Special Literacy Instruction for English Language Learner Students

Program description:

English-based literacy programs in these evaluations involve a structured, direct instruction approach to teaching reading to ELL students. Some of the programs are multi-media (e.g., involving computer-based instruction). These programs are compared with literacy instruction-as-usual.

Typical age of primary program participant: 6

Typical age of secondary program participant: N/A

Meta-Analysis of Program Effects

Outcomes Measured	Primary or Secondary Participant	No. of Effect Sizes	Unadjusted Effect Sizes (Random Effects Model)			Adjusted Effect Sizes and Standard Errors Used in the Benefit-Cost Analysis					
						First time ES is estimated			Second time ES is estimated		
			ES	SE	p-value	ES	SE	Age	ES	SE	Age
Test scores	P	6	0.32	0.09	0.00	0.13	0.09	7	0.07	0.05	17

Benefit-Cost Summary

The estimates shown are present value, life cycle benefits and costs. All dollars are expressed in the base year chosen for this analysis (2011). The economic discount rates and other relevant parameters are described in Technical Appendix 2.

Program Benefits					Costs	Summary Statistics			
Participants	Taxpayers	Other	Other Indirect	Total Benefits		Benefit to Cost Ratio	Return on Investment	Benefits Minus Costs	Probability of a positive net present value
$4,491	$1,652	$0	$826	$6,969	-$282	$24.75	15%	$6,688	90%

Detailed Monetary Benefit Estimates

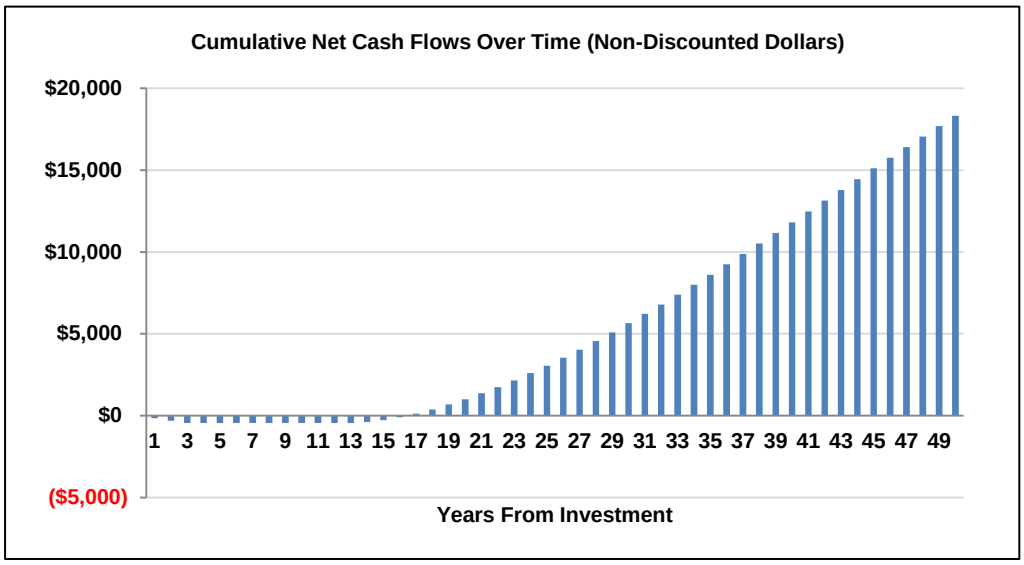
Source of Benefits	Benefits to: Participants	Taxpayers	Other	Other Indirect	Total Benefits
Earnings via test scores	$4,491	$1,652	$0	$826	$6,969

Detailed Cost Estimates

The figures shown are estimates of the costs to implement programs in Washington. The comparison group costs reflect either no treatment or treatment as usual, depending on how effect sizes were calculated in the meta-analysis. The uncertainty range is used in Monte Carlo risk analysis, described in Technical Appendix 2.

Program Costs			Comparison Costs			Summary Statistics	
Annual Cost	Program Duration	Year Dollars	Annual Cost	Program Duration	Year Dollars	Present Value of Net Program Costs (in 2011 dollars)	Uncertainty (+ or – %)
$1,398	3	2009	$1,298	3	2009	$282	20%

Source: The cost estimate reflects the sum of local, state, and federal dollars allocated per-student (averaged across Washington State school districts) for the 2008-09 school year. All students who qualify for the state Transitional Bilingual Instructional Program (TBIP) receive some form of services, so the comparison group cost is the same as the program group cost. Because specialized literacy programs may require supplemental materials and training, we added $100 to the cost estimate and increased the uncertainty around the cost estimate to 20 percent. Source for dollars allocated per-student: Office of Superintendent of Public Instruction.



Multiplicative Adjustments Applied to the Meta-Analysis

Type of Adjustment	Multiplier
1- Less well-implemented comparison group or observational study, with some covariates.	0.5
2- Well-implemented comparison group design, often with many statistical controls.	0.5
3- Well-done observational study with many statistical controls (e.g., instrumental variables).	0.75
4- Random assignment, with some implementation issues.	0.75
5- Well-done random assignment study.	1.00
Program developer = researcher	0.5
Unusual (not “real-world”) setting	0.5
Weak measurement used	0.5

Studies Used in the Meta-Analysis

Chambers, B., Cheung, A. C. K., Madden, N. A., Slavin, R. E., & Gifford, R. (2006). Achievement effects of embedded multimedia in a Success for All Reading program. *Journal of Educational Psychology, 98*(1), 232-237.

Farver, J. A. M., Lonigan, C. J., & Eppe, S. (2009). Effective early literacy skill development for young Spanish-speaking English language learners: An experimental study of two methods. *Child Development, 80*(3), 703-719.

Solari, E. J., & Gerber, M. M. (2008). Early comprehension instruction for Spanish-speaking English language learners: Teaching text-level reading skills while maintaining effects on word-level skills. *Learning Disabilities Research & Practice, 23*(4), 155-168.

Troia, G. A. (2004). Migrant students with limited English proficiency: Can Fast ForWord Language make a difference in their language skills and academic achievement? *Remedial and Special Education, 25*(6), 353-366.

Vaughn, S., Cirino, P. T., Tolar, T., Fletcher, J. M., Cardenas-Hagan, E., Carlson, C. D., & Francis, D. J. (2008). Long-term follow-up of Spanish and English interventions for first-grade English language learners at risk for reading problems. *Journal of Research on Educational Effectiveness, 1*(3), 179-214.