



Proficiency-based/Student-centered Education Glossary or Definitions

Standard: a description of an area or skill or knowledge deemed essential.

State Standards: A set of standards articulated by the Maine Department of Education. The *Maine Learning Results* – which incorporate the Common Core Standards for ELA and Mathematics and the *Parameters for Essential Instruction* (2007) – articulate standards and performance indicators for all eight (8) content areas and the *Guiding Principles*.

Local Standards: Standards deemed essential by an SAU *in addition* to the State Standards.

Power Standards (a.k.a., Graduation Standards): A subset of standards that educators have determined to be the most important for students to learn. In most cases, power standards are developed or selected at the school level by administrators and teachers.

Curriculum: Devised by each SAU without State oversight, the curriculum describes the structure of the SAU's system of delivery of content, skills, habits of mind as informed by State standards. The curriculum also describes the system of assessment of State and local standards. It is a "map" of how learners will meet and address each of the standards.

Proficiency-Based (a.k.a., Standards-Based): Standards are used to guide curriculum. Students progress in demonstrating proficiency of standards is measured and used to determine advancement to higher learning levels.

Proficiency-Based System (a.k.a., Standards Based System): A school district can be said to have a proficiency-based system when all aspects of the system – including reporting, transportation, scheduling, buildings and grounds, etc. – support a proficiency-based approach.

Unpacking a standard: A process by which educators (and often students) examine a standard to clarify the expected learning targets/goals are embedded in that standard, and identifying the type of knowledge and how best to learn those targets.

Performance Indicator/Benchmark: Describes in tangible terms what a learner may do in order to demonstrate proficiency within a standard.

Declarative Knowledge (DK): Knowledge that is informational (facts, terms) or conceptual (ideas, generalizations, principles)>

Procedural Knowledge (PK): Knowledge of skills or processes (how to do ____). Includes mental skills/processes and psychomotor skills/processes.

Learning Target(a.k.a., Learning Goal): A statement of what learners will know (DK), understand (DK) or be able to do (PK).

Rubric: A graphic that clearly and tangibly describes what achievement of a standard “looks like” at a variety of scoring or complexity levels.

Assessment: Task design to elicit a demonstration of learner progress toward reaching a goal or target.

Formative Assessment: Assessment (see above) carried out **in order to** determine the next appropriate instructional or learner steps. The student will have additional opportunities to demonstrate proficiency. If the expectation is that this score will change with further instruction and assessment, then the assessment is “formative.”

Summative Assessment: Assessment (see above) carried out **in order to** summarize the record a learner’s proficiency up to that point. No further opportunities will be allowed to demonstrate proficiency. If the expectation is that this score will remain unchanged, then the assessment is “summative.”

Response to Intervention (RTI): An approach to academic intervention providing systematic assistance to children having difficulty learning. RTI seeks to prevent academic failure through early intervention, frequent progress measurement, and increasingly intensive research-based instructional interventions for children who continue to have difficulty.

Evaluation/testing: Synonymous with *summative assessment*, though it may specifically connote standardized tests, such as NECAP, NWEA, MEA or SAT.

Proficiency: Targeted level of achievement in standard or learning goal. “Demonstrating proficiency” is synonymous with “demonstrating mastery” or “meeting the standard.”

Expanded Learning Opportunity (ELO): An opportunity for a learner to demonstrate achievement of the standards outside of the traditional school setting. This could include after school activities, extension programs (e.g. 4H), partnerships with local ecological centers, Career and Technical Education (CTE), internships, early college coursework, independent studies, or other structures designed by the learner in collaboration with the teacher.

Guiding Principles: Overarching, interdisciplinary standards that describe the skills and dispositions that most impact learner success. In Maine, as per *The Learning Results*, there are five guiding principles.

THE MAINE LEARNING RESULTS: PARAMETERS FOR ESSENTIAL INSTRUCTION

THE GUIDING PRINCIPLES – The knowledge and skills described in the Maine Department of Education Regulation 132 support Maine students in achieving the goals established in Maine’s Guiding Principles. The Guiding Principles state that each Maine student must leave school as:

- A. A clear and effective communicator who:
 - 1. Demonstrates organized and purposeful communication in English and at least one other language;
 - 2. Uses evidence and logic appropriately in communication;
 - 3. Adjusts communication based on the audience, and;
 - 4. Uses a variety of modes of expressions (spoken, written, and visual and performing including the use of technology to create and share expressions).
- B. A self-directed and lifelong learner who:
 - 1. Recognizes the need for information and locates and evaluates resources;
 - 2. Applied knowledge to set goals and make informed decisions;
 - 3. Applied knowledge in new contexts;
 - 4. Demonstrates initiative and independence;
 - 5. Demonstrates flexibility including the ability to learn, unlearn, and relearn;
 - 6. Demonstrates reliability and concern for quality; and
 - 7. Uses interpersonal skills to learn and work with individuals from diverse backgrounds.
- C. A creative and practical problem solver who:
 - 1. Observes and evaluates situations to define problems;
 - 2. Frames questions, makes predictions, and designs data/information collection and analysis strategies;
 - 3. Identifies patterns, trends, and relationships that apply to situations;
 - 4. Generates a variety of solutions, builds a case for a best response and critically evaluates the effectiveness of the response;
 - 5. Sees opportunities, finds resources, and seeks results;
 - 6. Uses information and technology to solve problems; and
 - 7. Perseveres in challenging situations.
- D. A responsible and involved citizen who:
 - 1. Participates positively in the community and designs creative solutions to meet human needs and wants;
 - 2. Accepts responsibility for personal decisions and actions;
 - 3. Demonstrates ethical behavior and the moral courage to sustain it;
 - 4. Understands and respects diversity; Displays global awareness and economic and civic literacy; and
 - 5. Demonstrates awareness of personal and community health and wellness;
- E. An integrative and informed thinker who:
 - 1. Gains and applies knowledge across disciplines and learning contexts and to real life situations with and without technology;
 - 2. Evaluates and synthesizes information from multiple sources;
 - 3. Applies ideas across disciplines; and
 - 4. Applies systems thinking to understand the interaction and influence of related parts on each other and on outcomes.

21st Century Skills: The overarching skills needed for a learner to thrive in the 21st century. Articulated by Tony Wagner (*The Global Achievement Gap*), the skills are, 1) critical thinking and problem solving, 2) collaboration, 3) agility and adaptability, 4) initiative and entrepreneurialism, 5) effective oral and written communication, 6) accessing and analyzing information, 7) curiosity and imagination.

Habits of Mind (a.k.a., Habits of Work): Mental dispositions and habits that positively influence learning.

College and Career Ready (Citizenship): The goal for learners is to graduate from high school ready to either enter into post-secondary level course work (without remediation), or to begin a career track in their chosen field. In a proficiency-based system, demonstrating proficiency in all of the standards is evidence that a learner is college and career ready.

Common Core State Standards (CCSS): A set of standards developed by The Council of Chief State School Officers (CCSSO) and the National Governors Association Center for Best Practices (NGA Center). The Common Core ELA and Mathematics standards have been adopted by 48 states, 2 territories, and the District of Columbia. Maine has incorporated the Common Core into its *Learning Results*.

Smarter Balance (SBAC): A multi-state collaborative working to develop an assessment system aligned to the Common Core State Standards and including performance assessment as a central feature. Maine is a governing member of the Smarter Balance Assessment Consortium.

Report Card: A periodic report of a learner's progress towards achievement of the standards.

Transcript: A summative report of a learner's achievement of the standards throughout high school.

Northern Maine Educational Collaborative (NMEC): A collective of County school districts, chartered together to share resources and expertise in order to develop and disseminate proficiency-based, learner-centered practices and systems.

Taxonomy of Learning: A hierarchical organization of learning and cognitive levels which use to (1) design and classify learning objectives, (2) design assessments, (3) unpack State and Federal Standards, and (4) design curriculum.

The most commonly known taxonomy of learning is Bloom's Taxonomy, based on levels of cognitive sophistication. Robert Marzano has designed a taxonomy of learning, based on complex reasoning processes, which is gaining currency.

Bloom's Taxonomy of Educational Objectives (first published in 1956) formulated hierarchies in three domains: cognitive, affective, and psychomotor. When used generically, the phrase – "Bloom's Taxonomy"- refers to the cognitive domain. The Taxonomy has six levels. Originally, these levels were, from lowest to highest, 1) knowledge, 2) comprehension, 3) application, 4) analysis, 5) synthesis, and 6) evaluation. In 2001, a revision of Bloom's Taxonomy was published. In addition to using verb forms, rather than nouns (so that hierarchy showed what students *do*), some of the language altered as follows: 1) remembering, 2) understanding, 3) applying, 4) analyzing, 5) evaluating, and 6) creating.

Bloom's Taxonomy, Old and New

Old	New
6) Evaluation	6) Creating
5) Synthesis	5) Evaluating
4) Analyzing	4) Analysis
3) Application	3) Applying
2) Comprehension	2) Understanding
1) Knowledge	1) Remembering

In 2007, Robert Marzano and John Kendall published *The New Taxonomy of Educational Objectives* (Corwin Press). Like the Bloom's Taxonomy, Marzano and Kendall's taxonomy is hierarchical – i.e., the higher levels represent more sophisticated cognitive processes than the lower levels – but theirs is broken into four overarching categories with 14 subcategories. As follows on the next page:

TAXONOMY

Marzano and Kendall 2008

KNOWLEDGE UTILIZATION			
Investigating - test hypothesis using assertions and opinions of others	Experimenting - test hypothesis using data collection by student	Problem Solving - use information to accomplish a goal with obstacles or limiting conditions	Decision Making - use information to make a decision
investigate research find out about take a position on	differentiating factors how/why happened what would happen	experiment generate & test test the idea that what would happen if	decide select the best alternatives which of these is most suitable what is the best way
investigate research find out about take a position on	experiment generate & test test the idea that what would happen if	solve develop a strategy figure out a way to how would you overcome how would you reach your goal	decide select the best alternatives which of these is most suitable what is the best way
ANALYSIS			
Specifying	Generalizing	Error Analysis	Classifying
- identify logical consequences of information	- construct new principles or generalizations based on information	- identifying logical or factual errors in knowledge	- identify categories to which information belongs
make and defend predict judge deduce	generalize draw conclusions draw inferences	revise edit evaluate diagnose critique	organize sort differentiate discriminate
what would have to happen develop an argument under what condition	create a principle create a rule trace development form conclusions list	assess identify errors identify problems identify issues	classify identify categories identify different types identify a broader category
what would have to happen develop an argument under what condition	create a principle create a rule trace development form conclusions list	assess identify errors identify problems identify issues	organize sort differentiate discriminate
COMPREHENSION			
Symbolizing	Integrating		
- construct symbolic representation of information	- identify basic structure of information		
represent illustrate	use models diagram	describe how or why describe key parts of describe the effects	paraphrase summarize
draw show	chart		
draw show	use models diagram	describe how or why describe key parts of describe the effects	paraphrase summarize
draw show	chart		
RETRIEVAL			
Executing	Recalling		
- perform procedures	- produce information on demand		
use demonstrate show	make complete	describe who	identify (from list) determine if true/false
make complete	describe who	what where when	identify (from list) determine if true/false
make complete	describe who	what where when	identify (from list) determine if true/false