



PAPER GROW

ESSA Level III Brief (Spring 2025)

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Main Research Findings

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| | Grade 7 students who attended more GROW high-impact tutoring sessions had higher math scores. |
| | Grade 8 students who attended more GROW high-impact tutoring sessions had higher math scores. |
| | For Grades 4 and 6, attending more GROW high-impact tutoring sessions was not associated with higher math scores. |

Note. Findings for Grades 7 ($n = 38$) and 8 ($n = 21$) were statistically significant ($p < .05$). Findings for Grades 4 ($n = 12$) and 6 ($n = 52$) were not statistically significant.

INTRODUCTION

GROW delivers targeted, small-group high-impact tutoring aligned to district curricula, with regular sessions, trained tutors, and ongoing assessments—designed to accelerate student growth and close learning gaps without overburdening existing staff.

Paper contracted the International Centre for EdTech Impact together with Instructure to examine the relationship between GROW high-impact tutoring usage and student math learning outcomes. Using the Every Student Succeeds Act (ESSA) standards as guidance in developing a

study design, findings in this report align with ESSA Level III (Promising Evidence; see Appendix A).

RESEARCH QUESTIONS

Implementation

1. To what extent did middle school students use GROW high-impact tutoring during the spring 2025 semester?
 - a. On average, how many total GROW tutoring sessions did students attend?
 - b. On average, how much time (total minutes) did students spend attending GROW tutoring sessions?
 - i. How much time did students spend talking?
 - ii. How much time did students spend with their video camera turned on?
 - c. On average, what percentage of scheduled GROW tutoring sessions did students attend?

Student outcomes

2. Was students' usage of GROW high-impact tutoring associated with students' math scores?

STUDY DESIGN AND METHODS

This study used a correlational design—aligned with ESSA Level III evidence standards—to examine the relationship between the use of GROW high-impact tutoring and students' math learning outcomes. The sample included 123 students across grades 4, 6, 7, and 8. Math scores on GROW's end of spring 2025 semester assessment served as the outcome measure. To mitigate bias, the study also incorporated math scores on GROW's beginning of spring 2025 semester assessment as a baseline measure of students' math achievement.

Researchers first used descriptive statistics to support analyses of implementation. Regression analyses were then conducted to explore the relationship between student GROW usage and student math outcomes. In addition, researchers calculated standardized effect sizes (i.e., omega-squared effect sizes) to determine the strength of these relationships. All models controlled for students' prior achievement.

IMPLEMENTATION FINDINGS

During the spring 2025 semester, students participated in an average of 15 GROW tutoring sessions and attended 81% of scheduled sessions. They spent a total of 612 minutes in tutoring, which included 43 minutes of talk time and 393 minutes with their video camera on. Participation patterns varied by grade level: grade 4 students averaged the highest number of sessions (20 sessions, 617 minutes total, 103 minutes of talk time) with 88% attendance. Grade

6 and grade 7 students both averaged 15 sessions, though grade 6 students recorded more overall time (640 minutes) and had 74% attendance, compared with grade 7 students (594 minutes and 88% attendance). Grade 8 students participated in the fewest sessions (11 sessions, 574 minutes total, only 4 minutes of talk time) and had an attendance rate of 82% (see Table 1).

Table 1. GROW average usage overall and by grade

Grade	<i>n</i>	Average Total Complete Sessions	Average Total Time (Minutes)	Average Total Time Talking (Minutes)	Average Total Time Video On (Minutes)	Attendance %
4	12	20	617	103	590	88
6	52	15	640	59	429	74
7	38	15	594	24	433	88
8	21	11	574	4	116	82
Overall	123	15	612	43	393	81

STUDENT OUTCOMES FINDINGS

A statistically significant, positive relationship was found for students in grade 7 ($p = .030$; $\omega^2 = 0.10$) and grade 8 ($p = .036$; $\omega^2 = 0.17$), indicating that students who attended more sessions in these grades achieved higher math scores. Specifically,

- Grade 7 students who attended more sessions tended to score higher on GROW's end of spring 2025 semester assessment; on average, every 10% increase in attendance corresponds to about a 5-point gain.
- Grade 8 students who attended more sessions tended to score higher on GROW's end of spring 2025 semester assessment; on average, every 10% increase in attendance corresponds to about a 9-point gain.

The relationship was not statistically significant for grade 4 students ($p = .53$) or grade 6 students ($p = .42$) (see Appendix B).

LIMITATIONS AND FUTURE RESEARCH

The current study offers promising results for *GROW*, but further research is needed to address its limitations and strengthen findings:

- **Research Design:** Future studies should employ quasi-experimental or experimental designs aligned with ESSA Level II or I evidence tiers.

- **Limited implementation timeframe:** Because this study's implementation period was limited to spring 2025 semester, future research can consider examining outcomes across a full academic year to capture sustained effects of high-dosage tutoring.
- **Larger sample size:** Future research should include a large sample size to strengthen generalizability and statistical power.
- **Dosage and Fidelity:** Future studies should examine variation in tutoring dosage and implementation fidelity to understand how these factors influence student outcomes.
- **Subgroup Analyses:** Future studies should explore differential effects by student characteristics, including specific subgroups such as multilingual learners or students with disabilities.

CONCLUSIONS

Given the positive, statistically significant findings, this study provides results to satisfy ESSA evidence requirements for Level III (Promising Evidence).

APPENDIX A

The Every Student Succeeds Act (ESSA) provides schools and districts with a framework for determining which products are evidence-based and have been shown to improve student or other relevant outcomes. Following guidance from ESSA ([statute](#) and [non-regulatory guidance](#)), Education Department General Administrative Regulations (EDGAR), [Standards for Excellence in Education Research \(SEER\)](#) and [What Works Clearinghouse \(WWC\)](#), Instructure classifies the research of interventions into one of the four ESSA evidence levels. For more information regarding the evidence levels, please visit <https://www.instructure.com/resources/product-overviews/ensure-edtech-efficacy-essa-evidence>.

 ESSA Level IV Demonstrates Rationale	 ESSA Level III Promising Evidence	 ESSA Level II Moderate Evidence	 ESSA Level I Strong Evidence
Research-based logic model (theory of change) for why this product should work Blueprint for implementation with fidelity, including appropriate usage metrics to track Represents a rationale – not empirical research – in an authentic education setting Limitations on federal funding eligibility	Correlational research study showing positive relationship between tool use and student outcomes Study did not include comparison groups, random assignment, or baseline equivalence Most meaningful for districts with similar context (student demographics, etc.) Establishes eligibility for all types of federal funding	Quasi-experimental research study showing students who used the product outperformed students who did not Includes demographically similar comparison group, but groups were not randomly assigned District context should be strongly considered when interpreting results Establishes eligibility for all types of federal funding	Experimental research study proving students who used the product outperformed students who did not Utilizes randomized comparison group for very strong, highly generalizable evidence Establishes eligibility for all types of federal funding

APPENDIX B

Table B1: Descriptive Statistics for GROW's internal assessments

GROW Users	GROW Assessment Scores	Mean	SD	Min	Max
Grade 4 ($n = 12$)	Pre-scores	46	17.70	13	80
	Post-scores	57	13.20	40	87
Grade 6 ($n = 52$)	Pre-scores	40	18.72	0	80
	Post-scores	52	20.69	7	93
Grade 7 ($n = 38$)	Pre-scores	46	14.83	13	73
	Post-scores	59	17.49	13	87
Grade 8 ($n = 21$)	Pre-scores	42	14.57	20	73
	Post-scores	46	19.30	7	87
Overall ($n = 123$)	Pre-scores	43	16.86	0	80
	Post-scores	54	19.26	7	93

Table B2: Regression analysis of student attendance and math scores on GROW's end of spring 2025 semester assessment for Grade 4 students ($n = 12$), controlling for prior achievement

Grade 4 $n = 12$				
Variable	Coefficient	Std. Error	t	p -value
Attendance	58.24	88.16	0.66	.530

Table B3: Regression analysis of student attendance and math scores on GROW's end of spring 2025 semester assessment for Grade 6 students ($n = 52$), controlling for prior achievement

Grade 6 $n = 52$				
Variable	Coefficient	Std. Error	t	p -value
Attendance	-19.21	23.44	-0.82	.420

Table B4: Regression analysis of student attendance and math scores on GROW's end of spring 2025 semester assessment for Grade 7 students ($n = 38$), controlling for prior achievement

Grade 7 $n = 38$				
Variable	Coefficient	Std. Error	t	p -value
Attendance	54.89	24.23	2.27	.030

Effect Size $\omega^2 = 0.10$

Table B5: Regression analysis of student attendance and math scores on GROW's end of spring 2025 semester assessment for Grade 8 students ($n = 21$), controlling for prior achievement

Grade 8 $n = 21$				
Variable	Coefficient	Std. Error	t	p -value
Attendance	89.83	39.73	2.26	.036

Effect Size $\omega^2 = 0.17$