

CREATING STRONG SCHOOLS & COMMUNITIES

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The Impact of Project GLAD[®] on Literacy and Science for ELs and non-ELs Year 1 Results From a Cluster Randomized Trial

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Language and Content

Project GLAD[®] (Guided Language Acquisition Design)





Project GLAD[®] components

Component	# Strategies	Purpose
Readiness and motivation	7	Establish behavior norms Build student interest
Input	6	Teach content using oral and visual strategies
Guided oral practice	9	Repeated exposure to vocabulary Practice complex sentences
Reading and writing	11	Support reading of grade- level text Scaffold writing





	Dictionary	1.	S. s. Oraj
Word SNH	Prediction (Clue)	Final Meaning/ Sketch/LI	enter.
Geologist NH6	Some kind of Scientist Studies stuff a Scientist who studies	A scientist who studies a bout the	
Earth scientist	900099. a Scientist who studies volcances and other thin that erupt.	Suctace of the	V
	Someone who makes expirements to find out what geology is mean Somebody who rock s	Rec kg	
Igrebus H 19 Ltn= ignis adj. fire	• A certain kind of rock. • A rock that's really sharp • A kind of rock that looks like glass and it's black.	Rock of volcanic origin. Made from magma.	L
Sedimenters (ary)	layers compact over time. A rock that has layes A rock that has more	Rocks formed by layers of sediment	Th
metamorphic !!	than I layers.	the second secon	
gneiss 10 de motishing 2	· a rock weathered		
devastation ² Quartite " destructive Shastas diverse"	deep under jour	d.	



Professional development



Research questions

- 1. What is the impact of Project GLAD[®] teacher training on fifth-grade students' achievement in:
 - vocabulary
 - reading comprehension
 - writing
 - science
- 2. Is the program impact different for ELs and non-ELs?

CRT study design



Study population

30 Idaho schools

21 districts50% located in rural communities

2,250 grade 5 students

65% Free/reduced-price lunch33% Latino62% White13% ELs

ELs = current + former

		Pretest	
	Ν	Mean	NPR
Reading comprehension			\frown
Current	80	464.5	15
Former	187	469.3	20
English proficient	1943	501.0	51
Vocabulary			\frown
Current	80	452.4	9
Former	187	460.7	15
English proficient	1956	499.6	50

Outcome measures

Subject	Measure	Pretest?
Comprehension	Gates-MacGinitie	Х
Vocabulary	Gates-MacGinitie	Х
Writing	Science essay scored with 6 Traits rubric	
Science: proximal	Rocks and minerals unit test	
Science: distal	Idaho state science assessment	

Analysis

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Level 1 [Student]
Postij = β0j + β1j Preij + eij
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Level 2 [School]

\beta 0j = \gamma 00 + \gamma 01 \text{ Trtj} + u0j

\beta 1j = \gamma 10
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 β 1j Preij for Vocabulary and Comprehension = Pretest β 1j Preij for Writing and Rocks & Minerals = Comprehension Covariate β 1j Preij for State Science (Gr 5) = State Reading (Gr 4) Covariate

ELs **Non-ELs** Coeff. ES Coeff. ES р р Vocabulary (5.72) 0.092 0.21 1.51 0.321 0.04 Compre-0.24 6.87 0.099 1.64 0.416 0.04 hension

Year 1 reading results

Year 1 writing results						
		ELs			Non-EL	S
	Coeff.	р	ES	Coeff.	р	ES
Ideas	0.21	0.053	0.32	0.13	0.076	0.21
Organi- zation	0.15	0.086	0.27	0.07	0.271	0.13

	ELs			Non-ELs		
	Coeff.	р	ES	Coeff.	р	ES
Rocks and minerals	0.42	0.303	0.19	0.47	0.127	0.23
State science test	0.88	0.309	0.12	1.33	0.159	0.13

Year 1 science results

Measure	ELs	Non-ELs
Vocabulary	.21~	.04
Comprehension	.24~	.04
Writing		
ldeas	.32*	.21~
Organization	.27~	.13
Voice	.05	.08
Word choice	.22	.14
Sentence fluency	.05	.12
Conventions	.02	.07
Rocks and minerals	.19	.23
State science	.12	.13

Vocabulary



Comprehension



Can Project GLAD close the gap?



Vocabulary



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For more information

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