



# Learning Systems

**Learning systems** are the structures and processes used to provide **curriculum, assessment, instructional pacing, and student learning outcomes**. Ensuring that every student masters key knowledge, skills, and dispositions for success requires a system that supports and tracks each student’s learning progression. Students (1) co-design learning opportunities and map their progress toward mastery and credentials based on competency, (2) use multiple, anytime/anywhere pathways to demonstrate progress and mastery, and (3) demonstrate progress through complex challenges (Council of Chief State School Officers, 2013).

While the following terms are often used interchangeably in educational resources, the definitions below are aligned to kid-FRIENDLY work.

Term	What It Is and What It Means	Resources
<b>Competency-Based System</b>	A system based upon <b>knowledge, skills attitudes, and behaviors</b> necessary to live and work successfully in a global society. Each student has <ul style="list-style-type: none"> <li>a personalized learning map, indicating how and when the student will demonstrate mastery</li> <li>choice</li> <li>support for anywhere, anytime learning</li> </ul>	<ul style="list-style-type: none"> <li>Silicon Valley Flex Academy, <a href="http://svflex.k12.com/">http://svflex.k12.com/</a></li> <li>Innovations Early College High School, Salt Lake City, Utah <a href="http://innovations.slcschools.org/">http://innovations.slcschools.org/</a></li> <li>iPrep Academy, Miami, <a href="https://sites.google.com/site/iprepacademy/">https://sites.google.com/site/iprepacademy/</a></li> </ul>
<b>Standard-Based System</b>	A system based upon <b>content and process standards</b> defined by national, state, and/or local <b>policy</b> .	<ul style="list-style-type: none"> <li>Monroe County Indiana Public Schools <a href="http://www.mccsc.edu/">http://www.mccsc.edu/</a></li> <li>Colorado Department of Education, Standards Based Learning Cycle <a href="http://www.cde.state.co.us/sites/default/files/Standards-Based%20Teaching%20%20Learning%20Cycle.pdf">http://www.cde.state.co.us/sites/default/files/Standards-Based%20Teaching%20%20Learning%20Cycle.pdf</a></li> </ul>
<b>Performance-Based System</b>	A system based upon <b>descriptors and assessments</b> requiring students to demonstrate the <b>application of knowledge</b> . Assessments measure the student’s ability to integrate knowledge and skills across multiple standards.	<ul style="list-style-type: none"> <li>Lindsay Unified School District, Lindsay, CA <a href="http://www.lindsay.k12.ca.us/District">http://www.lindsay.k12.ca.us/District</a></li> </ul>
<b>Mastery Learning System</b>	A system where students <b>must master the learning objectives before moving on</b> to the next set of learning. The system is based on two assumptions: (1) all students can learn all important academic content to a level of excellence and (2) the primary function of schools is to define learning objectives and help all students to achieve them. Assessments are criterion-referenced and used to guide instruction (adapted from Dolan, Ford, Newton, Kellan, 1989).	<ul style="list-style-type: none"> <li><a href="http://www.education.com/print/mastery-learning/">http://www.education.com/print/mastery-learning/</a></li> </ul>

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<b>Learning Objective</b>	A learning objective describes what learners will know, do, or feel. They also include <b>who</b> (student), <b>how</b> (action verb), and <b>what</b> (content).	<ul style="list-style-type: none"> <li>• <a href="http://flippedclassroom.com/mastery.php">http://flippedclassroom.com/mastery.php</a></li> <li>• <a href="http://www2.nau.edu/d-learn/support/tutorials/pedagogy/01learningexpectations.php">www2.nau.edu/d-learn/support/tutorials/pedagogy/01learningexpectations.php</a></li> </ul>
<b>Competency</b>	A competency includes <b>explicit, measurable, transferable</b> learning <b>objectives that empower</b> students (Patrick, 2013).	<p><u>Example of Competency Standard</u></p> <p>Identify an issue, generate a question, and explain the significance of locally, regionally, or globally focused researchable questions (<a href="http://www.edsteps.org">www.edsteps.org</a>).</p>
<b>Standard</b>	A standard includes a concise, written <b>description of what students are expected to know and be able to do</b> at a specific stage of their education (e.g., end of course, unit, or grade level, etc.).	<p><u>Example of ELA Standard</u></p> <ul style="list-style-type: none"> <li>• Write arguments to support claims with clear reasons and relevant evidence.</li> <li>• Introduce claim(s), acknowledge and distinguish the claim(s) from alternate or opposing claims, and organize the reasons and evidence logically.</li> <li>• Support claim(s) with logical reasoning and relevant evidence, using accurate, credible sources and demonstrating an understanding of the topic or text.</li> <li>• Use words, phrases, and clauses to create cohesion and clarify the relationships among claim(s), counter claims, reasons, and evidence.</li> <li>• Establish and maintain a formal style.</li> <li>• Provide a concluding statement or section that follows from and supports the argument presented (Kentucky Core Academic Standard ELA Grade 8).</li> </ul>
<b>Performance Standard</b>	A performance standard defines <b>what a student must know and/or be able to do</b> (content standard) <b>to attain a certain level</b> , such as passing a test or scoring proficient on a measurement scale.	<p><u>Example of Performance Standard</u></p> <ul style="list-style-type: none"> <li>• Imagine your school district is going to make a decision about continuing to fund sports programs in schools. You have a chance to write an argument essay that will be read by the mayor, printed in the paper, or presented to the head of the school board. Your letter should state a position or claim by taking a clear side, backed up with research, and refute the other side. Thinking about all you've learned about this issue argue whether, overall, sports are more helpful or harmful for young people. Use what you know about argument essay writing to structure your writing(<i>The Reading and Writing Project Grade 8 Common Core Assessment, 2012</i>).</li> </ul>

## References

- Council of Chief State School Officers. (2013). Knowledge, skills, and dispositions: The innovation lab network state framework for college, career, and citizenship readiness, and implications for state policy. Retrieved from <http://www.ccsso.org/Documents/ILN%20Knowledge%20Skills%20and%20Dispositions%20CCR%20Framework%20February%202013.pdf>
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