu.

Collaboration Award

This award is designed to recognize multiple individual WMU employees from the same or different departments and/or units who have collaborated to make a significant contribution in the area of assessment of student learning.

- [Guidelines, summary and instructions](#)

Individual Award

This individual-based award is designed to recognize WMU employees who have made a significant contribution in the area of assessment of student learning.

- [Guidelines, summary and instructions](#)

Unit Award

This unit-based award is designed to recognize and showcase outstanding efforts in the area of assessment at WMU. An outstanding assessment process is characterized by the use of the results of assessment to improve the activities being assessed. Therefore, criteria for selection will emphasize the demonstration of program improvements as a result of the assessment program.

- Guidelines, summary and instructions

Section 9 – External resources

Assessment conferences

- [Assessment Institute](#)
- [Association of American Colleges and Universities: Events](#)
- [North Central Association Higher Learning Commission annual conference](#)

Readings on assessment

Websites

External institutional and organizational assessment websites:

- [American Association of Higher Education's 9 Principles of Good Practice for Assessing Student Learning](#)
- [Association for Institutional Research](#)
- [Ball State University](#)
- [Kansas State University](#)
- [National Institute for Learning Outcomes Assessment](#)
- [North Carolina State University](#)
- [NC State University Office of Institutional Research and Planning: Internet Resources for Higher Education Outcomes Assessment](#)
- [Practical Assessment, Research and Evaluation](#) (online journal 1999-present)
- [The National Teaching and Learning Forum](#) (Wiley online library)
- [University of Kentucky](#)



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