



LEARNING EXPERIENCE DESIGN | LXD Research | n2y

Unique Learning System

GROWTH STUDY
HIGH SCHOOL ELA & MATH

2021 - 2022 ACADEMIC YEAR

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UNIQUE LEARNING SYSTEM

STUDY BACKGROUND & DETAILS

PROGRAM DESCRIPTION

n2y is a U.S.-based provider of instructional materials for students with moderate to significant disabilities. n2y has been providing instruction for these students for over two decades. Currently they serve their largest share of students through Unique Learning System (ULS), a cloud-based adaptive curriculum that helps classroom teachers deliver differentiated, standards-aligned content in reading, mathematics, language arts, science, and social studies.

STUDY DETAILS

n2y partnered with LXD Research to analyze pre- and post-Checkpoint assessments for ELA and math units of study in October, February, and May of the 2021-22 school year. This report focuses on the high school students.

Checkpoint assessments within Unique Learning System units are delivered pre- and post-instruction. Each assessment item is aligned to a specific skill: six skills per assessment; two questions per skill.

The analytic sample included 1,795 unique students. These 1,795 students had complete data in at least one subject on all six measurement occasions. Of these students, 1,617 had complete data for Reading, 1,407 had complete data for Word Recognition, 1,633 had complete data for Math, and 1,320 had complete data for all three units of study.

Overall, 35% of students were receiving differentiated instruction in Level 2 while 65% were receiving differentiated instruction in Level 3.

SAMPLE DESCRIPTION

LOCATION: Nationwide U.S.

GRADES: High school

DEMOGRAPHICS: Majority (87%) in self-contained SPED classrooms

SUBJECT FOCUS: English language arts and math skills

Size: 1,795 students

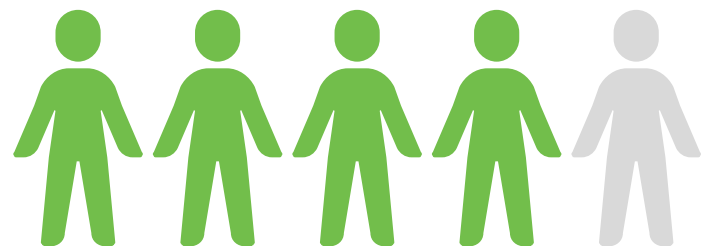
TIME PERIOD: 2021-2022 school year

KEY FINDINGS

Unique Learning System had a notable impact across the school year for Reading, Word Recognition, and Math skills.

- For all three subjects, well over three quarters of students increased or maintained their scores from October to May.
- ULS helped students at both differentiated levels grow throughout the school year by learning at their own level.

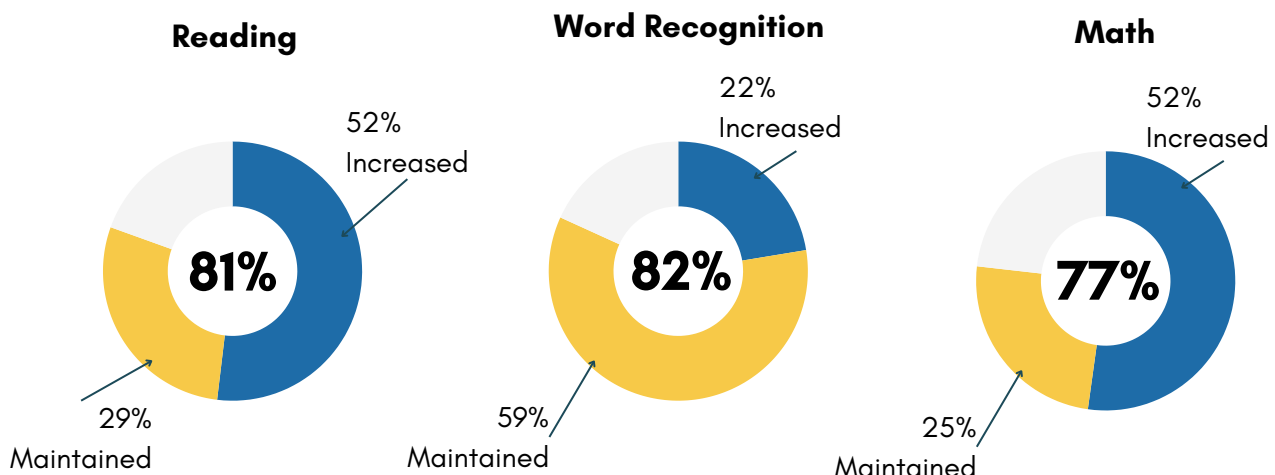
4 Out of 5 Students Increased or Maintained Their Skills for All Subjects



KEY FINDINGS: ELA & MATH GAINS

Unique Learning System had a meaningful impact across the school year for Reading, Word Recognition and Math. For students with unique learning needs, maintaining or improving their skills is an accomplishment to celebrate.

- **80.5%** of the sample **increased** (51.9%) **or maintained** (28.6%) their **Reading** scores from October to May.
- **81.8%** of the sample **increased** (22.4%) **or maintained** (59.4%) their **Word Recognition** scores from October to May.
- **76.8%** of the sample **increased** (52.2%) **or maintained** (24.6%) their **Math** scores from October to May.
- ULS helped students at both differentiated levels grow throughout the school year by learning at their own level.



KEY FINDINGS: ELA & MATH GROWTH TRAJECTORIES

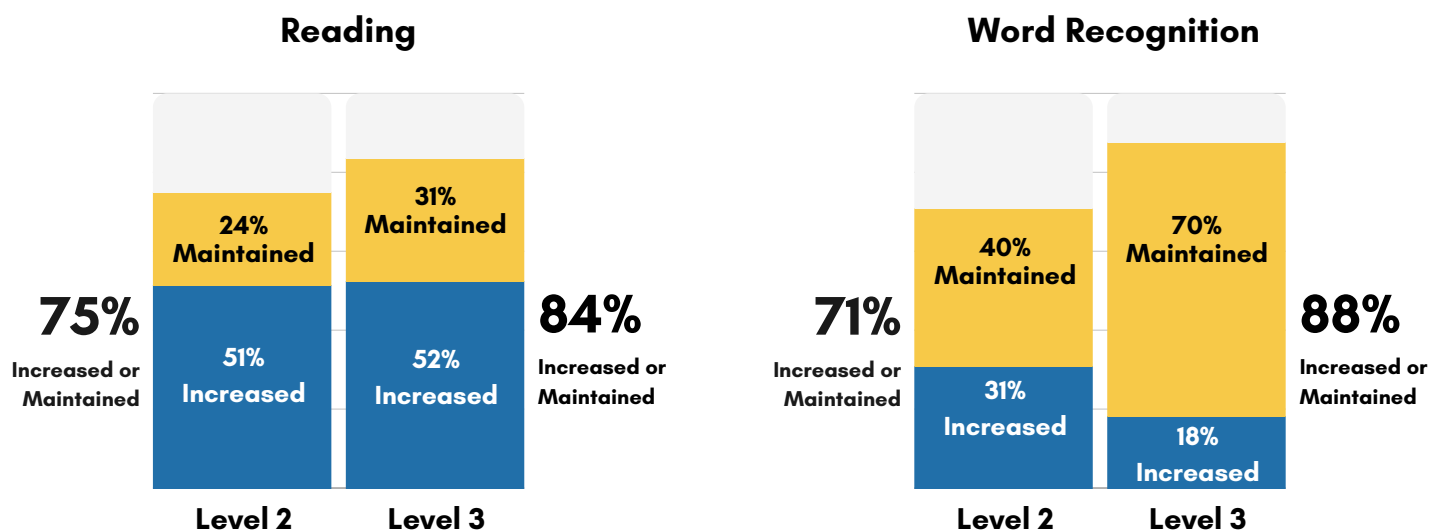
In addition to examining gains from October to May, researchers examined growth patterns from October to February to May.

- For all three subject areas, students at Differentiated Level 3 scored higher than students at Differentiated Level 2 at each measurement occasion.
 - Students at Differentiated Level 3 consistently scoring higher than Differentiated Level 2 is positive evidence that the assessments themselves, in addition to the ULS curriculum, are differentiating effectively.
 - By addressing individual differences in students' needs, ULS helped students at both differentiated levels grow at similar paces throughout the school year by learning at their own level.

KEY FINDINGS: ELA & MATH SCORES BY DIFFERENTIATION LEVEL

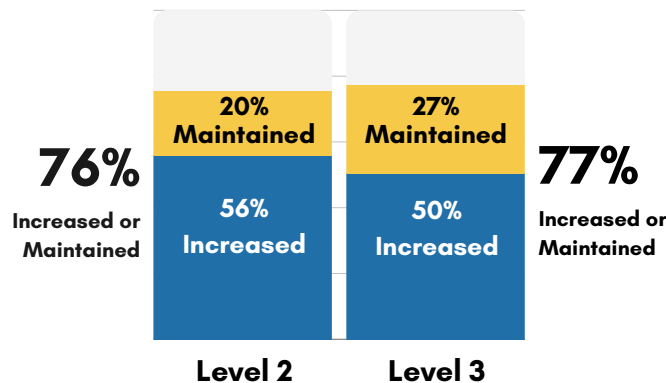
- The Checkpoint assessment data shows Unique Learning System's impact on both Level 2 and Level 3 differentiation groups across the school year.
- The ability to maintain or improve proficiency in ELA and math skills is notable, as it indicates students' ability to generalize and apply these skills throughout the school year.
- At Level 2:
 - **75.0%** of students **improved or maintained** their Reading scores across the year.
 - **70.9%** of students **improved or maintained** their Word Recognition scores across the year.
 - **75.5%** of students **improved or maintained** their Math scores across the year.
- At Level 3:
 - **83.5%** of students **improved or maintained** their Reading scores across the year.
 - **87.6%** of students **improved or maintained** their Word Recognition scores across the year.
 - **77.4%** of students **improved or maintained** their Math scores across the year.

**Percent of Students Who Increased or Maintained Their ELA Skills
by Differentiation Level**



KEY FINDING: ELA & MATH SCORES BY DIFFERENTIATION LEVEL, CONTINUED

Percent of Students Who Increased or Maintained Their Math Skills,
by Differentiation Level



SUMMARY

For special education students, *maintaining* skills across the school year is a win to celebrate. Even better, *increasing* skills across the school year is a huge triumph.

Unique Learning System helped four out of five students improve or maintain their Reading, Word Recognition, and Math skills across the school year.

ULS worked well for multiple subjects and for both differentiation levels, 2 and 3.

Students at both differentiated levels showed encouraging growth, with especially strong results for students at Differentiated Level 3, where:

- **Over 80%** of students **improved or maintained** their **Reading** scores across the year.
- **Nearly 90%** of students **improved or maintained** their **Word Recognition** scores across the year.
- **Nearly 80%** of students **improved or maintained** their **Math** scores across the year.

Taken together, the data show that **ULS worked well for all subjects and for all learners, with especially strong results for Word Recognition and for students at Differentiated Level 3.**

TECHNICAL APPENDIX:

GROWTH TRAJECTORIES

The tables below shows the means along with standard deviations to highlight the individual variability among students.

- In each case, the mean is higher for Differentiated Level 3.
- At all measurement occasions, Differentiated Level 3 has a lower standard deviation than Differentiated Level 2.

	Reading Checkpoint Assessment					
Differentiation Level	October Mean (SD)		February Mean (SD)		May Mean (SD)	
	Pre-test	Post-test	Pre-test	Post-test	Pre-test	Post-test
Level 2 (n = 559)	8.71 (2.59)	9.40 (2.45)	8.61 (2.68)	9.36 (2.44)	8.92 (2.67)	9.40 (2.53)
Level 3 (n = 1,058)	9.98 (2.18)	10.58 (1.89)	10.28 (2.06)	10.64 (1.88)	10.37 (2.16)	10.78 (1.91)
Levels 2 & 3 (n = 1,617)	9.54 (2.41)	10.17 (2.17)	9.70 (2.43)	10.20 (2.18)	9.87 (2.45)	10.30 (2.24)

	Word Recognition Checkpoint Assessment					
Differentiation Level	October Mean (SD)		February Mean (SD)		May Mean (SD)	
	Pre-test	Post-test	Pre-test	Post-test	Pre-test	Post-test
Level 2 (n = 488)	9.53 (3.30)	10.26 (2.77)	9.46 (3.18)	9.95 (2.97)	9.56 (3.30)	9.84 (3.08)
Level 3 (n = 919)	10.94 (2.64)	11.28 (2.01)	11.20 (1.90)	11.23 (2.00)	11.19 (2.05)	11.29 (2.00)
Levels 2 & 3 (n = 1,407)	10.45 (2.96)	10.92 (2.35)	10.60 (2.56)	10.78 (2.46)	10.63 (2.67)	10.79 (2.52)

TECHNICAL APPENDIX: GROWTH TRAJECTORIES, CONTINUED

The table below shows the means along with standard deviations to highlight the individual variability among students.

- In each case, the mean is higher for Differentiated Level 3.
- Differentiated Level 3 has a lower standard deviation than Differentiated Level 2 in all cases except for the February post-test.

	Math Checkpoint Assessment					
Differentiation Level	October Mean (SD)		February Mean (SD)		May Mean (SD)	
	Pre-test	Post-test	Pre-test	Post-test	Pre-test	Post-test
Level 2 (<i>n</i> = 556)	7.83 (3.30)	8.58 (3.06)	8.18 (3.07)	8.84 (2.84)	8.59 (2.89)	9.20 (2.82)
Level 3 (<i>n</i> = 1,077)	9.42 (2.60)	9.84 (2.42)	9.88 (2.37)	10.14 (2.25)	10.08 (2.32)	10.34 (2.09)
Levels 2 & 3 (<i>n</i> = 1,633)	8.88 (2.95)	9.41 (2.72)	9.30 (2.75)	9.70 (2.54)	9.57 (2.62)	9.95 (2.42)

LXD Research is an independent research firm that evaluates educational programs with ESSA-aligned methods.

Learn more at www.lxdresearch.com

n2y offers special education solutions that prepare students for the ultimate test: succeeding in life. Empower achievement and enrich lives with differentiated, standards-based academic and life skills lessons, skill-based intervention, comprehensive assessment and data collection, integrated behavior management and intervention, engaging educational games, relevant symbol communication tools, enriching current events content, and a powerful, collaborative system for IEP development and implementation.

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