



Washington Office of Superintendent of
PUBLIC INSTRUCTION

Mathematics Menu of Best Practices and Strategies Brief

2020

BACKGROUND

The Strengthening Student Educational Outcomes Act ([ESSB 5946](#)) passed the state Legislature in 2013. It required OSPI to convene a mathematics panel of experts to develop a menu of best practices and strategies for use in the Learning Assistance Program (LAP) to provide additional support to students who have not yet met grade-level standard and are enrolled in LAP. These menus were also created to ensure that all Learning Assistance Program supports and services provided would align with evidence-based practices.

The [Menus of Best Practices and Strategies](#) provide Washington State educators with practices and strategies that best help students grow and succeed academically. The mathematics menu provides best practices and strategies that are aligned to the Washington State K-12 Learning Standards for Mathematics and were identified for use by a panel of experts representing a wide range of educational experience and expertise.

Authorizing Legislation:

RCW 28A.165.035



Key Points and Practices

Background and Content Philosophy

- The Mathematics K-12 Learning Standards are built on an intentional progression of skills and knowledge. These standards describe the mathematical habits of reasoning and modeling with mathematics, being problem solvers, and analyzing and interpreting data that educators at all levels should seek to develop in their students. Understanding this progression of knowledge and skill supports identifying gaps in a student's learning that should be addressed.
- Culturally responsive teaching in mathematics ensures educators create an inclusive environment, make the learning relevant with some aspects of student choice, plan and enact learning activities that are engaging and challenging, and support students in knowing what they have learned and why it is of value.
- Within a multi-tiered system of supports, educators use data-informed practices to support student social emotional, behavioral, and academic learning, and data-informed assessment results to make intentional decisions, utilizing a team structure.

Implementing Menu Practices

School staff must design and deliver practices and interventions with fidelity, or as they were intended, to maximize outcomes for students. The menu provides information on implementation science, including [Active Versus Passive Implementation](#), to help districts and schools implement

their LAP interventions and supports as intended.

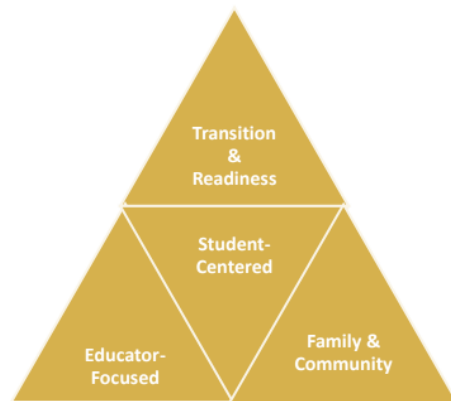
During active implementation, schools participate in rapid improvement cycles, such as [Plan-Do-Study-Act \(PDSA\)](#), to continually improve the delivery and impact of their LAP interventions and supports. The main questions schools ask in this improvement cycle are as follows:




- What is the specific problem are we trying to solve?
- What changes might be introduced and why?
- How will we know if the change(s) is(are) an improvement or not?

Prior to using a proposed practice or program, implementation teams assess whether it is an appropriate fit for the need, context, and capacity of the school. The [Hexagon tool](#) guides teams through this exploration with six indicators: evidence, usability, supports, need, fit with other initiatives, and capacity to implement. The implementation section in the menu provides additional resources, including links to modules and short courses, to increase team efficacy and understanding of the implementation process.

Menu Entries

Practices are organized into four broad categories of interventions: *Student-Centered*, *Transition & Readiness*, *Educator-Focused*, and *Family & Community*. Each practice has been analyzed by the Washington State Institute of Public Policy ([WSIPP](#)) and designated as evidence-based, research-based or promising practice in their [WSIPP LAP Inventory](#) (RCW 71.24.025). Each entry describes the practice or strategy, ideas and resources to support planning, demographic considerations, strategies for successful implementation, and supporting research and references.





	"Evidence-based" means a program or practice that has been tested in heterogeneous or intended populations with multiple randomized, or statistically controlled evaluations, or both; or one large multiple site randomized, or statistically controlled evaluation, or both, where the weight of the evidence from a systemic review demonstrates sustained improvements in at least one outcome. "Evidence-based" also means a program or practice that can be implemented with a set of procedures to allow successful replication in Washington and, when possible, is determined to be cost-beneficial.
	"Research-based" means a program or practice that has been tested with a single randomized, or statistically controlled evaluation, or both, demonstrating sustained desirable outcomes; or where the weight of the evidence from a systemic review supports sustained outcomes as described in "evidence-based" portion of this section but does not meet the full criteria for evidence-based.
	"Promising practice" means a program or practice that, based on statistical analyses or a well-established theory of change, shows potential for meeting the evidence-based or research-based criteria, which may include the use of a program that is evidence-based for outcomes other than those listed in the "evidence-based" portion of this section.


Student-Centered Practices and Strategies

	
Double dosing (secondary only) Summer school programs Tutoring by an adult	Tutoring by a peer



Educator-Focused Practices and Strategies

	
Consultant teacher/instructional coach Targeted professional learning	Professional learning communities

Transition & Readiness Practices and Strategies


Credit retrieval and mastery of high school standards Grade 8 to high school transitions Kindergarten transitions

Family & Community Practices and Strategies

	
Community-based student mentors	Family engagement

*Note: The definitions of evidence-based, research-based, and promising outlined above are separate from the Tiers of Evidence defined by the federal Every Student Succeeds Act (ESSA). WSIPP and ESSA Tiers of Evidence share common criteria for determining classifications (e.g., programs must be tested in similar populations; study shows a statistically significant effect on a relevant outcome). While definitions sometimes overlap, they are not perfectly aligned ([WSIPP 2020](#)). For more information on ESSA Tiers of Evidence, see the U.S. Department of Education's guidance on Using Evidence to Strengthen Education Investments.



ESTD
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*All students prepared for post-secondary pathways,
careers, and civic engagement.*



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