July 2014

Initial Inventory of Evidence- and Research-Based Practices: Washington's K-12 Learning Assistance Program

More information on the programs and findings can be found by clicking here*

Program/intervention	Level of evidence	Benefit-cost percentage	Reason program does not meet evidence-based criteria (see full definitions below)	Percent minority
Tutoring Support				
Tutoring: By adults, one-on-one, structured	•	89%		72%
Tutoring: By adults, one-on-one, non-structured	Р	52%	Weight of evidence/Benefit-cost	66%
Tutoring: By certificated teachers, small-group, structured	•	97%		67%
Tutoring: By non-certificated adults, small-group, structured	•	78%		69%
Tutoring: By peers, same-age and classwide	•	76%		68%
Tutoring: By peers, cross-age	•	83%	Heterogeneity	NR
Extended Learning Time				
Summer learning programs: Academically focused	•	93%		85%
Out-of-school-time tutoring	•	75%		84%
Summer book programs: Multi-year intervention	Р	72%	Weight of evidence/Benefit-cost	95%
Summer book programs: One-year intervention, with additional support	Р	60%	Weight of evidence/Benefit-cost	78%
Summer book programs: One-year intervention	P	50%	Weight of evidence/Benefit-cost	86%
Professional Development				
Teacher professional development: Targeted	•	84%		83%
Teacher professional development: Not targeted	0	34%	Produces null or poor outcomes	47%
Teacher professional development: Use of assessment data to guide instruction	•	100%		58%
Educator professional development: Use of data to guide instruction ("train the trainers")	Р	53%	Weight of evidence/Benefit-cost/Heterogeneity	23%
Teacher professional development: Online, targeted	•	57%	Benefit-cost/Heterogeneity	31%
Teacher induction/mentoring	Р	61%	Weight of evidence/Benefit-cost	88%
Professional Learning Communities	Р	NA	Research on outcomes of interest not yet available	NA
Consultant Teachers				
Coaching	•	87%		42%
Coaching: Content-Focused Coaching	•	68%	Single evaluation/Benefit-cost	96%
Coaching: Literacy Collaborative	•	89%	Heterogeneity	29%
Coaching: Online	•	73%	Single evaluation/Benefit-cost/Heterogeneity	27%

Key:

- Evidence-based
- Research-based
- **O** Produces null or poor outcomes
- P Promising
- NA Not applicable
- NR Not reported

Program/intervention	Level of evidence	Benefit-cost percentage	Reason program does not meet evidence-based criteria (see full definitions below)	Percent minority
Parent Outreach				
Parents as tutors with teacher oversight	Р	54%	Weight of evidence/Benefit-cost	58%
Parent and family engagement coordinators	Р	NA	Research on outcomes of interest not yet available	NA
Community Partnerships				
Mentoring for students: School-based (taxpayer costs only)	•	80%	Mixed results	78%
Mentoring for students: School-based (including volunteer costs)	•	79%	Mixed results	78%
Mentoring for students: Community-based (taxpayer costs only)	•	84%	Mixed results	80%
Mentoring for students: Community-based (including volunteer costs)	•	81%	Mixed results	80%
Case management in schools	Р	67%	Weight of evidence/Mixed results/Benefit-cost	76%
Behavior Support				
School-wide positive behavior programs	•	99%		66%
Services for 8th, 11th & 12th Grades				
Credit retrieval	Р	NA	Research on outcomes of interest not yet available	NA

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Reasons Programs May Not Meet Suggested Evidence-Based Criteria:

Benefit-cost: The WSIPP benefit-cost model was used to determine whether a program meets this criterion. Programs that do not achieve at least a 75% chance of positive net present value do not meet the benefit-cost test. Heterogeneity: To be designated as evidence-based under current law or the proposed definition, a program must have been tested on a "heterogeneous" population. We operationalized heterogeneity in two ways. First, the proportion of minority program participants must be greater than or equal to the minority proportion of children in Washington State aged 0 to 17. From the 2010 Census, for children aged 0 through 17 in Washington, 68% were white and 32% minority. Thus, if the weighted average of program participants had at least 32% minorities then the program was considered to have been tested on a heterogeneous population. Second, the heterogeneity criterion can also be achieved if at least one of the studies has been conducted on youth in Washington and a subgroup analysis demonstrates the program is effective for minorities (p <= .2). Programs passing the second test are marked with a ^. Programs that do not meet either of these two criteria do not meet the heterogeneity definition.

Mixed results: If findings are mixed from different measures (e.g., undesirable outcomes for behavior measures and desirable outcomes for test scores), the program does not meet evidence-based criteria.

Program cost: A program cost was not available to WSIPP at the time of the inventory. Thus, WSIPP could not conduct a benefit-cost analysis.

Research on outcomes of interest not yet available: The program has not yet been tested with a rigorous outcome evaluation.

Single evaluation: The program does not meet the minimum standard of multiple evaluations or one large multiple-site evaluation contained in the current or proposed definitions.

Weight of evidence: Results from a random effects meta-analysis (p > .10) indicate that the weight of the evidence does not support desired outcomes, or results from a single large study indicate the program is not effective.

Level of Evidence:

<u>Evidence-based</u>: A program or practice that has been tested in heterogeneous or intended populations with multiple randomized and/or statistically-controlled evaluations, or one large multiple-site randomized and/or statistically-controlled evaluation, where the weight of the evidence from a systematic review demonstrates sustained improvements in educational or behavioral student outcomes. Further, "evidence-based" means a program or practice that can be implemented with a set of procedures to allow successful replication in Washington and, when possible, has been determined to be cost-beneficial.

Research-based: A program or practice that has been tested with a single randomized and/or statistically-controlled evaluation demonstrating sustained desirable outcomes; or where the weight of the evidence from a systematic review supports sustained outcomes as identified in the term "evidence-based" in RCW (the above definition) but does not meet the full criteria for "evidence-based."

<u>Promising practice</u>: 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 could include the use of a program that is evidence-based for outcomes other than the alternative use.

Other Definitions:

Benefit-cost percentage: The percent of the time where the monetary benefits exceed costs.