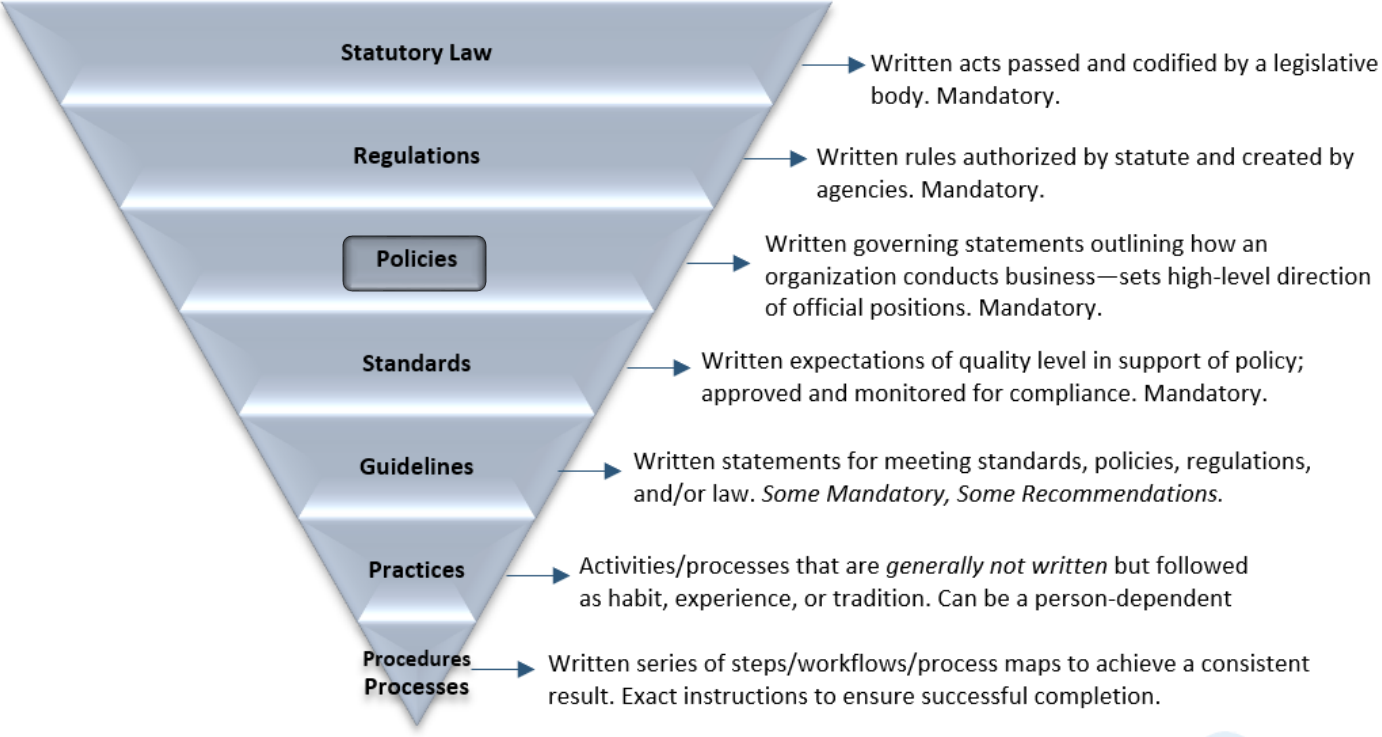# Dakota State University
Basic Assessment Definitions

Heads Up: Why can the language of assessment seem like a buffet table with too much food?
Different accreditors, regulatory agencies, grant organizations, and educational institutional have varying language for "assessment." Stakeholders are responsible to understand and apply whatever definitions apply in these circumstances. The definitions below are grounded in best practice assessment literature and reflect the intention of a common assessment language at DSU.

	Term	Dakota State University Operational Definitions for Assessment Purposes
1.	**Assessment** (Use of Information to Improve)	Assessment is the systematic basis for making inferences about learning and development through defining, gathering, analyzing, interpreting, and using information to increase results. Assessment developed from research and best practice methodologies is an on-going process of converging information from multiple sources and formats to determine the degree to which the institution, students, and employees meet clearly defined outcomes (expectations for quality performance). Assessment studies focus on knowledge, skills, and attitudes at the course, program, and institutional levels to determine how well the campus experience meets student and societal needs (Kramer & Swing, eds., 2010; Suskie, 2009; Upcraft & Schuh, 2002). The basic motive for gathering information is to improve the functioning of the institution and its people (Astin & Antonio, 2012) • **Institution-Level Assessment**: Gathering information [input data, output data, outcome data, and/or impact data] that represents all students and/or employees across the university that can function to improve the entire institution and its people. The university can use information from institutional assessments to serve multiple purposes. • **Academic Program-Level Unit Assessment**: Gathering information [input data, output data, outcome data, and/or impact data] that is specific to the activity of the academic program that can function to improve the academic program as a whole. • **Administrative/Support Operations-Level Unit Assessment**. Gathering information [input data, output data, outcome data, and/or impact data] that is specific to the activity of an administrative/support operation that can function to improve the operation as a whole. • **Course-Level Assessment**: Gathering information [input data, output data, outcome data, and/or impact data] that is specific to the activity within a classroom that can function to improve learning experiences in the classroom. • **Individual-Level Assessment**: Gathering information [input data, output data, outcome data, and/or impact data] that is specific to the activity of one person that can function to improve the performance of that person.
2.	**Assessment Measure** (metric)	An assessment measure (metric) is an instrument that produces information about the quantity (quantitative) or quality (qualitative) of any issue under study in order to make informed decisions, improvements, and/or determine value.

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3.	**Assessment Methods**	Because the nature of teaching, learning, and working relationships are complex, it is advantageous to use multiple methods of assessment to capture accurate information about those multi-faceted dimensions. Different assessment methods are listed below: • Direct • Construct-Centered • Multiple Choice • Indirect • Authentic • Open-Ended Response • Qualitative • Survey • Interview • Quantitative • Checklist • Observation • Task-Centered • Rating Scales
4.	**Baseline Data**	Baseline data provide a beginning point from which to track change over time. Baseline data can take the following forms: • Pre-test results (formative use of data) before instruction begins can establish a baseline from which to compare performance after instruction is over (summative use of data). • Results of first administration of an institutional measure (e.g., critical thinking skills test, student survey, employee survey) establish the baseline from which to track change over subsequent administrations of the same institutional measure.
5.	**Evaluation** (Use of Data to Judge Merit, Value, or Worth)	"Evaluation refers to the process of determining the merit, worth, or value of something, or the product of the process" (Scriven, 1991, p. 139). "The evaluation process, to be totally effective, must consider any constraints which may be imposed by the system itself" (Wilson, Dell, & Anderson, 1993, p. 89). Whereas the primary function of *assessment* is for improvement, the primary function of *evaluation* is to grade, appraise, judge, rank, and review, etc. within the context of a particular situation, without bias, and in a systematic manner.
6.	**Fidelity of Implementation**	Fidelity of implementation refers to the degree to which an intervention is delivered as intended; it is critical to successful translation of evidence-based interventions into practice (Carroll et al., 2007; Mihalic, 2004). Fidelity can be measured within and across agreed-upon components of the planned activity, strategy, or intervention: assessing inputs (resources), assessing timeline, assessing content, assessing pace, role clarity, intended outcome clarity, adjustments, coordination, etc. "It is generally not wise to take program implementation for granted" (Rossi, Lipsey, & Freeman, 2004, p. 177).
7.	**Goal Statement**	A goal statement focuses on an end point that an institution, program, department, or individual wants to achieve "that allows for progress to be assessed and a determination to be made when these aims have been achieved" (Ruben, 2016, p. 65). A goal must be focused on identified priorities, clear, measurable, and achievable. A goal statement can be short-term or long-term and describes aims for processes within and outside the teaching and learning process (Suskie, 2009). Strong goal statements are directional [increase or decrease XXX]. Avoid identifying "actions" as goals—the actual goal is bigger than an action implemented to achieve the goal. Example: • Intended Outcome: Students have access to high-quality on-campus housing that meets their needs. • **Goal: Increase institutional capacity to provide student-centered, amenity-focused housing.** • Action: Build a new dorm that provides student-centered amenities. • Action: Remodel institution-owned housing near campus to provide student-centered amenities.
8.	**Implementation**	"Implementation is the manner in which approaches are deployed and applied within an organization" (Ruben, 2016, p. 65). Implementation can occur at different levels: state-wide, system-wide, campus-wide, college-wide, program-wide, course-sections wide, and/or department-wide.

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9.	**Inputs**	Inputs are resources that go into an initiative, program, department, course, or activity (e.g., time, money, staff, faculty, materials, equipment, and facilities). Decision makers can assess the adequacy of inputs to determine how effectively they support achieving the expected results.
10.	**Outcome Statement**	An intended outcome statement identifies an important ability that people should be able to demonstrate, represent, or produce based upon their learning experiences (curricular content, sequence, activities, and context) or working environment (resources, support, professional development, and context). Outcome statements refer to a destination—the ends rather than the means (Suskie, 2009). • **Non-Academic Intended Outcome Statement**: A stated, measurable expectation of what individuals will be able to know, do, or believe after they participate in a non-academic unit's services or activities. *Example: Employees use assessment data to ensure the quality of programs and services that support DSU's mission.* • **Academic Program Learning Outcome (PLO):** A stated, measurable expectation of what students will have learned/performed in a specific academic discipline. Program learning outcomes state the measurable skills, knowledge, and attitudes that students should be able to do or demonstrate as a result of participating in the program. Outcomes should be specific, measurable, agreed upon, realistic, and time framed (Winthrop University, 2011). *Example: Students will be able to defend a self-developed solution to a rural or urban problem relevant to their own city, town, or campus.* *Note: It is advantageous for people to assess achievement in an outcome with more than one measure (metric).*
11.	**Outputs**	The number and kinds of activities, services, events, products, and participation generated by aa academic program or non-academic unit (adapted from the University of Wisconsin-Extension—Cooperative Extension, 2008).
12.	**Performance Gap**	A performance gap is the difference between the expected results and the actual results.
	Performance Targets & Benchmarks	Performance targets and benchmarks establish targets by which the institution says, "This is good enough." • **Short-Term Performance Target**: A specific performance threshold that "is good enough" for a group short term. The target could be over several months, annual, or over several years. • **Long-Term Benchmark**: Internal or external against a comparison group that identifies "how good is good enough" long-term. Regional and national comparison thresholds provide context to local performance—how is our performance compared with others?

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13.	**Policies**	Policies are basic principles or rules to guide present and future decisions at all levels of an organization to achieve rational outcomes. Policies are the shared "road" on which individuals or groups agree to travel together. Expectations exist at multiple levels: **Statutory Law** → Written acts passed and codified by a legislative body. Mandatory. **Regulations** → Written rules authorized by statute and created by agencies. Mandatory. **Policies** → Written governing statements outlining how an organization conducts business—sets high-level direction of official positions. Mandatory. **Standards** → Written expectations of quality level in support of policy; approved and monitored for compliance. Mandatory. **Guidelines** → Written statements for meeting standards, policies, regulations, and/or law. *Some Mandatory, Some Recommendations.* **Practices** → Activities/processes that are *generally not written* but followed as habit, experience, or tradition. Can be a person-dependent **Procedures Processes** → Written series of steps/workflows/process maps to achieve a consistent result. Exact instructions to ensure successful completion.
14.	**Procedures**	Procedures are ways in which people work to accomplish a task. Procedures might include steps and/or a sequence of actions. Procedures can be planned steps or actions picked up at will. Procedures are the actions people take within a process. Policies are often accompanied by procedures that define how the policy should be implemented. **Procedures** are the guard rails to keep us on road. **Policy** is the road we agree to travel together.

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15.	**Program**	A program is a sequence of credit-bearing courses and experiences designed to provide students with discipline-specific knowledge, skills, and dispositions. Programs are offered at different levels with learning outcomes appropriate to the level of rigor: *Note: BOR policy does not include certificates in its definition of programs. However, HLC identifies certificates as programs.* • Certificate Programs • Associate Degree Programs • Bachelor's Degree Programs • Master's Degree Programs • Ph.D. Programs
16.	**Reliability**	Reliability is associated with the consistency of scores across evaluators and across time (Banta, 2002). A measure may be considered reliable when the same results occur, regardless of when the measure occurs and who does the scoring (Perkin, 1999). Reliability of results is determined by the degree of measurement error that exists in a measure (metric, tool). Error may occur for a number of reasons. Every measure has some degree of error—it's a question of "how much" error is present. • Scorers allow personal bias to impact results (halo effect—letting overall opinion of a person or group influence ratings). • The situation in which a person takes the measure causes error (e.g., inaccurate directions, excessive noises, excessive hear/cold, and/or emotional upsets). • Scorers rate too strictly/severely. • Scorers rate too kindly. • Scorers avoid judgments and rate "middle of the road." • Measurement tool components are vague and/or confusing. • A student's ability to produce adequate answers in constructed response may be a result of something other than proficiency in the expected outcome. • Technical issues (e.g., computer malfunction, inability to access electronic tool, confusing navigation) can impact results.
17.	**Research Study Article vs. Research-Based Article vs. Non-Research-Based Article**	• **Research Study Article**: A research article contains a hypothesis, a proposed question, and/or an assumption to be tested. Research articles typically include description of research methods, subjects, procedures, tools, and the process of testing the research question (e.g., who, what, when, where, and how the researcher conducted the study). A research article also typically includes the findings, conclusions, suggestions for further research, and an analysis of implications from the findings. A research article should be from a peer-reviewed journal. • **Research-Based Article**: A research-based article cites references and other documentation (e.g., research studies, research-based books/articles) that support the author's conclusions/point of view. • **Non-Research-Based Article**: A non-research article is based upon the author's personal experience and/or opinion. It can be a newspaper/magazine article, editorial, book review, and/or advice column.
18.	**Research Study vs. Assessment Study**	• **Research Study**: A research study is any effort to gather evidence which guides theory by testing hypotheses (Upcraft & Schuh, 1996). A research study guides theory and test concepts, typically with broader implications for higher education (Erwin, 1991; Upcraft & Schuh, 2002). • **Assessment Study**: An assessment study is designed to guide good practice, typically with implications for a single institution (Erwin, 1991; Upcraft & Schuh, 2002). "Institutional and program evaluation efforts, in and of themselves are not

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		considered research" (Borden & Owens, 2001, p. 14). "The key motive for [an assessment study] is to improve the functioning of the institution and its people" (Astin, 1993, p. 2).
19.	**Standardization**	People incorrectly use the term *standardized test* to mean all manner of things: norm-referenced tests; multiple-choice tests; external tests imposed by outside agencies; and/or tests developed by commercial vendors, rather than by individual schools or faculty. *Standardized means only that the test is uniform*. **All examinees face the same task, administered in the same manner, and scored in the same way**. The motivation for standardization is simple: to avoid irrelevant factors that might distort comparisons among individuals. . . We have to put all test-takers in the same environment when we elicit the behaviors that we want to measure. This means that we have to standardize the test, making it the same for all students. Any test can be standardized as long as the tasks, administration, and scoring processes are uniform. *Reference: Koretz, (2008), p. 23*.
20.	**Study Questions** (for purposes of continuous improvement)	Study questions for purposes of continuous improvement efforts focus on specific issues relevant to the effectiveness of an institution, a department, office, and/or a program. Study questions concentrate data gathering, data analysis, literature review, actions, and assessments on improving inputs, experiences/processes, and/or outputs directly related to the university or unit's mission, goals, and intended outcomes. Study questions can address issues that have already happened or issues that have yet to happen. Examples for demonstration purposes only: • Will changes in our practice improve student performance in _____? • Will changes in our practice improve employee _____? • How and what did students know, understand, and believe when they entered the institution or program? (Maki, 2010, p. 266) • What practices along the way revised or changed students' conceptual understanding in a field of study? (Maki, 2010, p. 266) • What practices challenged and even changed students' long-held beliefs, attitudes, values, and interpretations? And what practices did not? (Maki, 2010, p. 266)
21.	**Symptom**	A symptom is a characteristic sign or indication (tangible evidence) of the existence of something else. The something else could be a problem or could be an achievement. For example, a person can weigh himself on a scale—the pounds of his body. The pounds are symptoms of the existence of something else—the reason why his body weighs XXX pounds.
22.	**Validity**	Validity refers to the degree of justification that a person has in drawing conclusions from the results of a measure (metric). Tests (measures) themselves are not valid or invalid. It is the *inference* based upon the scores that is valid or not. Validity is the most important condition for using results for performance evaluation (Koretz, 2008).