

ReadyGEN Field Study Report

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Executive Summary

Due to the growing need to provide engaging, standards-driven elementary literacy instruction, Savvas developed ReadyGEN, a K–6 integrated literacy program.

Designed to help students accelerate their learning through a reading experience with authentic text, ReadyGEN engages students through its 12 full-length, authentic literary and informational texts at every grade. Unlike other core reading programs, ReadyGEN lets educators teach with full-length, authentic literature, not a basal anthology. Every ReadyGEN lesson follows the Gradual Release of Responsibility Model with the goal of building independent and engaged readers and writers.

The ReadyGEN Field Study was designed to gather preliminary outcome data on a diverse set of student and teacher outcomes as well as teacher feedback. The field study was conducted by the Savvas Research team during the 2015-2016 school year, and included two elementary schools, 11 teachers and 264 students in grades 1 and 4. Major findings, organized by the key evaluation questions, are presented below.

Is there a relationship between ReadyGEN and improvements in student literacy skills? What reading gains, if any, are observed and how large are these gains? Does growth vary by subpopulations and contexts?

Results showed that ReadyGEN students demonstrated significant growth (12% percentile points of growth) over the course of the study, as gauged by a national, standardized test, the Terranova 3 Reading Test. Effect size is a commonly used measure of the importance of an observed difference. The effect size of the observed change ($d=.77$) can be classified as large.

Results by ReadyGEN subgroups also showed significant learning gains across different types of students including females, males, Limited English Proficiency students and non-LEP students, Special Education and non-Special Education students, and students of various ethnicities. Results also showed significant differences between schools, Special Education and Non-Special Education students, and 1st and 4th graders. Specifically, ReadyGEN students at School A had greater learning gains than students at School B, and this difference was quite large ($d=.78$). Similarly, non-Special Education students demonstrated greater literacy growth than Special Education students ($d=.33$).

What other potential impacts does ReadyGEN have on students and teachers?

As part of the field study, students completed the Elementary Reading Attitude Survey in the Fall and Spring to measure changes in their reading attitudes. Results showed that 4th grade students demonstrated an increase in their reading attitudes while 1st graders demonstrated a decline in their reading attitudes .

Results from teachers on the impact of ReadyGEN were somewhat mixed. It should be noted that while the surveys analyze responses from all teachers, the small sample size (n=11) participating in the field study means that a few teachers can easily impact results (for example, 3 teachers disagreeing out of 11 will produce an agreement rate of only 73%). For example, overwhelmingly teachers (91%) reported that their students had learned important English Language Arts skills over the course of the study (and this is consistent with the Terranova 3 results). However, while they reported that students had learned, approximately only half were satisfied with their students' progress and felt their students had been academically challenged by ReadyGEN. Teachers also reported that the biggest impacts of ReadyGEN were on student writing skills (73%), followed by vocabulary (55%). Furthermore, 64% of teachers felt ReadyGEN assisted their students for the Common Core State Standards (CCSS), primarily in meeting CCSS Reading standards. The majority of teachers (82%) also reported that the program helped students with 21st Century skills such as: 1) seeing connections between reading and the real-world, 2) analyzing and synthesizing information from multiple sources and 3) higher order cognitive skills.

Similarly, results on the program's impact on student engagement are mixed. Approximately 82% of ReadyGEN teachers reported that students actively participated in their literacy learning. However, when teachers were asked specifically about ReadyGEN, results are not as positive; for example, a little over half (6 of 11) teachers felt that ReadyGEN increased students' interest in reading, and only 5 of 11 of teachers reported that the program's reading activities were fun and engaging for students.

In terms of the program's impact on teacher practices and preparedness, over half (64% and higher) of teachers reported that ReadyGEN: 1) provided good ideas for reading and writing activities, 2) provided teachers with requisite knowledge to teach each lesson, 3) positively impacted their knowledge of the CCSS for Reading, and 4) assisted students with limited reading abilities (including LEP students).

What do teachers think about ReadyGEN? How do the teachers rate the perceived usefulness and quality of program features?

A little over half of teachers (6 out of 11) reported that they liked the ReadyGEN program. These teachers liked the ReadyGEN program materials, would like to use again next year, and felt it was different in a positive way in comparison to other English/Language Arts programs they have used previously. When asked to compare the ReadyGEN program to prior English/Language Arts programs, 45% of teachers liked ReadyGEN better and another 45% preferred their prior program(s). Thus, their ratings of ReadyGEN were also mixed.

That said, teachers did feel certain components of ReadyGEN were quite useful. For example, the top three rated components by teachers are: 1) Anchor text, 2) Teacher Guide, and 3) Savvas Realize. In contrast, the least useful components as rated by the study teachers are: 1) Scaffolding Handbook, 2) Foundational Skills mini-lessons, and 3) assessments. In general, they also rated the reading and writing activities as useful, and liked the variety of genres and stories included in ReadyGEN text. In contrast, only 18% thought the ReadyGEN program offered useful phonics and grammar activities. It should be noted that not all phonics and grammar resources were available during the implementation of the study. In general, while some components and resources were rated quite favorably, this was not true of all components and features.

In sum, the ReadyGEN Field Study demonstrated that students who used this program showed high levels of literacy gains over the course of the study. Preliminary findings do suggest a positive relationship between usage of ReadyGEN and student performance. On other outcome measures (e.g., perceived impacts on students literacy skills, engagement, student reading attitudes, etc.) and teacher feedback of the program, results were not as significant or favorable.

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Project Background

“Literacy arouses hopes, not only in society as a whole but also in the individual who is striving for fulfilment, happiness and personal benefit by learning how to read and write. Literacy... means far more than learning how to read and write... The aim is to transmit... knowledge and promote social participation.” -

UNESCO Institute for Education, Hamburg, Germany

In years past literacy research emphasized the importance of reading, both being read to and independent reading, as a predictor of future academic success in reading and language arts. However, more recent research has shown that reading, as a stand-alone activity, is not enough to create pre-literacy skills that lead to successful reading skill attainment later on (Phillips et al., 2008). Indeed, children need comprehensive skill building activities in order to truly achieve literacy levels that will allow them to succeed in both 21st century academics and the work place (Roberts, Jurgens, & Burchinal, M., 2005).

In an effort to address the literacy needs of our country’s youth, Savvas Education developed a K–6 integrated literacy program. Designed to help students accelerate their learning through areading experience with authentic text, ReadyGEN engages students through its 12 full-length, authentic literary and informational texts at every grade. Thus, unlike other core reading programs, ReadyGEN lets educators teach with full-length, authentic literature, not a basal anthology. Aligned to the Common Core State Standards, ReadyGEN meets text complexity requirements and the suggested percentage of fiction to nonfiction selections.

Every ReadyGEN lesson follows the Gradual Release of Responsibility Model with the goal of building independent readers and writers. Within each lesson, students delve into key ideas and details, craft and structure, and the integration of knowledge and ideas. The program also comes with a plethora of resources designed to meet the needs of all learners. For example, Foundational Skills lessons help students to build understanding through text and instruction and the Scaffolded Strategies Handbook allows teachers to determine the support students need to overcome the challenges in the texts. In ReadyGEN, writing is also taught every day with students practicing the writing process and in multiple modes.

In order to obtain preliminary information on this new literacy program, the Savvas Research Team conducted a one-year field study on ReadyGEN during the 2015-16 school year. The field study was designed to gather preliminary outcome data on a diverse set of student and teacher outcomes as well as teacher feedback. The study was conducted at two elementary schools, and included students in grades 1 and 4.

Project Overview

The overarching purpose of this field study was to explore the extent to which the ReadyGEN program is associated with increases in literacy skills among elementary students. Specifically, this study was designed to address the following research questions:

- Is there a relationship between ReadyGEN and improvements in student literacy skills? What reading gains, if any, are observed and how large are these gains? Does growth vary by subpopulations and contexts?
- What other potential impacts does ReadyGEN have on students and teachers?
- What do teachers think about ReadyGEN? How do the teachers rate the perceived usefulness and quality of program features?

The remainder of this report includes: 1) a description of the methodology of the study, including a more detailed description of the sample; 2) results of the analyses performed organized by evaluation questions; and 3) overall conclusions.

Design and Methodology

Research Design

This study was designed to evaluate the relationship between ReadyGEN and student reading gains as well as evaluate teacher implementation practices and perceptions of the program. The research design was a one-year summative field test with teachers in grades one and four implementing the ReadyGEN program during the 2015-2016 school year. This field test utilized a pre/post measure of student performance in reading as well as teacher implementation and practices. Implementation data was

collected on instructional activities and materials utilized so usage of the ReadyGEN curriculum could be monitored and to encourage fidelity of implementation of the program. Implementation guidelines were provided to promote fidelity of implementation of ReadyGEN. The TerraNova 3 (for 1st graders¹) and Terranova 3 Common Core edition (for 4th graders) were selected in order to enhance the sensitivity of the study to picking up the effects of ReadyGEN on student performance on the Common Core State Standards. Standard scores from the norm-referenced assessments were used in all analyses because of the equal-interval property of the scores which make them appropriate for computations.

Procedures

Training

All participating ReadyGEN teachers received an initial activation training at the beginning of the school year prior to implementing the program. The initial activation training was four hours long at Site A and two hour long at Site B. The training provided: a) an overview of the program and components, b) how to implement a module, and c) registration and use of online resources on Savvas Realize. Additionally, teachers participated in a forty-five minute long virtual research orientation. The research orientation reviewed data collection instruments and the timeline for data collection for the school year. It also gave the teachers the opportunity to ask any questions regarding research activities.

Curriculum

ReadyGEN is an elementary reading program that was designed to provide students and teachers with the tools to meet the Common Core State Standards instructional shifts. ReadyGEN is organized around unit modules. Grades kindergarten to two includes six units and there are four units in grades three to six. ReadyGEN includes Authentic, rigorous Text Sets to build knowledge around unit themes that actively engage students. Each theme emphasizes common characteristics of a unifying concept and promotes in-depth understanding through daily lessons in two modules.

¹ The Common Core edition is unavailable for 1st graders

Teacher and students also had access to the online platform Savvas Realize, which contains online resources to support print components and provide flexibility. Specific program materials provided to classrooms included:

- Teacher's Guide
- Reader's and Writer's Journal Teacher's Guide
- Scaffolded Strategies Handbook
- Assessment Book
- Text Collection and/or Classroom Library

Implementation Guidelines

ReadyGEN teachers were provided with implementation guidelines at the beginning of the study. The implementation guidelines were developed by the Savvas ReadyGEN team and provided a concise outline of the program's routine as well as key program components that serve as the foundation of the ReadyGEN program. The implementation guidelines were reviewed at the initial training with all participating teachers. A full copy of the implementation guidelines can be found in Appendix B.

Measures

A range of information was collected as part of the study, including descriptive information, program implementation data, and preliminary outcome data. While the majority of the data is quantitative in nature (surveys, assessments), teachers were also given the opportunity to provide open-ended responses regarding the usefulness of ReadyGEN program features. The following provides details on the measures employed as part of the field study.

Teacher Survey: Field study teachers completed an online teacher survey at the end of the study. The survey was developed by the Savvas Research group to collect information on:

- Perceived impacts of ReadyGEN on student skills, including preparation for Common Core State Standards;

- Perceived impacts on engagement;
- Perceived impacts on teachers' practices and skills; and
- Satisfaction with and feedback on ReadyGEN.

Online Implementation Log: Field study teachers completed an online implementation each week during the study period. This implementation log was developed by the Savvas Research group to collect information on ReadyGEN usage (days and amount of time) and implementation of ReadyGen components and routines. Additionally these logs tracked if any modifications were made during instruction of ReadyGEN lessons or if teachers supplemented with other materials. The logs were completed at the end of each week and took approximately fifteen minutes to complete.

Student Survey: Participating students in the 1st and 4th grade completed the Elementary Reading Attitude Survey² in September 2015 and May 2016. The survey was designed to measure student attitudes toward reading around two dimensions: academic and recreational reading. The 20 item survey is administered whole class, and consists of a brief statement about reading (e.g., "How do you feel about reading for fun at home?") followed by 4 pictures of Garfield, with each Garfield pose depicting a different emotional state which range from very positive (happiness) to very negative (anger).

Student Assessments: Assessments were administered twice over the course of the study, once in September 2015 and again in May 2016, in order to obtain pre-post data to measure literacy gains. The TerraNova 3 was selected following a review of existing standardized, published assessments.

The TerraNova 3 (for 1st graders³) and Terranova 3 Common Core edition (for 4th graders) features innovative items that deliver an authentic measure of the higher order thinking skills and increased depth of knowledge highlighted by the Common Core. This assessment offers constructed-response, extended constructed- response, and performance task items in the same test, on the same scale. As part of the field study,

² McKenna, M. C. & Kear, D. J. (1990). Measuring attitude toward reading: A new tool for teachers. *The Reading Teacher*, 43(9), 626-639.

³ The Common Core edition is unavailable for 1st graders

students were administered the Reading portion of the test. At the first grade, students were administered 40 reading test items measuring 6 objectives: Oral Comprehension, Basic Understanding, Analyze Text, Evaluate/Extend Meaning, Reading and Writing Strategies, and Introduction to Print. At the fourth grade, students were administered 45 reading test items measuring 4 objectives: Basic Understanding, Analyze Text, Evaluate/Extend Meaning, and Reading and Writing Strategies. The reading test produces a single scale score which was the primary measure for outcome analyses. For presentation and interpretability purposes, scores were also converted to percentile ranks.

For both assessments, teachers followed the test publisher's standard testing procedures to administer the assessment. For the TerraNova 3, Gatti Evaluation, an independent research firm, scored the test following published scoring protocols.

Classroom Observations and Interviews: Each classroom was observed twice during the school year. The first observation occurred in the fall in October or November, and the second observation occurred in the spring during May. The observations took approximately 45 minutes. Each teacher was also interviewed for 15 minutes to gain perspective on how the lesson went, perceived impact of ReadyGEN on student learning, feedback on ReadyGEN lessons and components as well as satisfaction with ReadyGEN.

Implementation

All the teachers implemented ReadyGEN with moderate fidelity. An average of 101 lessons were completed during the school year with an average of 3.09 lessons implemented each week. When the average implementation for each of the key routines were analyzed, the majority of teachers implemented Build Understanding, Close Read, and Writing. While small groups were employed by both schools on a daily basis, one school utilized ReadyGEN resources much more extensively than the other.

Key routines were also examined more closely to determine on average what teachers were implementing. The majority of teachers utilized the following routines from Build Understanding: Set the Purpose, Engage Children, Read and Turn and Talk. Close Read routines were more varied with teachers implementing Cite Text Evidence and Reading or Language Analysis approximately 50% of the time. By The Way Words,

Benchmark Vocabulary, Close Read Practice and Close Read Model were all implemented between 24% and 38% of the time.

All teachers met with small reading groups each week. On average each classroom had five small groups. Low-performing reading groups were met with an average of 3 times each week for approximately 21 minutes each meeting. On-level performing reading groups were met with an average of 2.5 times each week for just under 20 minutes each meeting. The high performing groups were met with an average of 2 times per week for an average of almost 21 minutes per meeting.

Site and Sample Description

Schools who had recently purchased ReadyGEN or were currently piloting the ReadyGEN program were contacted for participation in the field test. Participating schools were required to complete research related activities and use the ReadyGEN program with fidelity for the full school year. Two schools participated in the study. The schools were located in urban and suburban areas in North Carolina. The final sample consisted of 297 students in thirteen classrooms taught by twelve teachers. The study participants were in first grade (216 students) and fourth grade (81 students). Table 1 presents the demographic distribution among study students.

Table 1: Student Demographics by Site

		School Name					
		School A		School B		Total	
		Count	Column %	Count	Column %	Count	Column %
Grade	1	144	100.0%	72	47.1%	216	72.7%
	4	0	0.0%	81	52.9%	81	27.3%
Gender	Female	73	53.7%	65	42.5%	138	47.8%
	Male	63	46.3%	88	57.5%	151	52.2%
Ethnicity	White	88	64.7%	94	61.4%	182	63.0%
	Hispanic	22	16.2%	29	19.0%	51	17.6%
	African American	20	14.7%	27	17.6%	47	16.3%
	Asian/Pacific Islander	2	1.5%	0	0.0%	2	0.7%
	Other/Multi	4	2.9%	3	2.0%	7	2.4%
ELL	Yes	21	15.4%	28	18.3%	49	17.0%
Special Ed.	Yes	16	11.8%	33	21.6%	49	17.0%

A total of twelve teachers participated in the study. All twelve teachers were female. Approximately 46.2% of teachers had been teaching for 0 to 5 years, 23.1% of teachers had been teaching 11 to 15 years, 15.4% had been teaching more than 20 years, and 7.7% had taught 6 to 10 years and 16 to 20 years. All teachers had a Bachelor's Degree (46.2%) or Master's Degree (52.8%).

Results

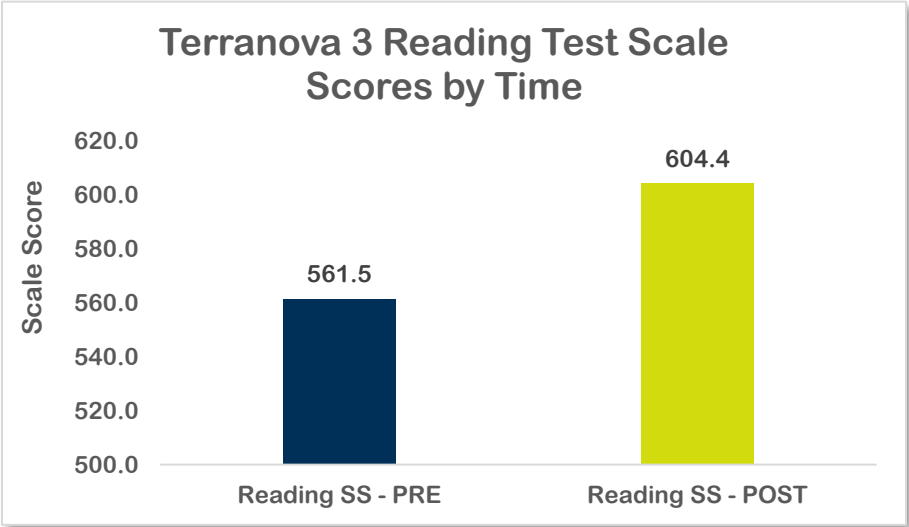
Is there a relationship between ReadyGEN and improvements in student literacy skills? What reading gains, if any, are observed and how large are these gains? Does growth vary by subpopulations and contexts?

In order to determine whether significant⁴ literacy gains occurred over the course of the field study, student pre- and post-test scale scores were analyzed via paired sample t-tests. Figure 1 shows the average pre- and post-scale score across all ReadyGEN students. As shown, students demonstrated considerable growth from pre (561.5) to post-testing (604.4), and this growth was also statistically significant, $p < .05$ ⁵. This is supported by the obtained effect size. Effect size is a commonly used measure of the importance of an observed difference. The effect size of the observed change ($d = .77$) can be classified as large.

⁴ "Significant" here means that we can be 95% or more confident that the observed differences are real. If the significance level is less than or equal to .05, then the differences are considered statistically significant. If this value is greater than .05, this means that any observed differences are not statistically significant and may be interpreted as inconclusive. However, at times this may be referred to as "marginally significant." In this case, the criterion is more liberal and means that we can be 90% or more confident that the observed differences are real.

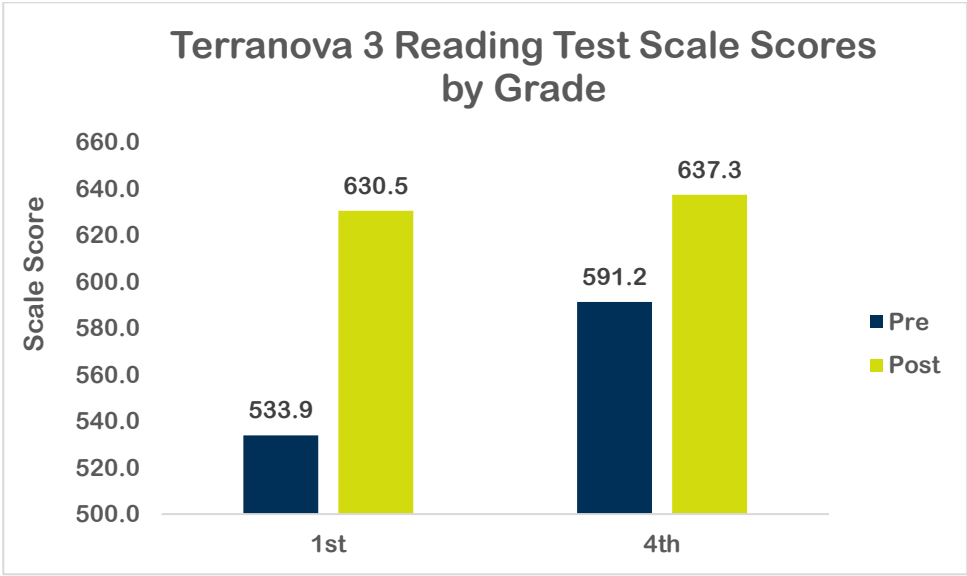
⁵ Tables for statistical results are presented in Appendix A.

Figure 1. Terranova 3 Scale Score Change from Pre- to Post-testing for First and Fourth Grade



When analyses were conducted by grade level, results showed significant gains among both 1st and 4th grade ReadyGEN students as measured by scale scores, see Figure 2.

Figure 2. Terranova 3 Percentile Rank Change from Pre- to Post-testing: By Grade

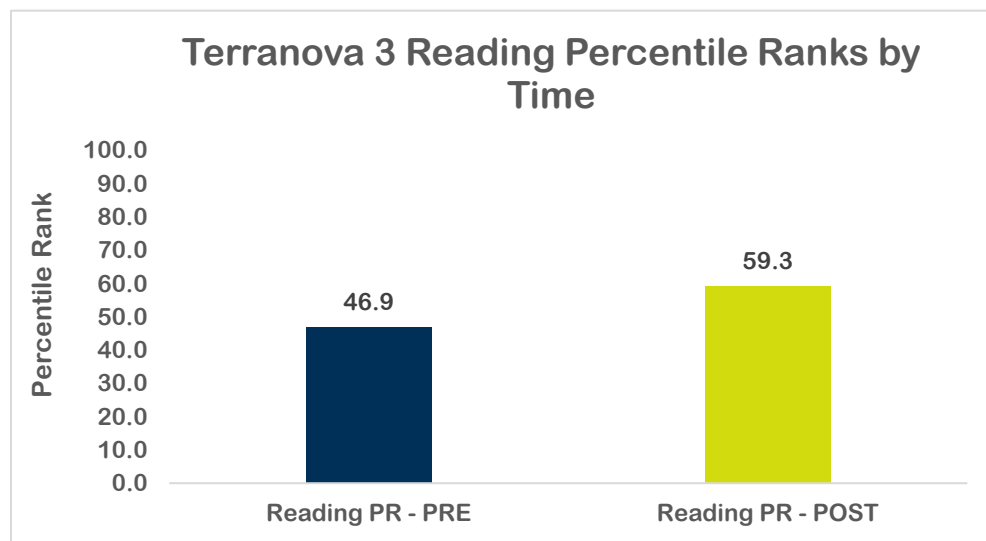


Improvement among ReadyGEN students can also be seen in growth of percentile ranks⁶, see Figure 3. It is a general rule of thumb that if a student makes a year's

⁶ Percentile ranks indicate the relative standing of a student in comparison with other students in the same grade in the norm (reference) groups (in this case, the nation) who took the test at a comparable time. Since percentile ranks do not represent equal units, and since their interpretation is limited to the reference group from which they were derived, they are best used for reporting scores when position in relation to the reference group is of primary interest.

growth for a year of instruction, then the percentile rank will remain the same. For the study sample, the percentile rank grew more than what would be expected in a typical academic year -- ReadyGEN students grew by 12 percentile points.

Figure 3. Terranova 3 Percentile Rank Change from Pre- to Post-testing for First and Fourth Grade



In summary, results showed that students who used ReadyGEN demonstrated significant growth in reading skills over time. In the following section, we examine whether gains were consistent across subgroups and contexts.

Growth by Subpopulations and Contexts

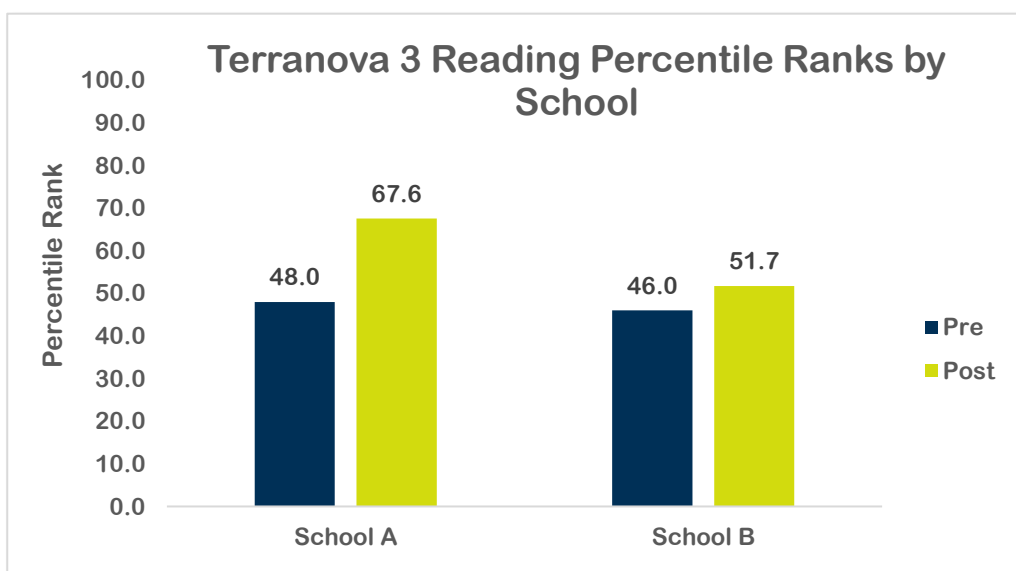
The overall math scale scores were analyzed by subpopulations in order to determine whether observed growth rates were consistent or accelerated between different types of ReadyGEN students. It should be noted that the sample sizes within subpopulations may be limited and/or non-equivalent and thus, the detection of differences is less sensitive. Subpopulations that contained sufficient data included: gender, ethnicity, Limited English Proficiency (LEP) status, Special education status, and grade level.

Results showed significant gains among all subgroups of ReadyGEN students as measured by scale scores. That is, females, males, Limited English Proficiency students and non-LEP students, Special Education students and non-Special Education students, and students of various ethnicities all demonstrated significant

gains from pre- to post-testing. For ease of interpretation, Figures 4-9 show the average pre/post percentile ranks for each subgroup⁷.

In addition, the interaction between growth and subgroup was examined to determine if members of subgroups demonstrated accelerated (or lower) gains as compared to non-members (or vice-versa). Results showed significant differences between schools, special education and non-special education students, and 1st and 4th graders. Specifically, ReadyGEN students at School A had greater learning gains (20%) than students at School B (6%), and this difference was quite large ($d=.78$). Similarly, non-Special Education students demonstrated greater literacy growth (14%) than Special Education students (6%, $d=.33$). The difference between the growth rates of 1st and 4th graders was also large ($d=.84$). Specifically, among 4th grade students, there was no growth as measured by the percentile rank (-2%); however, 1st graders demonstrated significant growth (19%) from pre- to post-testing as measured by the percentile ranks.

Figure 4. Terranova 3 Percentile Rank Change from Pre- to Post-testing by School



⁷ While graphs display percentile ranks, analysis are based on the standardized scale scores for all subgroups except grade level. For this analysis, percentile rank was used since it is on the same scale (0-100) regardless of grade – in contrast, the scale score is designed to be higher by grade (vertical scale).

Figure 5. Terranova 3 Percentile Rank Change from Pre- to Post-testing by Special Education Status

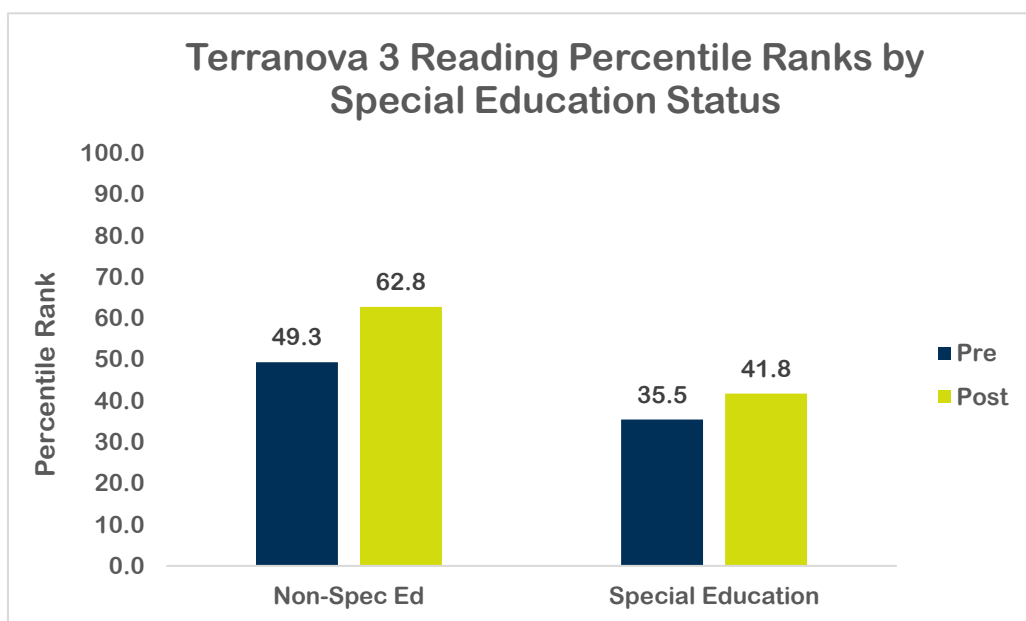


Figure 6. Terranova 3 Percentile Rank Change from Pre- to Post-testing by Grade

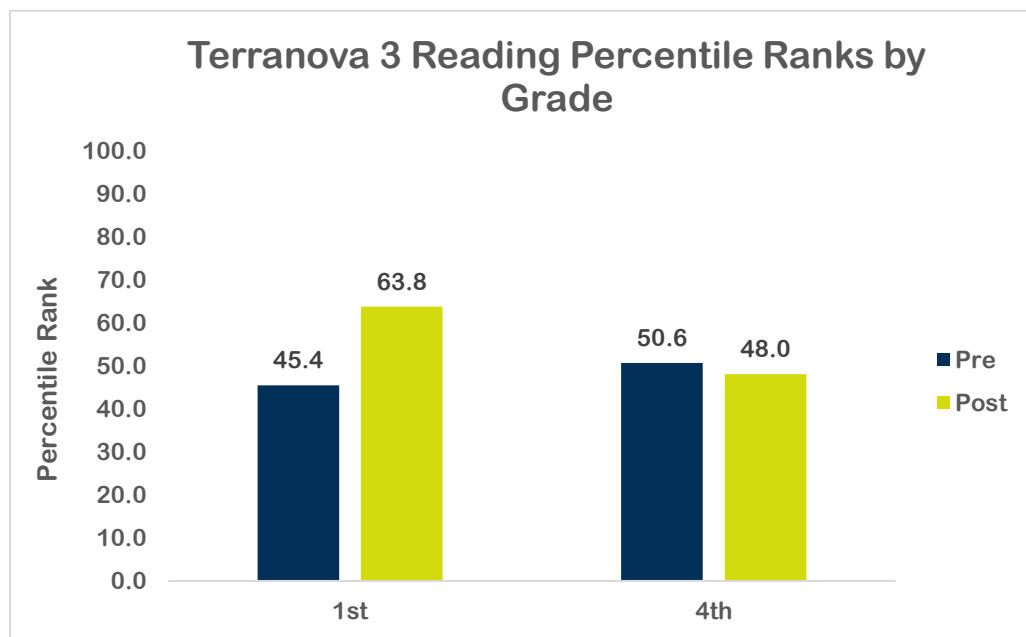


Figure 7. Terranova 3 Percentile Rank Change from Pre- to Post-testing by Gender

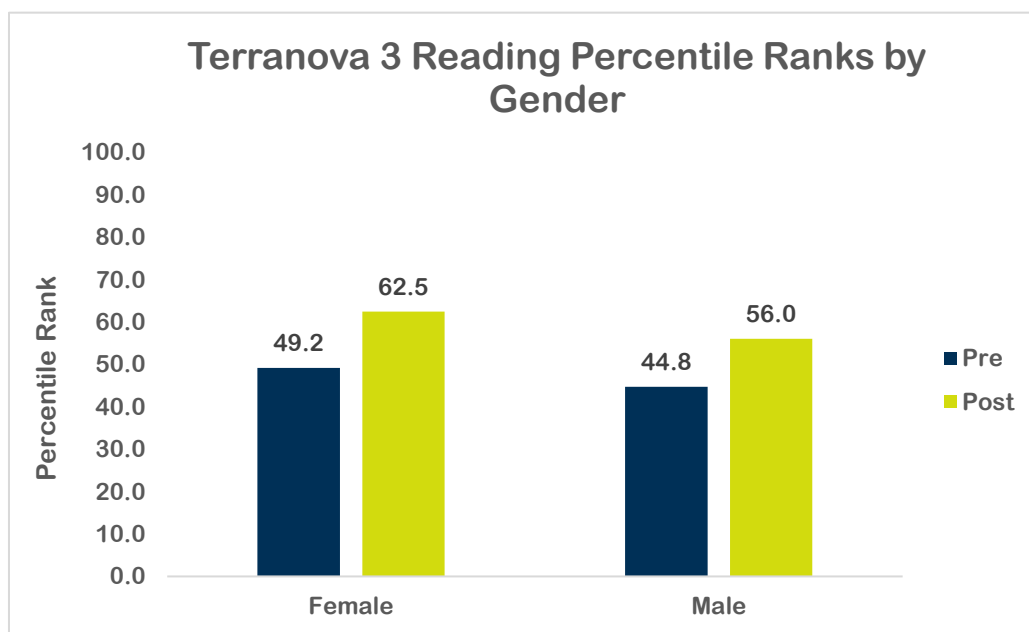


Figure 8. Terranova 3 Percentile Rank Change from Pre- to Post-testing by Ethnicity

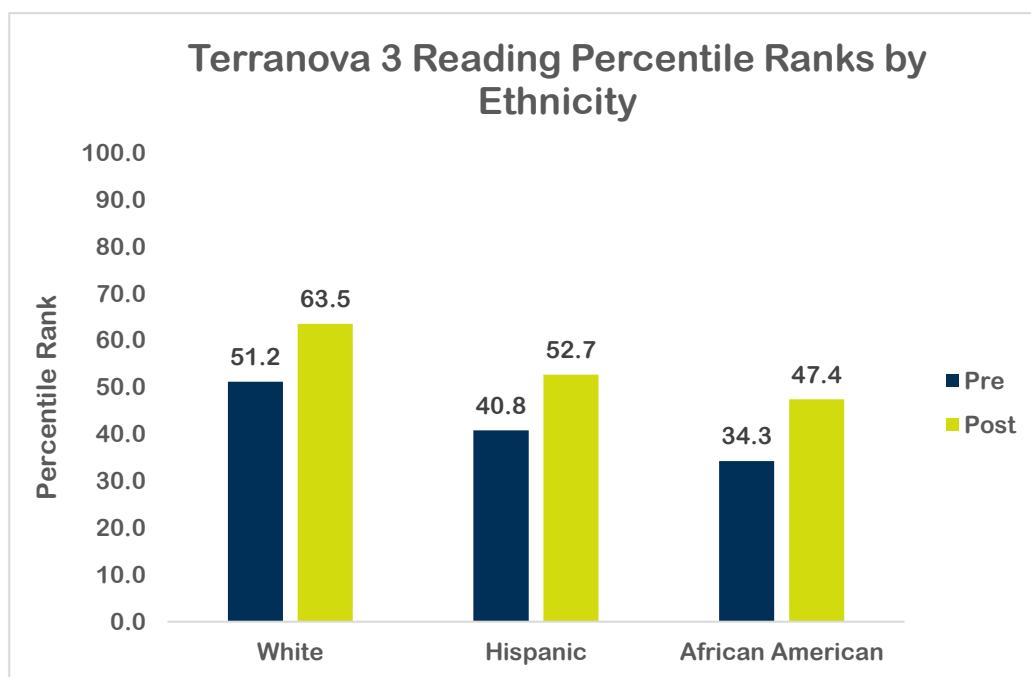
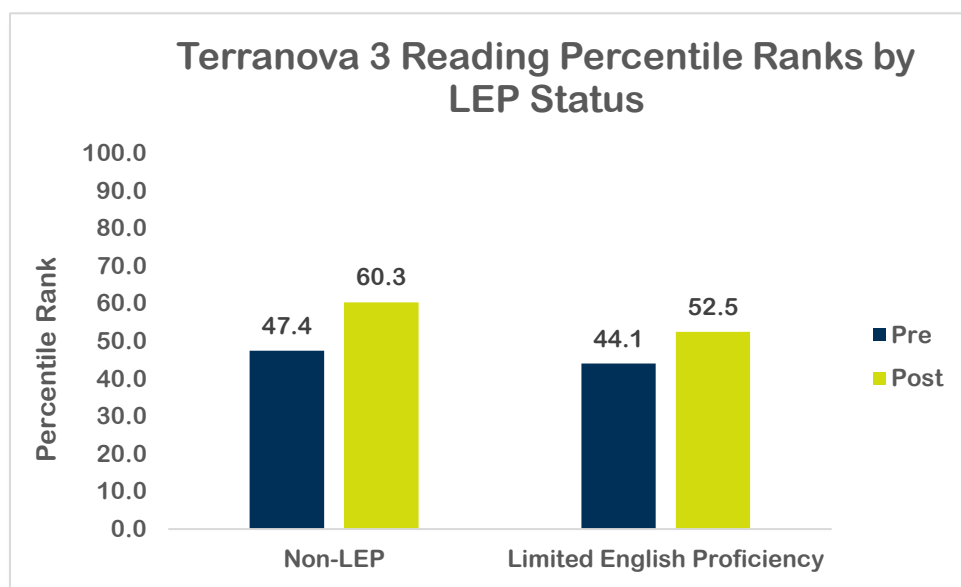


Figure 9. Terranova 3 Percentile Rank Change from Pre- to Post-testing by Limited English Proficiency Status



To summarize, results by ReadyGEN subgroups showed significant learning gains across different types of students including females, males, minorities and non-minorities, LEP students and those not, and Special Education and non-Special Education students. Furthermore, accelerated literacy gains were observed for students at School A, non-Special Education students, and 1st grade students as compared to students at School B, Special Education students and 4th grade students, respectively.

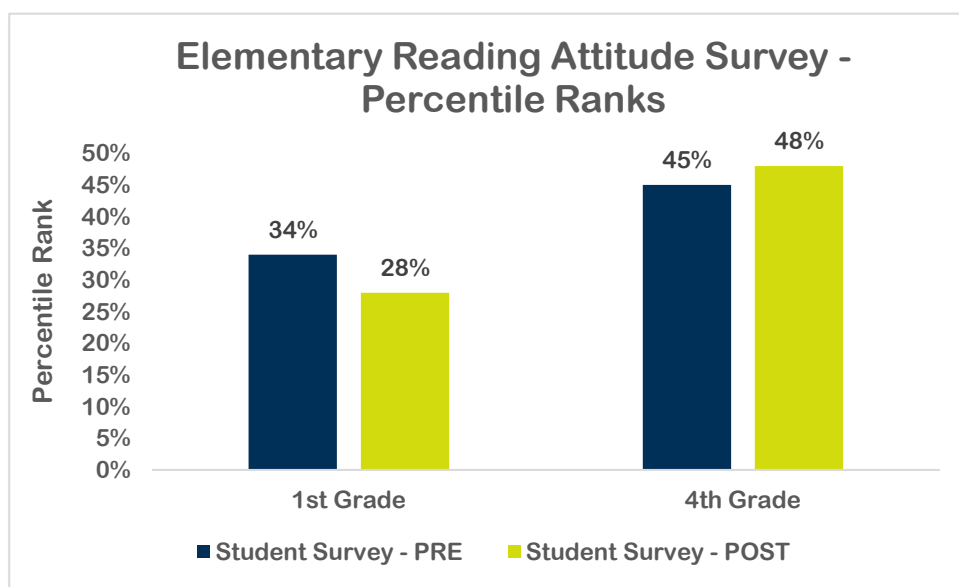
What other potential impacts does ReadyGEN have on students and teachers?

Student and teacher surveys were used to collect information on other preliminary outcomes. Specifically, students were asked to report on their attitudes towards reading and teachers were asked to report the extent to which ReadyGEN impacted student literacy skills, preparation, and engagement. It should be noted that while the surveys analyze responses from all teachers, the small sample size (n=11) participating in the field study means that a few teachers can easily impact results (for example, 3 teachers disagreeing out of 11 will produce an agreement rate of only 73%). With this in mind, the following results are presented along with qualitative information from teacher surveys in order to provide preliminary information on what teachers and students thought about the potential impact of this program.

Perceived Impact on Student Reading Attitudes

As previously noted, students completed the Elementary Reading Attitude Survey in the Fall and Spring to measure changes in their reading attitudes. For interpretability purposes, their raw scores were converted to percentile ranks. As shown in Figure 10, students in 1st grade demonstrated a drop in their reading attitudes (6%); this decline was marginally significant, $t_{(185)}=1.775$, $p=.08$. In contrast, 4th grade students demonstrated an increase in their reading attitudes (3%) but this improvement was not statistically significant, $t_{(73)}=0.422$, $p=.67$.

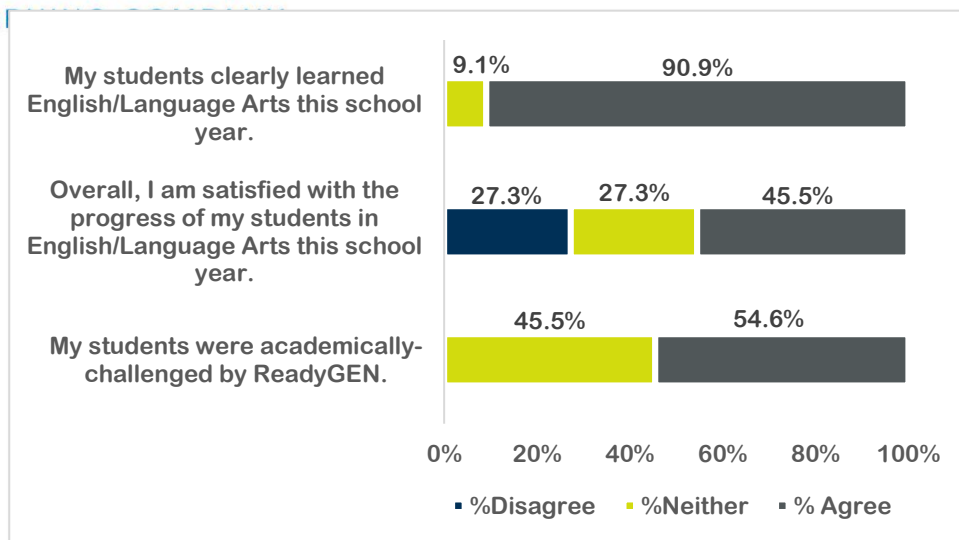
Figure 10. Elementary Reading Attitude Survey Results



Perceived Impact on Student Literacy Skills

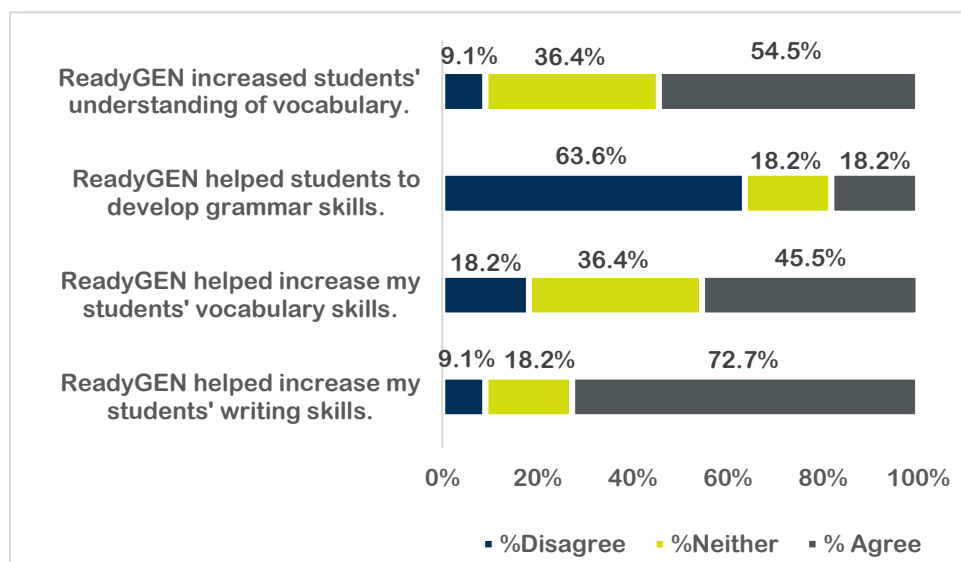
Teachers were asked to report on the extent to which their students demonstrated learning gains and skills over the course of the field study. As shown in Figure 11, overwhelmingly teachers reported that their students had learned important English Language Arts skills (91%). However, while they reported that students had learned, approximately only ½ were satisfied with student progress over this time and felt their students had been academically challenged by ReadyGEN.

Figure 11. Teacher Perceptions of Student Learning and Progress



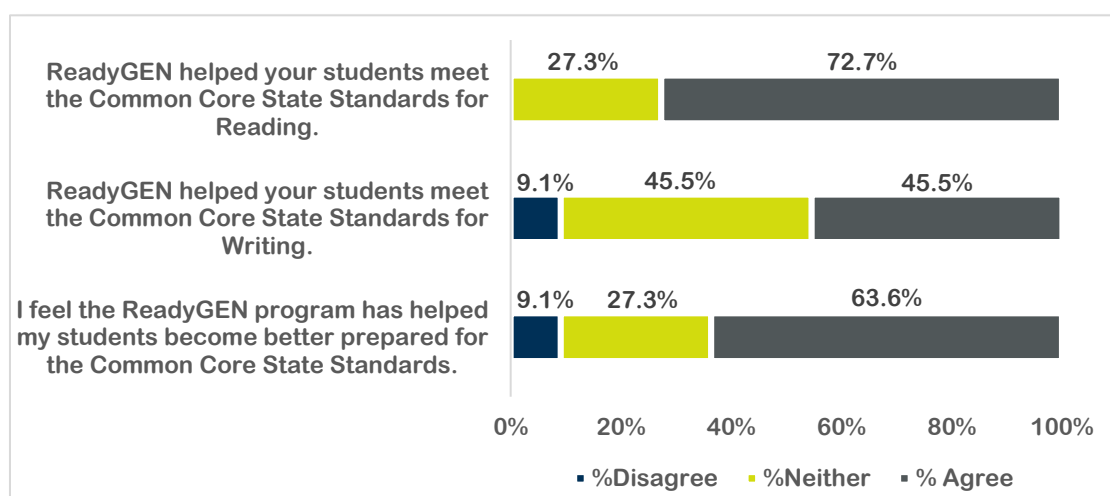
When asked specifically the extent to which ReadyGEN had a positive impact on a variety of student skills, results showed that most teachers felt the program helped increase their students' writing skills (73%). Furthermore, about ½ felt that ReadyGEN also assisted students' vocabulary skills and understanding. However, teachers did not feel strongly about the program's impact on students' grammar skills – only 18% reported that the program helped in this area, see Figure 12. It should be noted that not all grammar and phonics materials were not available during a large majority of the study and implementation did not include these materials for the most part.

Figure 12. Teacher Perceptions of Impact of ReadyGEN on Students' Skills



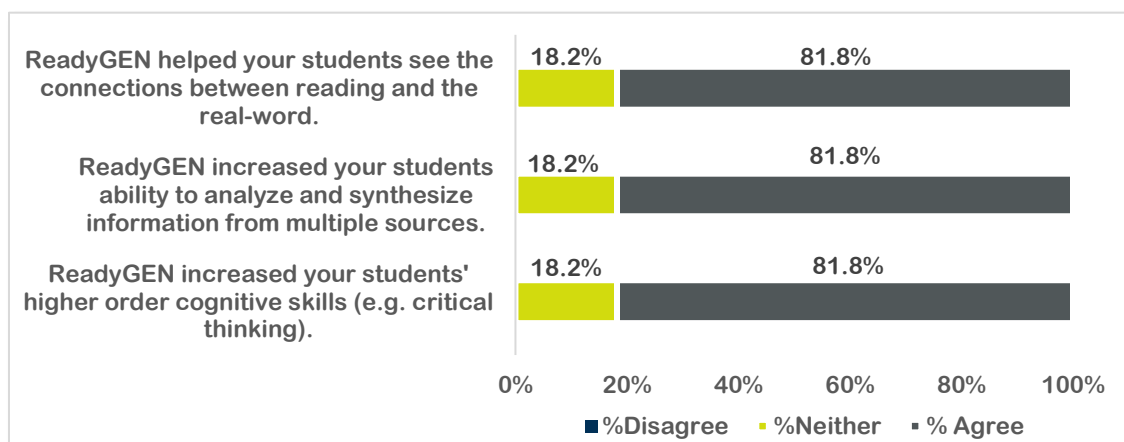
Teachers were also asked the extent to which ReadyGEN affected their students preparation for Common Core State Standards (CCSS). As shown in Figure 13, 64% of teachers reported that the program assisted their students become better prepared for the CCSS, primarily in meeting CCSS Reading standards (73%), followed by CCSS Writing standards (46%). This latter finding is interesting given that most teachers (73%) felt the program helped increase student writing skills.

Figure 13. Teacher Perceptions of Impact of ReadyGEN on Students' Preparation for Common Core State Standards



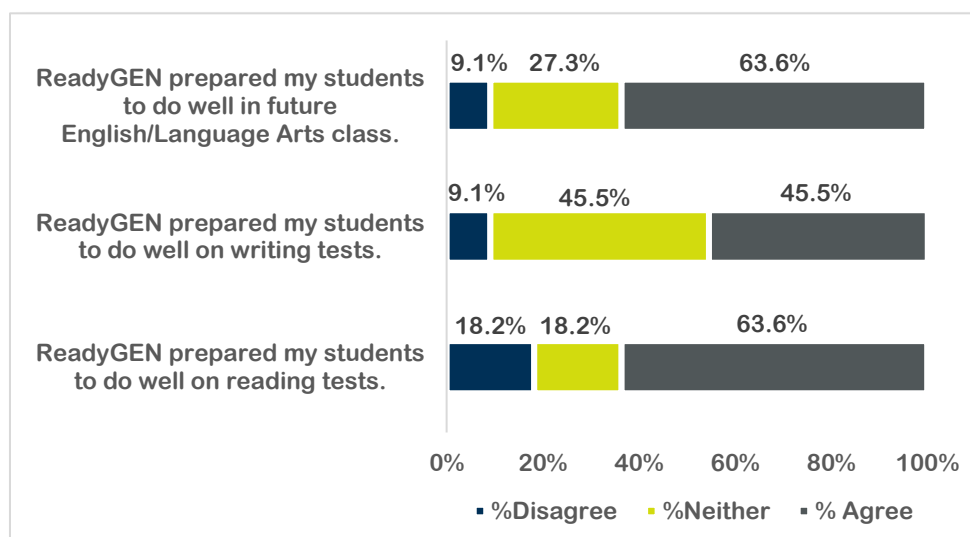
With respect to 21st Century skills, 82% of teachers reported that the program helped students: 1) see connections between reading and the real-world, 2) analyze and synthesize information from multiple sources and 3) higher order cognitive skills, see Figure 14. It is interesting to note that 21st Century skills, above other areas, were rated by most teachers as being positively impacted by ReadyGEN.

Figure 14. Teacher Perceptions of Impact of ReadyGEN on Students' 21st Century Skills



The majority (64%) of teachers also felt that ReadyGEN helped prepare their students for future English/LA classes and to do well on future reading tests. That said, the influence of the program on students' preparation for future writing tests was not perceived as highly (only 46% agreed that the program had a positive impact), see Figure 15.

Figure 15. Teacher Perceptions of Impact of ReadyGEN on Students' Preparation for Tests

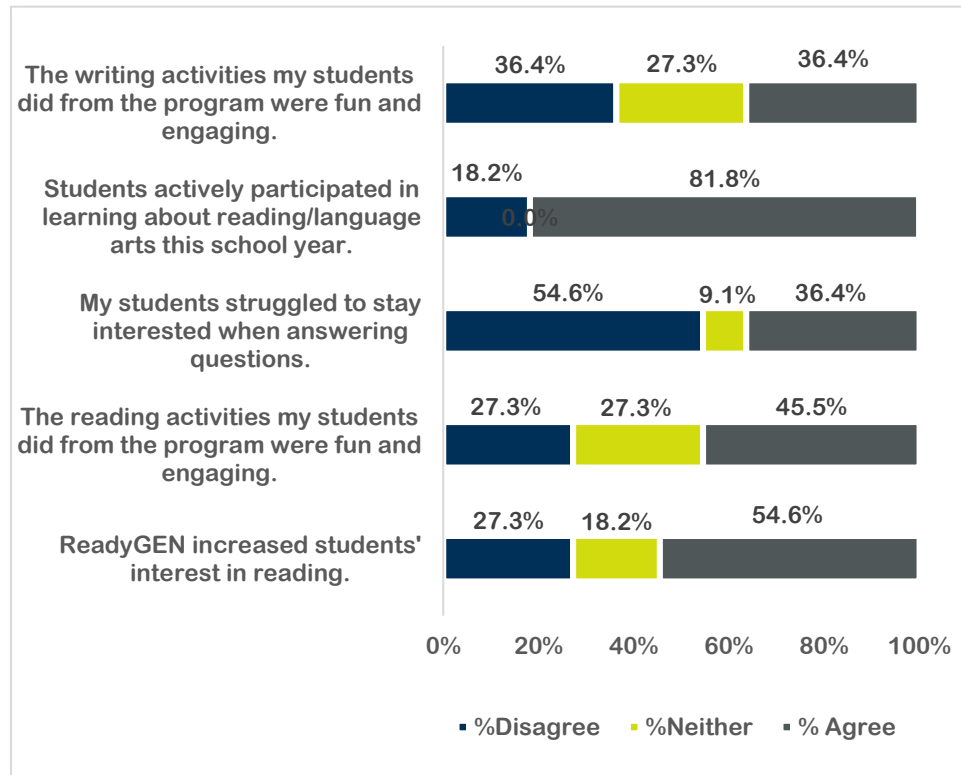


Perceived Impact on Student Engagement

Engagement is an important dimension since educational programs that appeal to student interests are more likely to be impactful on academics. Therefore, as part of the teacher survey, several questions were asked to measure student engagement. Results show that approximately 82% of ReadyGEN teachers reported that students actively participated in their literacy learning, see Figure 16. However, when teachers

were asked specifically about ReadyGEN, results are not as positive; for example, a little over half (55%) of teachers felt that ReadyGEN increased students' interest in reading and that students did *not* struggle to stay interested when responding to program questions. A lower percentage of teachers (46%) reported that the program's reading activities were fun and engaging and only 36% reported that the writing activities were fun and engaging.

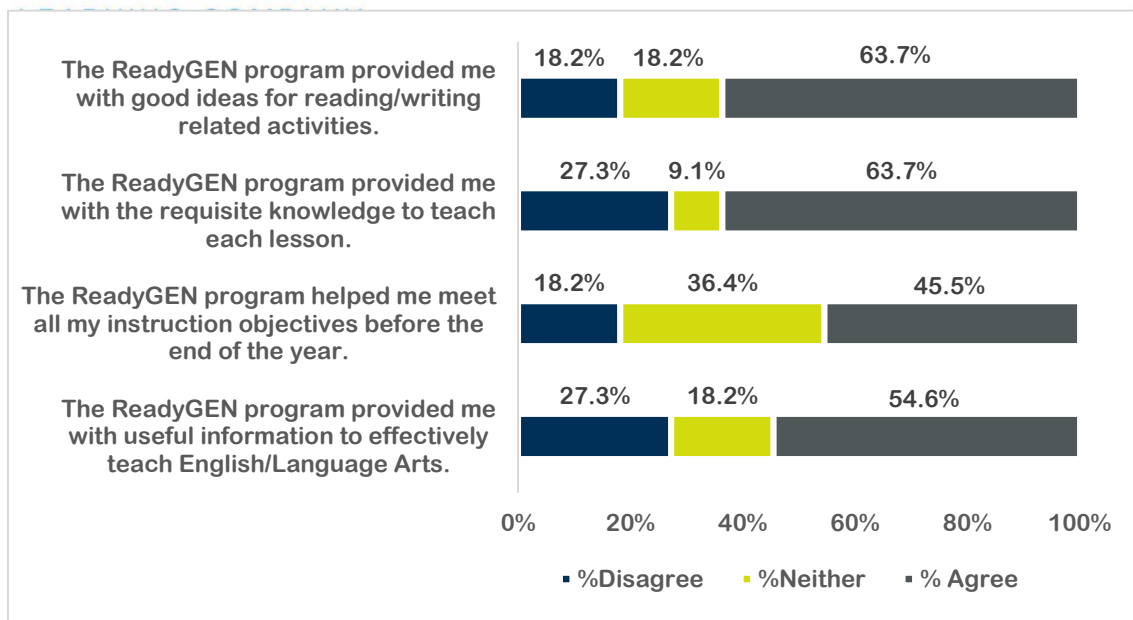
Figure 16. Teacher Perceptions of Impact of ReadyGEN on Students' Engagement



Perceived Impact on Teacher Practices

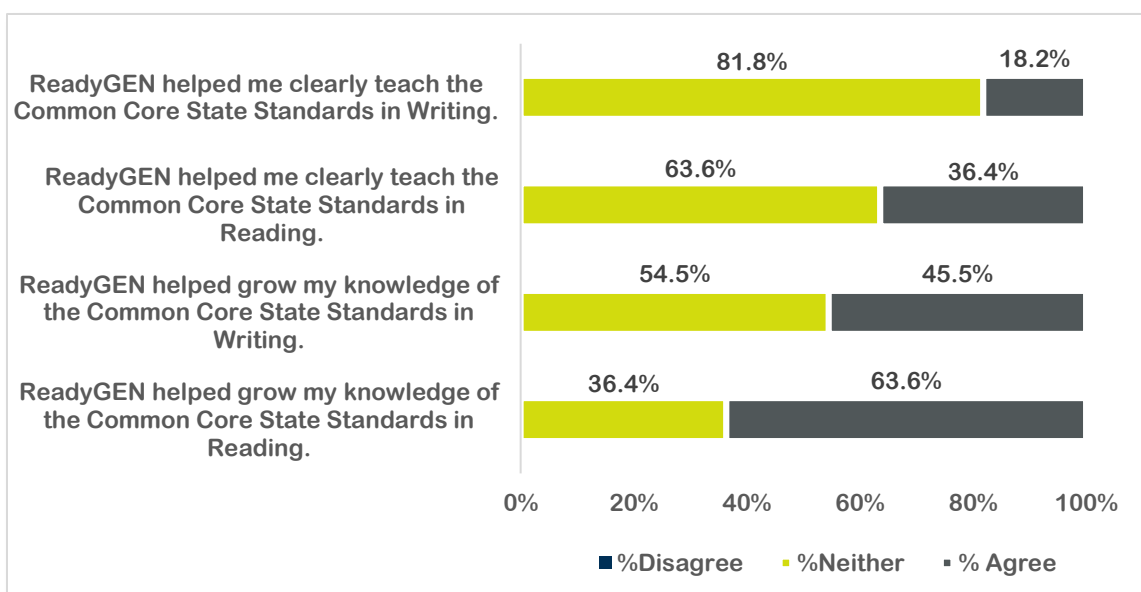
Teachers were also asked whether the ReadyGEN program assisted them and their instructional practices over the course of the study period. The majority of teachers (64%) reported that ReadyGEN provided them with: 1) good ideas for reading and writing activities, and 2) requisite knowledge to teach each lesson. 55% also reported that ReadyGEN provided them with useful information to effectively teach. The lowest rated area was the program's assistance in helping teachers meet their instructional objectives – 46% reported agreement to this statement, see Figure 17.

Figure 17. Teacher Perceptions on Assistance Provided by ReadyGEN



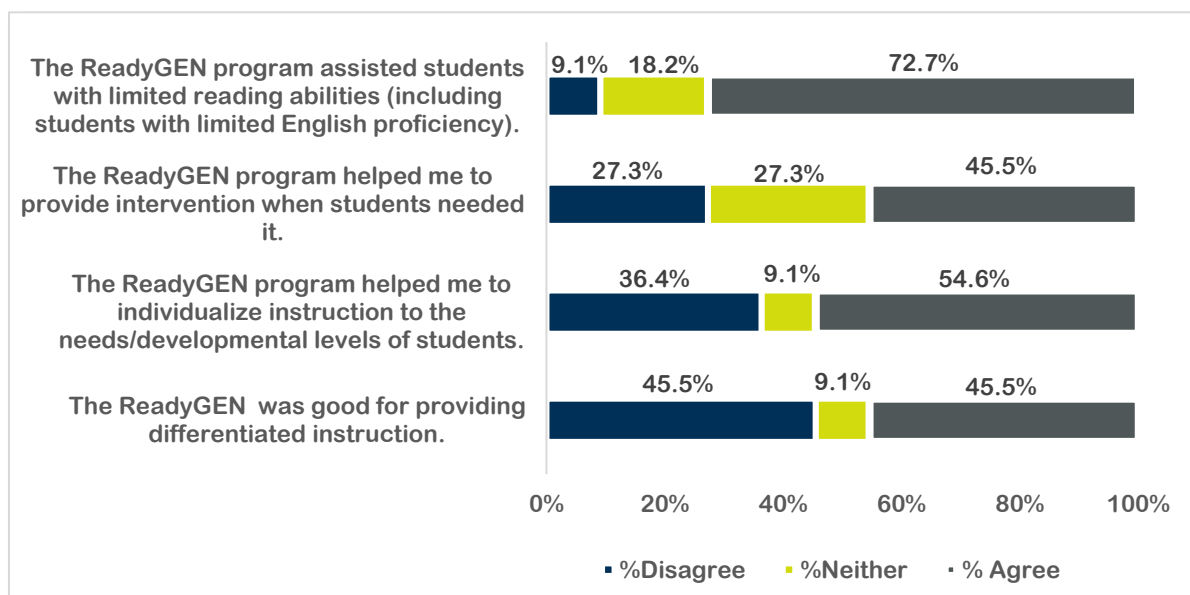
When asked about the program's assistance in helping teachers teach and expand their own knowledge of the Common Core State Standards, most teachers reported an impact on their knowledge as compared to their teaching. As shown in Figure 18, 64% of teachers reported that ReadyGEN positively impacted their knowledge of the CCSS for Reading and 46% reported a positive impact on their knowledge of the CCSS for Writing. In contrast, only 36% and 18% reported a positive influence on their teaching of the CCSS for Reading and Writing, respectively.

Figure 18. Teacher Perceptions on Assistance Provided by ReadyGEN for Common Core State Standards



Approximately half of the teachers surveyed also reported that ReadyGEN was helpful in meeting the needs of diverse learners. For example, 55% reported that the program helped them individualize instruction, and 46% reported that the program was good for differentiated instruction and helped them to provide intervention when students needed it. When asked specifically about students with limited reading abilities (including LEP students), a higher proportion (73%) felt the program was useful. Thus, in general teachers felt that ReadyGEN was particularly helpful for meeting the needs of struggling readers.

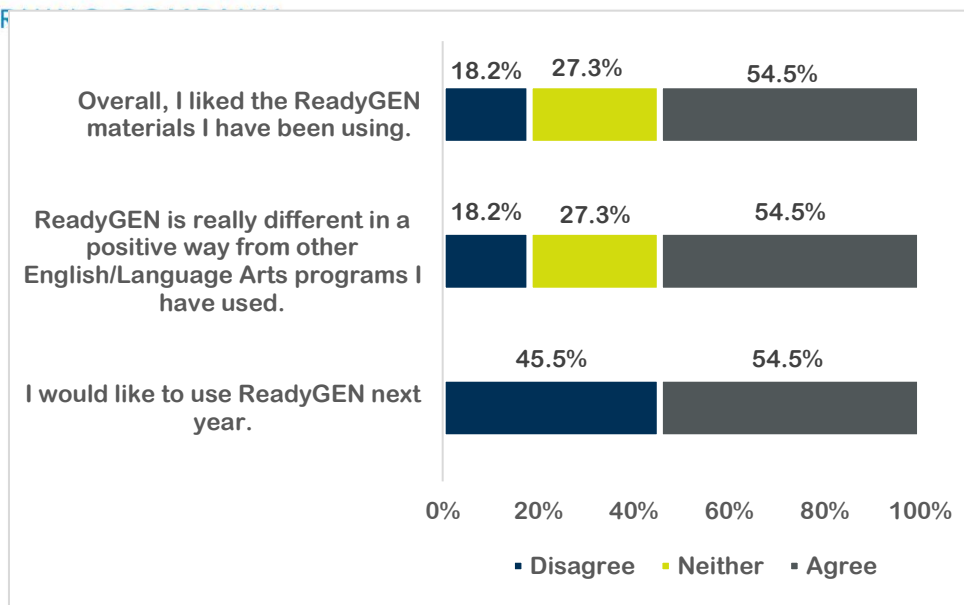
Figure 19. Teacher Perceptions on Assistance Provided by ReadyGEN for Differentiated Instruction



What do teachers think about ReadyGEN? How do the teachers rate the perceived usefulness and quality of program features?

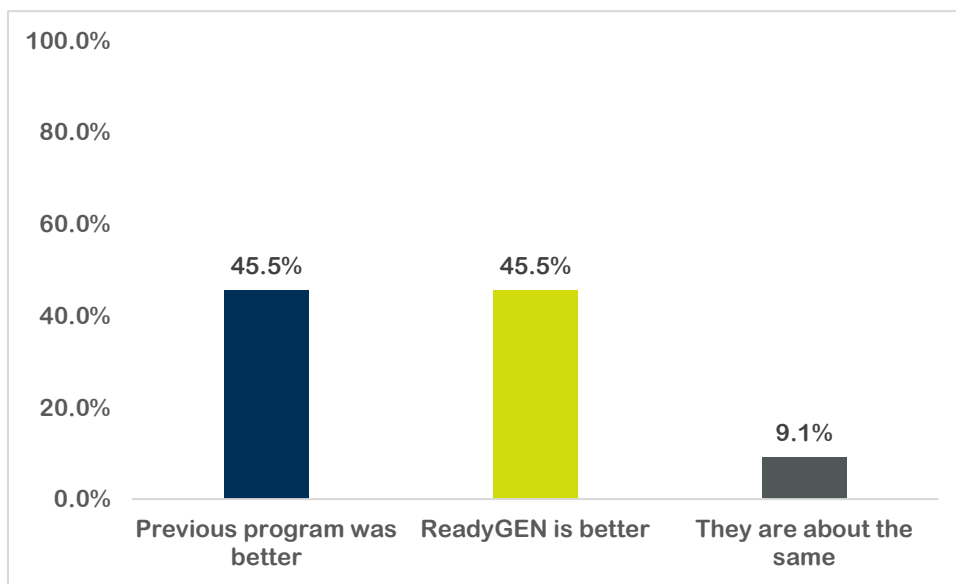
Feedback from teachers indicated that a little over half (55% or 6 out of 11) reported that they liked the ReadyGEN program. These teachers liked the ReadyGEN program materials, would like to use again next year, and felt it was different in a positive way in comparison to other English/LA programs they have used previously. The remaining 45% of teachers were either indifferent or disagreed, see Figure 20.

Figure 20. Teacher Overall Ratings of ReadyGEN



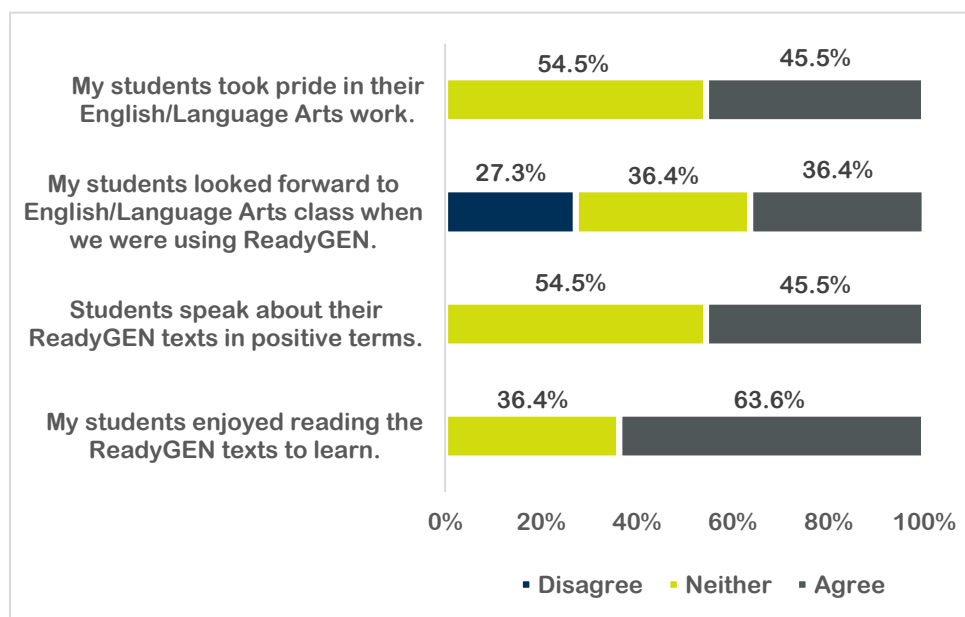
Teachers were asked to directly compare ReadyGEN to the other English/Language Arts programs they have used previously. As shown in Figure 21, 45.5% of teachers liked ReadyGEN better than other programs they have used, but the same percentage preferred their prior program(s). The remaining 9% essentially rated the programs the same.

Figure 21. Teacher Ratings of ReadyGEN versus Other English/LA Programs



When teachers were asked to report on their students' perceptions of the ReadyGEN program, the majority (64%) thought their students enjoyed reading from the ReadyGEN texts. However, a smaller proportion (46%) felt that students spoke about ReadyGEN in positive terms or took pride in their English/LA work. Even less (36%) agreed that students looked forward to class when using ReadyGEN. Overall, teacher ratings of their students' perceptions of ReadyGEN was similar to their own perceptions of the program – it was moderate.

Figure 22. Teacher Ratings of ReadyGEN versus Other English/LA Programs



In order to obtain feedback of specific components of the ReadyGEN program, teachers were asked to rate components on a scale of 1=Not at all useful to 5=Very useful. Results are shown in Table 2 and are ordered by most useful to least. A higher percentage of teachers tended to rate core resources as useful as compared to their ratings of the more ancillary components (e.g., the assessments). Not surprisingly, these also tended to be the least used resources as well.

Table 2. Teacher Ratings of ReadyGEN versus Other English/LA Programs

	Some to Very Useful*	Not to A Little Useful*	Did Not Use**
Building Understanding	100.0%	0.0%	0.0%
Close Read	100.0%	0.0%	0.0%
Small Group Time	100.0%	0.0%	18.2%
Teacher's Guide	100.0%	0.0%	0.0%
Anchor Text	90.9%	9.1%	0.0%
Text Collection	90.9%	9.1%	0.0%
Writing	90.0%	10.0%	9.1%
Reader's and Writer's Journal Teacher Guide	88.9%	11.1%	18.2%
Online Resources (Realize)	72.7%	27.3%	0.0%
Foundation Skills Mini-Lesson	50.0%	50.0%	9.1%
Performance Assessment	45.5%	54.5%	0.0%
End of Unit Assessment	44.4%	55.6%	18.2%
Scaffolded Strategies Handbook	42.9%	57.1%	36.4%
Assessment Book	14.3%	85.7%	36.4%

*Percent is out of total ratings of usefulness. **Percent is out of total teachers.

Teachers were asked in an open-ended item, which 3 components they liked the best. The most often cited components are: 1) Anchor text, 2) Teacher Guide, and 3) Savvas Realize. The following provides a sample of feedback submitted by teachers:

"I found the anchor texts for each student worked great, the close reading questioning helped with higher level thinking, and the Realize site helped present information."

"Anchor Texts are fabulous! Close Reading questions inspired students to thinking deeply about the text Teacher manual - easy to follow!"

"Writing lessons were very helpful as we had no writing curriculum beforehand. Students and I enjoyed the writing topics. Anchor texts and Text Collection had interesting stories in my opinion, but, students did not seem to enjoy them as much as I did. Teacher's editions were very well organized easy to follow. I like that it is like a script."

Teachers were also asked which 3 components they liked least. The most often cited components were: 1) Scaffolding Handbook, 2) Foundational Skills mini-lessons, and 3) assessments. A couple of teachers also were dissatisfied with the writing and

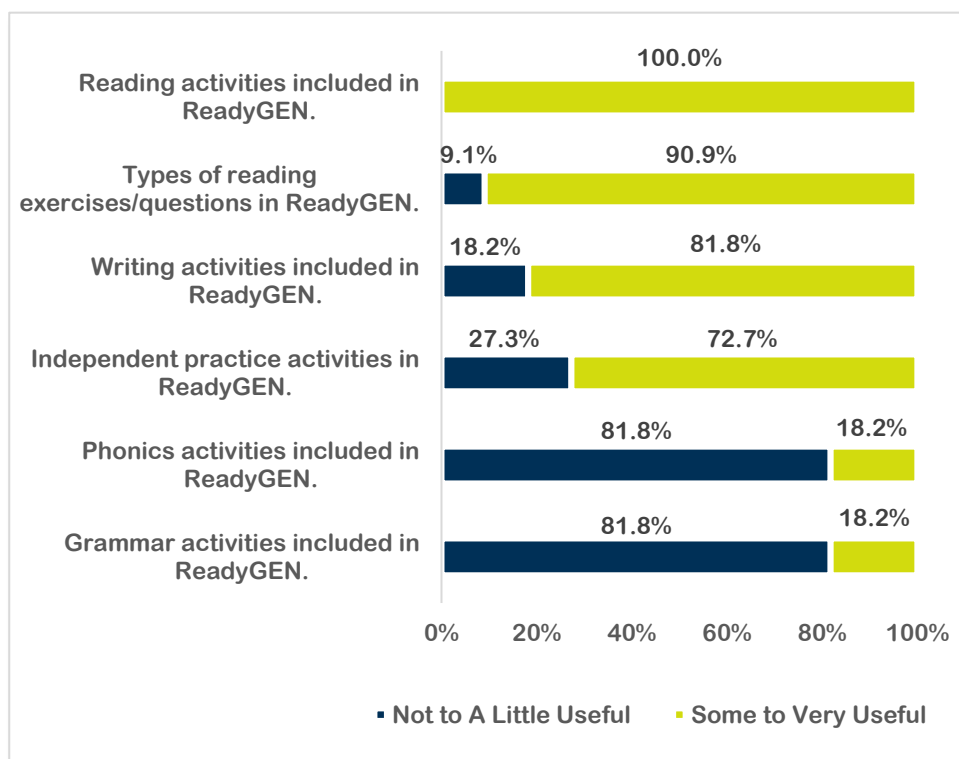
grammar activities. The following provides a sample of feedback submitted by teachers:

“Scaffolding book-hard to use questioning was more text evidence.”

“The lack of reading comprehension passages with corresponding questions to prepare students for EOG testing. Grammar lessons did not flow and were hard to follow, felt like it jumped around a lot. Writing lessons were unfulfilling in that they did not allow students to complete a prompt in a lesson and this was frustrating for students. Also, writing lessons had to be rewritten in order for students to understand the expectations.”

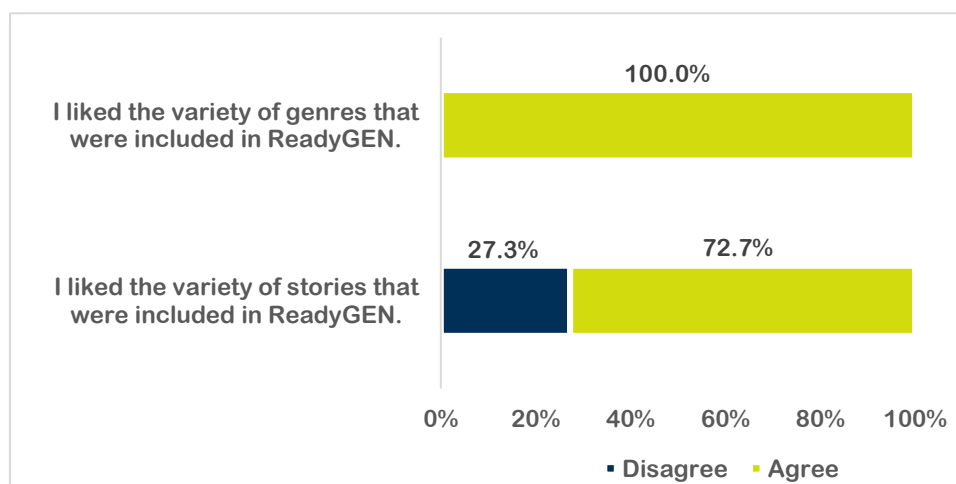
Such findings are consistent with their responses to the quantitative survey items. Specifically, teachers were asked to rate the various types of activities that ReadyGEN offers. As shown in Figure 23, 91-100% of teachers reported that the reading activities (including exercises and questions) were very to somewhat useful. A majority of teachers also felt that the writing activities (82%) and independent practice (73%) were very to somewhat useful. In contrast, only 18% thought the ReadyGEN program offered useful phonics and grammar activities. It should be noted that not all grammar and phonics materials were not available during a large majority of the study and implementation did not include these materials for the most part. Based on the feedback from pilot site teachers, the ReadyGEN development team is exploring continuous improvements to address concerns.

Figure 23. Teacher Ratings of ReadyGEN Activities



Consistent with the high usefulness ratings for the reading activities, teachers also reported that they liked the variety of genres (100%) and stories (73%) that were included in ReadyGEN, see Figure 24.

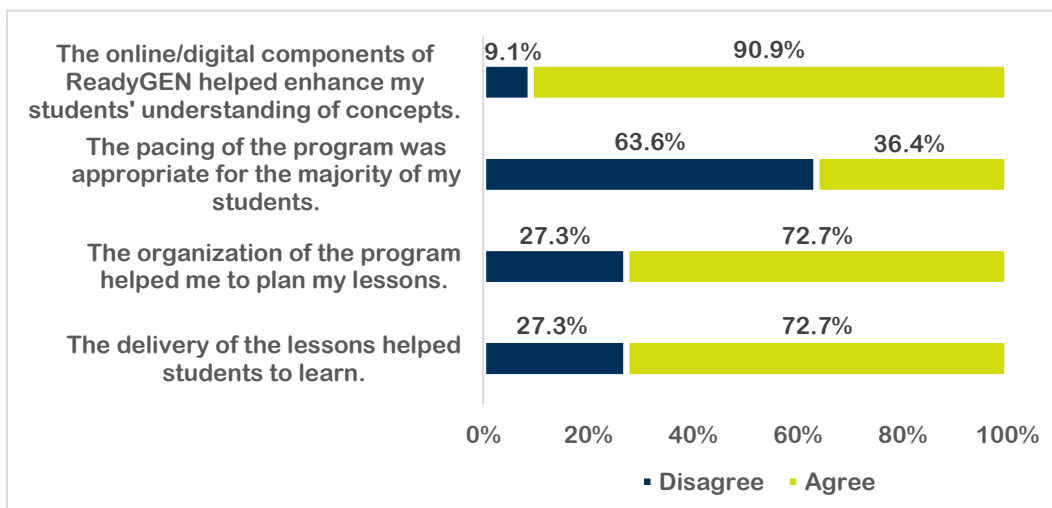
Figure 24. Teacher Ratings of ReadyGEN Texts



As previously noted, Savvas Realize (the online platform for ReadyGEN) was rated highly by teachers. This is supported by the majority's agreement (91%) to the

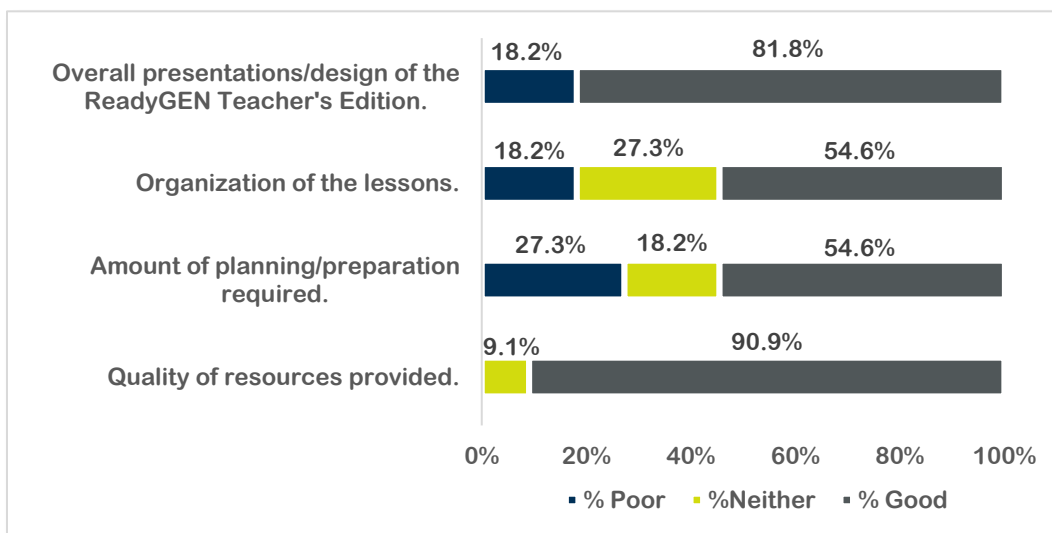
statement: The online components of ReadyGEN helped enhance my students' understanding of concepts. Furthermore, 73% of teachers felt that the organization of ReadyGEN was helpful for planning their lessons, and the delivery of lessons helped students to learn. With respect to pacing, however, only 36% of teachers felt it was appropriate.

Figure 25. Teacher Ratings of ReadyGEN Features



With respect to ReadyGEN's organization and design, the majority reported favorable ratings. Specifically, 91% rated the quality of resources and 82% rated the overall presentation and design as "good to very good." Over ½ (55%) also felt the organization of the lessons and amount of planning time required were good. Thus, in general, teacher liked the design and organizational features of ReadyGEN.

Figure 26. Teacher Ratings of ReadyGEN Organization and Design



Conclusion

Preliminary findings from the ReadyGEN Field Study suggest that ReadyGEN is associated with positive student outcomes. Elementary students using the program showed significant growth in literacy skills from pre- to post-testing, and these gains can be classified as large per effect size measures. Moreover, statistically significant growth was observed across different types of students including females, males, Limited English Proficiency students and non-LEP students, Special Education students and non-Special Education students, students at grades 1 and 4, and students of various ethnicities.

Such positive findings on student outcomes, however, were not as clearly evident in self-reported affective outcomes. For instance, trends observed in self-reported ratings of student reading attitudes showed a minimal and non-statistically significant gain in positive reading attitudes among 4th graders, and a decline in reading attitudes among 1st graders. Among teachers, the majority (91%) reported that students had learned, but approximately only half were satisfied with their students' progress and felt their students had been academically challenged by ReadyGEN. Similarly, a little over half (55%) of teachers felt that ReadyGEN increased students' interest in reading, and only 46% of teachers reported that the program's reading activities were fun and engaging. That said, teachers did report that the biggest impacts of ReadyGEN were on student writing skills (73%), and 21st Century skills (82%) such as: 1) seeing connections between reading and the real-world, 2) analyzing and synthesizing information from multiple sources and 3) higher order cognitive skills.

Similar trends were observed on teacher ratings of the quality of the program. For example, a little over half of teachers (6 out of 11) reported that they liked ReadyGEN and would like to use again next year. However, when asked to compare the ReadyGEN program to prior English/Language Arts programs, 45% of teachers liked ReadyGEN better and another 45% preferred their prior program(s). Nevertheless, teachers found several components of ReadyGEN as quite useful. For example, the top three rated components by teachers are: 1) Anchor text, 2) Teacher Guide, and 3) Savvas Realize. In contrast, the least useful components as rated by the study teachers are: 1) Scaffolding Handbook, 2) Foundational Skills mini-lessons, and 3) assessments. Overall, while some components and resources were rated quite favorably, this was not true of all components and features.

In sum, the ReadyGEN Field Study demonstrated that students who used this program showed high levels of literacy gains over the course of the study. While causal conclusions cannot be made (i.e., that ReadyGEN caused these increases), such preliminary findings do suggest a positive relationship between usage of ReadyGEN and student performance. On other outcome measures (e.g., perceived impacts on students literacy skills, engagement, student reading attitudes, etc.) and teacher feedback of the program, results were not as significant or favorable.

Appendix A: Statistical Tables

Table A1. ReadyGEN Only Students: Paired Sample t-tests on Terranova 3

Test	Time	Mean	N	Std. Deviation	t	df	Sig.	d
Reading Scale Score	Pre	561.4525	263	60.17618	-15.631	262	.000	.77
	Post	604.3688	263	48.56542				
Reading Percentile Rank	Pre	46.9202	263	26.47463	-8.219	262	.000	.46
	Post	59.2814	263	27.80117				

Table A2. Repeated Measures ANOVA on Terranova 3 Scale Scores by Time and School

Time	Subgroup	Mean	Std. Deviation	N	F _{time*group}	df	Sig.	d
Pre	School A	537.768	48.98076	125	40.118	1, 261	.000	.78
	School B	582.905	61.46768	138				
Post	School A	597.728	49.44129	125				
	School B	610.384	47.13211	138				

Table A3. Repeated Measures ANOVA on Terranova 3 Percentile Rank⁸ by Time and Grade

Time	Subgroup	Mean	Std. Deviation	N	F _{time*group}	df	Sig.	d
Pre	1 st grade	45.4468	27.80379	188	46.113	1, 261	.000	.84
	4 th grade	50.6133	22.55497	75				
Post	1 st grade	63.7660	27.76368	188				
	4 th grade	48.0400	24.68693	75				

⁸ Analysis was run on the percentile rank instead of the scale score since the Terranova scale score is designed to show differential growth (a vertically-scaled core). In contrast, the percentile rank has a mean of 50 and range of 0-100 for all students, regardless of grade.

Table A4. Repeated Measures ANOVA on Terranova 3 Scale Scores by Time and Special Education Status

Time	Subgroup	Mean	Std. Deviation	N	F _{time*group}	df	Sig.	d
Pre	Non-Special Ed	562.535	60.76715	213	7.122	1, 256	.008	.33
	Special Ed	559.355	58.71277	45				
Post	Non-Special Ed	608.187	44.72065	213				
	Special Ed	586.133	60.81477	45				

Table A5. Repeated Measures ANOVA on Terranova 3 Scale Scores by Time and Gender

Time	Subgroup	Mean	Std. Deviation	N	F _{time*group}	df	Sig.	d
Pre	Female	566.758	54.80585	124	0.474	1, 256	.492	--
	Male	557.559	64.88805	134				
Post	Female	611.064	44.35715	124				
	Male	598.119	51.44426	134				

Table A6. Repeated Measures ANOVA on Terranova 3 Scale Scores by Time and Ethnicity

Time	Subgroup	Mean	Std. Deviation	N	F _{time*group}	df	Sig.	d
Pre	White	567.904	62.11447	167	0.010	1, 246	.990	--
	Hispanic	555.952	57.25721	42				
	African American	543.125	56.70716	40				
Post	White	610.682	53.01467	167				
	Hispanic	598.190	39.93363	42				
	African American	586.750	33.63282	40				

Table A7. Repeated Measures ANOVA on Terranova 3 Scale Scores by Time and Limited English Proficiency Status

Time	Subgroup	Mean	Std. Deviation	N	F _{time*group}	df	Sig.	d
Pre	Non-LEP	561.811	60.17322	218	0.240	1, 256	.625	--
	LEP	562.900	61.83842	40				
Post	Non-LEP	604.743	50.01823	218				
	LEP	602.150	39.76376	40				

Table A8. Paired t-test on Terranova 3 Scale Scores by Time and Grade

Grade	Time	Mean	Std. Deviation	N	t	df	Sig.
1st	Pre	533.910	46.50338	188	18.450	187	.00
	Post	591.239	47.91080	188			
4th	Pre	630.493	24.44817	75	2.438	74	.017
	Post	637.280	31.84870	75			

Appendix B: Implementation Guidelines

ReadyGEN Implementation Guidelines

The Implementation Guidelines clearly outline the essential features of the program that must be implemented in order for the program to be maximally effective. The guidelines point out key program components that **must** be implemented during ELA lessons. These key program components have the greatest influence on student learning and performance, and therefore should be implemented.

Element	Activities/Features
Build Understanding	Must complete the following:* • Set The Purpose • Explore • Engage Children • Read • Turn and Talk including Think-Pair-Share Routine *Set The Purpose / Explore could be combined, as could Engage Children / Read.
Foundation Skills Mini-Lesson	Optional: Teachers may use the embedded foundational skills mini lesson or an outside resource.
Close Read	Optional: • Watch the Close Reading “How To” video as a class at the beginning of the year. • Teach By-The-Way Words Must complete the following: • Cite Text Evidence (should take no more than 8 minutes) • Vocabulary routines using Benchmark Vocabulary– can also be used for traditional spelling • Reading or Language Analysis ○ Retell A Story/Word Choice ○ Model ○ Practice/Apply
Small Group Time	Optional: • Step 1: Focused Independent Reading ○ Build Accountability ○ Monitor Progress Must complete the following: • Step 2: Small Group Options ○ Create Small Groups based on student performance needs ○ Meet with 2-3 small groups everyday ○ Group time should last 10-15 minutes ○ More time should be spent with low performing groups

	○ High performing groups can work independently, and met with less frequently Optional: • Use of Leveled Text, Interactive Games, and Tik -a-Tok as additional skills practice for students working independently during Small Group • Sleuth – incorporated into instruction every other week to ensure students’ mastery of the Close reading routine. • Reading/Language Analysis Extension
Writing	Must complete the following: • Set The Purpose • Teach and Model • Prepare to Write • Organize • Write and/or Illustrate • Independent Writing Practice* ○ TikaTok can be used as <i>optional</i>, digital practice • Share Writing* Optional: • *Select Independent Writing Practice or Share Writing if both cannot be accommodated. • Conventions Mini Lesson
Module B	Repeat all steps as previously outlined.
Performance Based Assessment	Complete 1 per Module - administered during class time and can span multiple days
End-of-Unit Assessment	Optional: Complete one per Unit - can be administered in print or online