

Reading Quest Pilot Evaluation

SOAR Evaluation and Policy Center at New Mexico State University

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Purpose of This Report

This report presents the results of an evaluation of Reading Quest tutoring at one school in northern New Mexico using student Fry Oral Reading Test (ORT) and Istation scores from the beginning and end of the 2022 – 2023 academic year. Results focus on comparing proficiency levels at these time points to identify if there were changes in performance for each grade level and then for grades one through three combined.

This summary also includes results from a brief anonymous survey sent to teachers who are using Reading Quest tutors to obtain feedback about their experience with the organization. The report concludes with a synthesis of findings and main recommendations gleaned from review of test and survey results. Institutional Review Board approval was obtained for the evaluation.

Setting

The school is a south side, Title 1 Community School. According to New Mexico Public Education data, all students in this school qualify for the federal free/reduced price lunch program, and over 90 percent are Hispanic, with just over a quarter classified as English Language Learners.

Reading Assessments Used

For analysis, two assessments were utilized:

- Istation's Indicators of Progress (ISIP): This computer-based test is primarily utilized to assess student strengths and needs and examines growth across the academic year using a composite score (used for current analyses) and specific areas, such as vocabulary, letter knowledge, and phonemic awareness. The ISIP has provided evidence of different types of reliability, including test-retest and marginal, which assess consistency over time and internal consistency of results (2016). Additionally, content and concurrent validity are described in the item development process and in the strong overlap between ISIP scores and other established measures. More information can be found in the technical manual cited at the end of this report.
- Fry Oral Reading Test: This test asks students to read brief paragraphs that become more and more difficult. The examiner notes every time a student misses a word, and the test stops when the student misses five or more words. The student is given a grade level evaluation based on what paragraph the student was able to read without missing more than two words.

Data Analysis

For the Oral Reading Test analyses, each score was given a corresponding number to allow for measurement and comparison of growth and change from beginning to end of the year. The following coding scheme was employed:

ORT Score	Code
Pre 1A	0
1A	1
1B	1.5
2A	2
2B	2.5
3	3
4	4
5	5
6	6
7	7

Table One: Coding System for ORT Analyses

Scores at the start and end of the 2022 – 2023 academic year were first evaluated to identify if the student was at grade level each time, and then a change score was calculated that looked at the difference in beginning and end of year ORT scores using the codes above. This allowed the evaluator to identify if a student grew and by how many grade levels. The number of students at grade level at the start and end of the year was also calculated along with the number of students who grew at least one grade level. These analyses are most appropriate given the ordinal nature of the ORT data (e.g., the range is not a continuous scale like Istation).

Istation analyses also consisted of two main approaches. For all students, average scores at the start and end of the year were compared and the average change scores for each grade, grades one through three, and all students were calculated. For first through third grade students, the number who grew at least one or two grade levels from the start to the end of the year was also calculated.

A dependent t-test was also run for all students and for first through third grade students combined to assess if their Istation changes were significant from the start to the end of the year, as those sample sizes were more amenable to this test compared to running a separate test for each grade. For both ORT and Istation analyses, results only include those who had a beginning and end of year score for each test. Students who had data for only one test were included in analyses (e.g., a student did not need to have both ORT and Istation scores to be included in this summary).

Results

First, in looking at the ORT, there was an increase in the number of students who were at or above grade level at the end of the year compared to the start of the year, going from one student to 36 students across all grade levels. The most movement was among third graders, with an additional 16 students at or above grade level over the course of the year. Additionally, 47 students grew at least one grade level, indicated by a change score of at least 1.0 (using the coding in Table One above). Table Two below outlines these changes across the start to the end of the year for students.

Grade Level	Total in Grade Included in Analyses	N Below Grade Level at Start of Year	N At or Above Grade Level at Start of Year	N Below Grade Level at End of Year	N At or Above Grade Level at End of Year	N That Grew at Least One Grade Level	Change in N at Grade Level from Start to End of Year
One	9	8	1	2	7	6	6
Two	14	14	0	5	9	14	9
Three	22	22	0	6	16	19	16
One to Three	45	44	1	13	32	39	31
One to Eight	58	57	1	22	36	47	35

Table Two: ORT Changes in Performance from Beginning to End of the Year

In looking next at Istation results, there was growth across all grade levels from the start to the end of the year, and change scores were also similar across all students. Results of the subsequent dependent t-test indicated that when combining all first through third graders, the Istation growth from the start to the end of the year was significant: $t(50) = 7.71$, $p < .001$. Analysis of differences across *all* students combined also indicated a significant improvement, at $t(66) = 8.70$; $p < .001$. That is, there was a significant improvement from the average for these groups at the start of the year to the average at the end of the year. There were also 44 students who grew at least one grade level in points from the start to the end of the year among first through third graders. Table Three below illustrates these change scores, and bar charts for change scores can be found in the Appendix.

Grade Level	Total in Grade Included in Analyses	Average Beginning of Year	Average End of Year	N Who Grew at Least One Grade Level (in Points)	N Who Grew at Least Two Grade Levels (in Points)	Average Growth Start to End of Year (Average of all Change Scores)
One	11	269	311	9	5	42
Two	17	309	351	14	12	42
Three	23	337	380	21	20	43
One to Three	51	313	355	44	37	42
One to Eight	67	330	369	N/A	N/A	39

Table Three: Istation Growth from Beginning to End of the Year

In terms of the overlap in findings when comparing Istation and ORT results (for first through third graders only), a relatively similar portion of students grew at least one grade level from the start to the end of the year across both tests. Though not covered in the results, almost all students in the data were on track to meeting grade level expectations using Istation benchmarks at the start of the year, while according to ORT data, several students were below grade level at that time. Still, students showed growth on both of these tests, which will benefit them in subsequent years. Each test can also serve a

helpful purpose in identifying and addressing student needs within these broader numbers and categories.

Finally, survey data provided by the seven teachers who responded indicates a positive experience with Reading Quest overall. In terms of the background of these teachers, they were spread out with how long they have been teaching at their school, and over half ($n = 5$) have been working with Reading Quest for two years or less. Table Four below shows teacher's years of experience at their school and working with Reading Quest.

	Number of Years Teaching at Their School	Number of Years Working with Reading Quest
This is My First Year	2	2
1 to 2 Years	1	3
3 to 5 Years	2	2
More than 5 Years	2	0

Table Four: Teacher Years of Experience at their School and with Reading Quest

Teachers were also asked a few open-ended questions about their experience with Reading Quest. First, in terms of general experience with the organization, teachers gave many positive responses, indicating that students enjoy the experience, the staff are professional, and that Reading Quest provides a very valuable service. All of their responses are bulleted below:

- Excellent training and superior quality
- Great, my students love and look forward to Reading Quest.
- It is has been incredible. My students love and look forward to reading quest.
- It's been a very positive experience. I've learned about some of the strategies the tutors use with my students and I am using them in my classroom.
- Reading Quest trainings have been invaluable to helping me understand how to work with struggling readers and newcomers. Students who work with RQ demonstrate measurable improvements in reading scores, and they also enjoy their time working with RQ tutors to improve their language skills.
- Staff is friendly and kiddos love going!!!
- They are professional and experienced and well organized. Tutors are well trained and work well effectively with students.

In terms of how teachers identify students to refer to Reading Quest, multiple approaches were used, including needs in specific areas (e.g. phonics), test scores, and observations. All of their responses are bulleted below:

- Classroom observation, testing data, and IEPs all support referrals to RQ.
- I identify students to refer to Reading Quest based on their Istation reading scores. I refer students that are Level 1, the lowest level and significantly below grade level.
- I used the Itrs screener and Observations
- Istation Results and Observations made during whole and small groups.
- My students already receive intervention in small groups. If they express interest and willingness to work hard to progress, I refer them to RQ
- Progress shown with curriculum based assessment; Lack of ability to retain and apply phonics.

- Those who are in need of critical intervention

There were also a number of specifics mentioned when teachers were asked to identify their student's biggest challenges with reading. Teachers listed multiple areas, such as fluency, decoding, vowel teams, and phonemic awareness. All of their responses are bulleted below:

- Applying reading patterns with consistency.
- Blending, fluency, and reading comprehension
- decoding and comprehension
- Many middle school students demonstrate gaps in their phonemic awareness, whether or not they identify as primary or secondary learners of English.
- Some students are just learning the letters of the alphabet and their corresponding sounds. Other students are blending cvc words. Decoding is a challenge for all.
- They struggle with symptoms of Dyslexia and need step by step presentations and repeated lessons and opportunities to practice a reading rule.
- Vowel teams

When then asked if their students have support other than Reading Quest tutors, responses indicated that many students have experiences such as small group support, additional volunteers who help, and specialized assistance such as the SAT leader or interventionist. All of their responses are bulleted below:

- My students read one-on-one or in a small group with one of my classroom volunteers twice a week.
- Special Education small group specialized instruction in segregated setting and classroom setting.
- Students receive tutoring support through volunteers supported by Communities in Schools, AVID volunteers, Near Peer tutoring with HS students, and the 21st Century Learning programs.
- They have availability to varying tutor programs and small group time with me and our reading interventionist. They also get to read to maple the therapy dog who visits our class.
- They receive intervention in small groups 4 times a week, and online participation in Lexia.
- Yes, some get tutoring from AVID, some are in small groups with our reading interventionist and myself.
- Yes, they get pulled out by our SAT leader who gives them explicit instruction as well as explicit instruction during RTI in class. (small group)

Focusing next on Reading Quest specifically, teachers were asked about impacts that these tutors have had on their students, both academically and otherwise. Teachers listed a number of positive outcomes, including improved student confidence in reading, improved reading skills, and a more positive attitude about reading and learning. All of their responses are bulleted below:

- Beyond academic improvements in reading, kids who work with RQ form positive self-concepts about themselves as learners, and they come to see ways that learning can be more fun and engaging.
- Confidence, my students are becoming more confident.
- I have seen students doing well on their spelling tests with RQ as well as celebrating accomplishments such as finishing books. Students are excited about going.

- My students love working with the Reading Quest tutors. They look forward to their Reading Quest time and are motivated to read. The tutors are great role models.
- Positive outlook on learning to read
- The kids are excited about learning and progressing with their reading skills.

With the possibility that other students may be in need of reading help, teachers were asked if they think there are more students who need tutoring than Reading Quest can provide. *All* teachers who responded indicated that more students would benefit from tutoring. All of their responses are bulleted below:

- All students bring different strengths to school, and definitely more students could benefit from tutoring with RQ. Over 60% of students in the middle school level at my school struggle to read at grade level, many at least a grade level or more behind.
- All students could benefit from extra tutoring.
- Definitely. Fifty percent of my class is reading below grade level and would greatly benefit from Reading Quest.
- [School] is a big community school. More students would benefit from tutoring.
- Yes! Every child benefits from the focused attention provided by RQ tutors.
- Yes. Every student would benefit from RQ's program and activities.

Finally, Reading Quest was interested in seeing if teachers think there is anything the organization can do to improve their tutoring program. Many teachers indicated they would like to see more tutors at the school or in the district, and a couple offered suggestions such as offering a similar program in math or communicating with the teacher a little more about what is being covered with the student. All of their responses are bulleted below:

- Any chance RQ could start a Math Quest program?
- Expand their program to more students in the district!
- I know tutors are already stretched thin with their schedule. It would be a benefit to my students to meet twice a week with their tutor.
- I would appreciate if there were more communication with the teacher as far as what is being covered, as well as progress monitoring.
- More availability, more tutors
- More tutors. [School] is a big school.
- They already have family and staff training, and sponsor a very successful Family Reading Night. If they could have a presence in every school, that would be an excellent improvement for our district!

For any other feedback, teachers had one last opportunity to offer additional comments about their experiences with Reading Quest. All teachers reiterated their positive opinions about Reading Quest, describing how students benefit from the experience and how much they enjoy their tutors in particular. All of their responses are bulleted below:

- Amazing and hard working individuals.
- Great Reading Quest staff at [School]!!!
- In addition to school-year support, I've had the chance to observe and talk with students who participate in RQ summer programming. Those learners get invaluable opportunities to extend and

apply their learning in highly creative and engaging ways. Tutors demonstrate care and compassion alongside a seriousness for learning that creates a magical space for students to learn.

- Reading Quest is an amazing experience for my students. The tutors make reading fun and engaging for students.
- RQ students show marked improvements in retaining reading skills. They get excited about reading and feel proud of their accomplishments. They LOVE their time with RQ tutors and look forward with enthusiasm.
- They are exceptional, and have created fun ways to engage students at all levels. As a teacher and a parent I LOVE to learn with them!
- They're incredible and amazing tutors.

Conclusions and Recommendations

Results and Implications

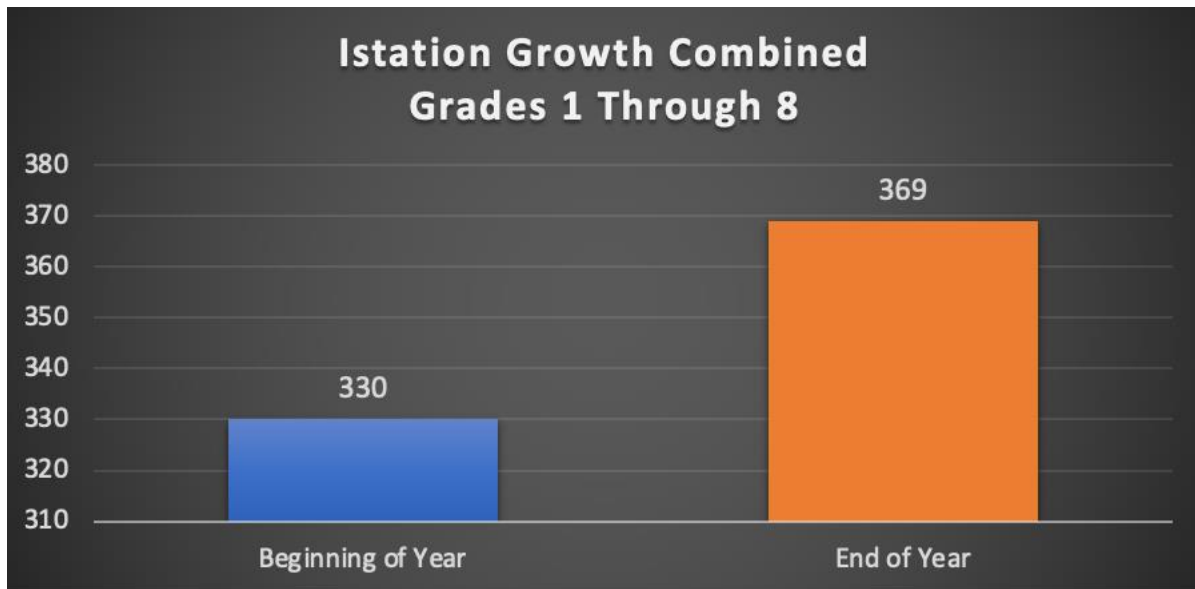
- Across ORT data, many more students were at or above grade level at the end of the year compared to the beginning of the year. Several also grew at least one grade level given how this was calculated.
- Istation scores were stronger at the start of the year compared to grade level results for ORT data at this time, however, there were increases in average Istation scores across all grade levels. Many students grew one, if not two, grade levels between the start and end of the year. Average change scores were very similar across grade levels.
- Survey data indicate that teachers greatly enjoy their time with Reading Quest and that they think their students have benefitted both academically and in their confidence and enjoyment of reading. It looks like many students have other reading supports, but teachers credited Reading Quest as being key in positive student outcomes. They noted that many more students would benefit from tutoring than are currently helped and asked for more tutors or time with tutors if possible. This is worth consideration by the organization, though it may be a challenge depending on funding and staffing.

References

Mathes, P., Torgesen, J., & Herron, J. (2016). *Istation's Indicators of Progress (ISIP) Early Reading Technical Report*. Retrieved from:

https://www.istation.com/Content/downloads/studies/er_technical_report.pdf

Appendix: Bar Charts for Istation Beginning and End of Year Comparisons

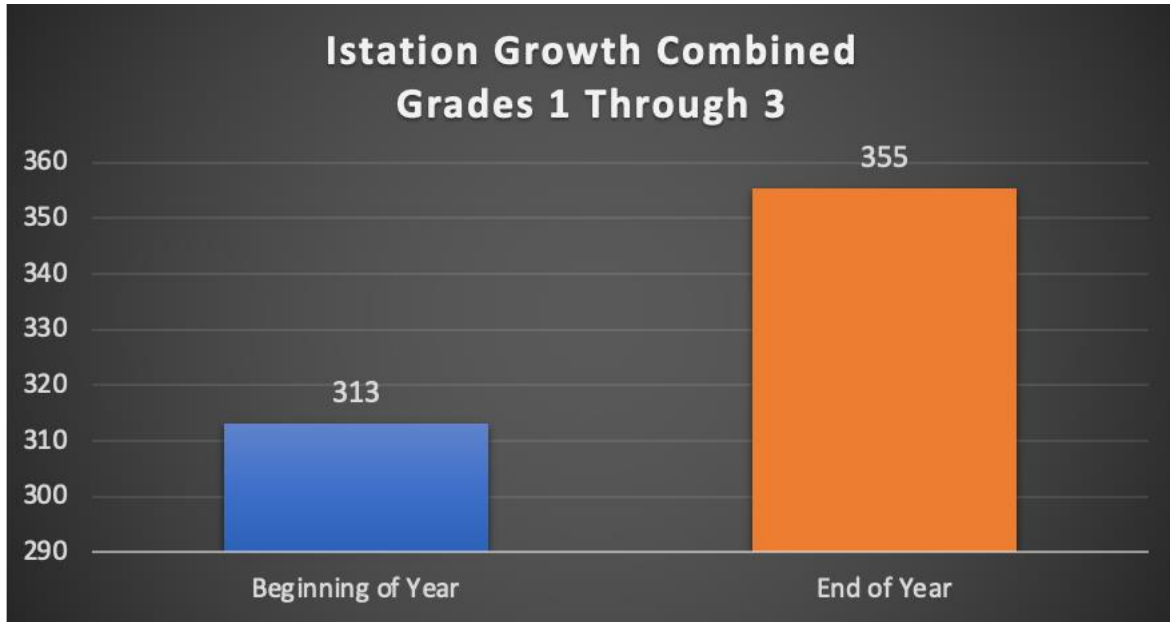


67 Students total

Istation average beginning of year score for Reading Quest students = 330

Istation average end of year score for Reading Quest students = 369

Istation average end of year growth for Reading Quest Students = 39 points

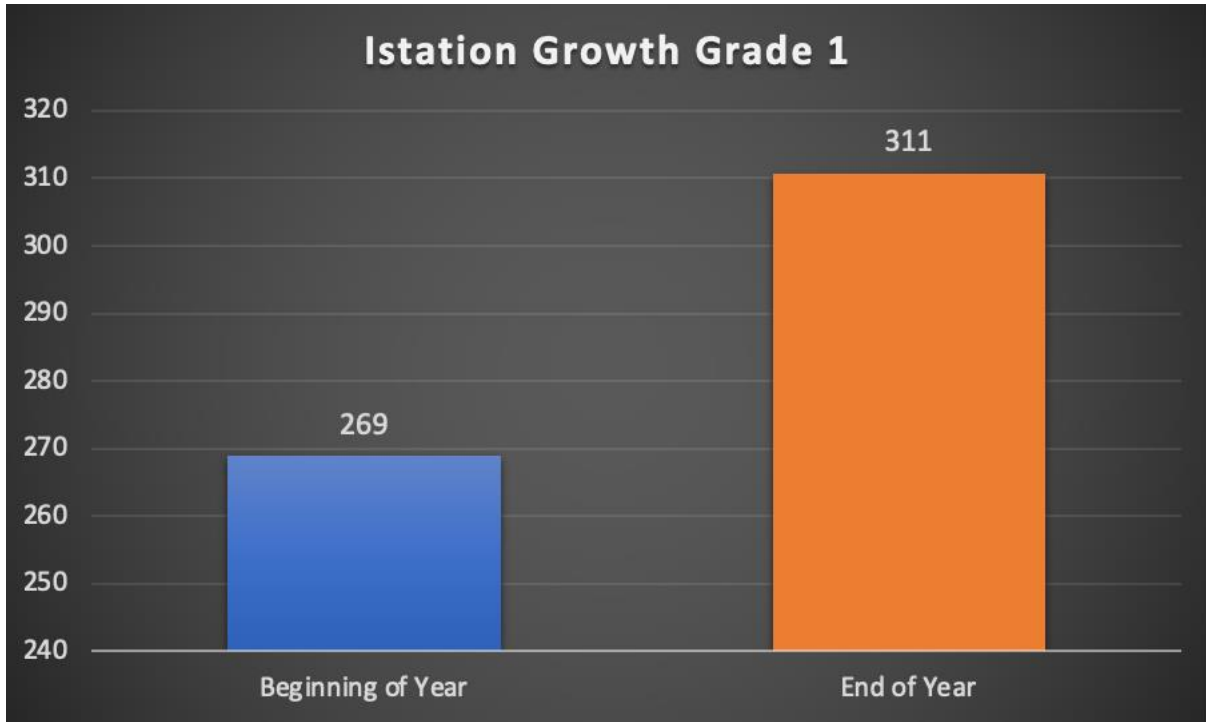


51 students total

Istation average beginning of year score for Reading Quest students = 313

Istation average end of year score for Reading Quest students = 355

Istation average end of year growth for Reading Quest Students = 42 points

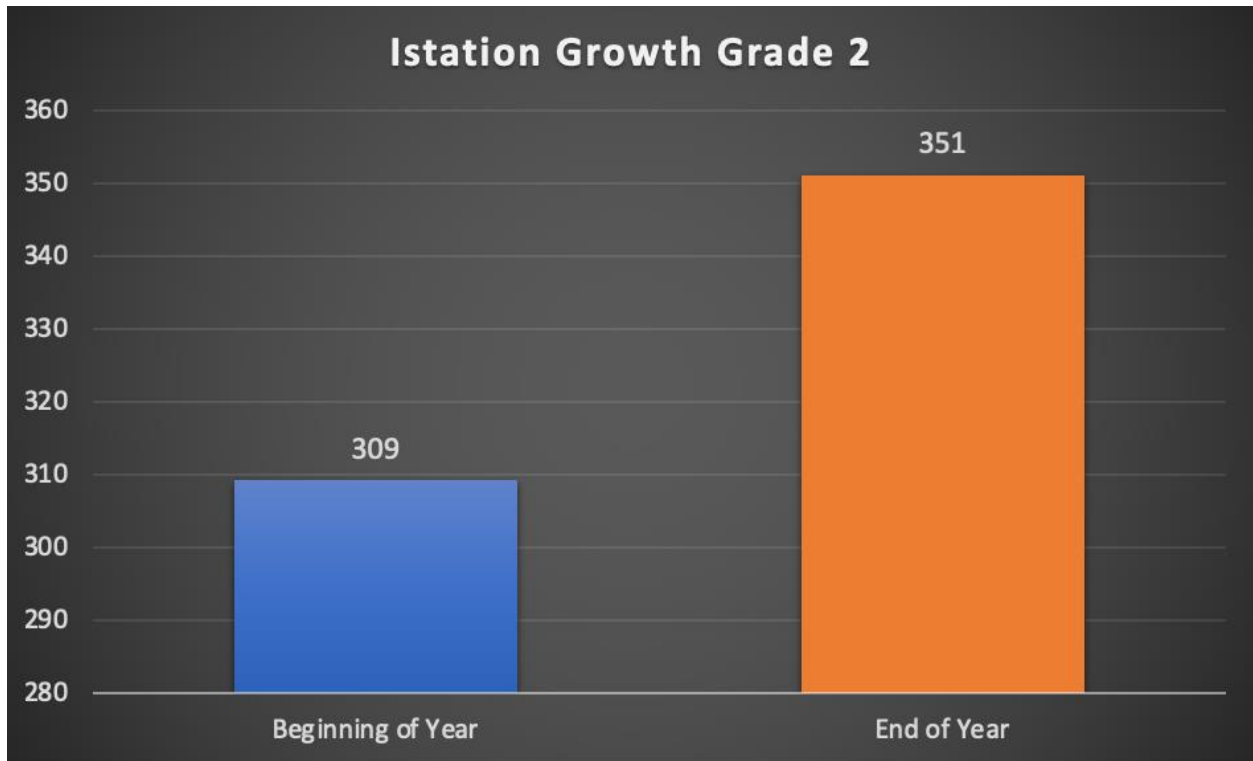


11 students total

Istation average beginning of year score for Reading Quest students = 269

Istation average end of year score for Reading Quest students = 311

Istation average end of year growth for Reading Quest Students = 42 points

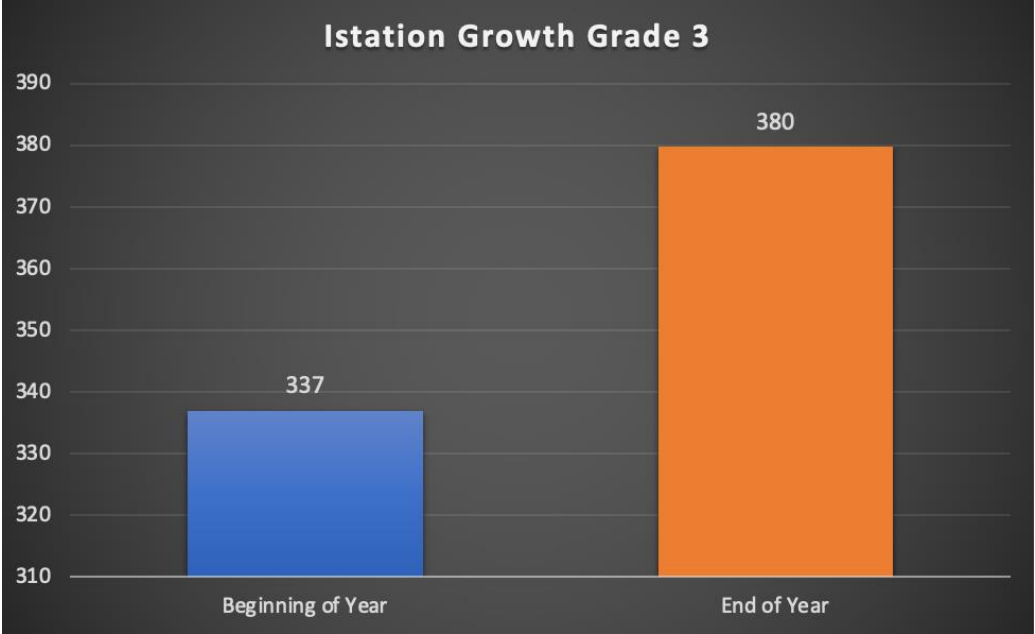


17 students total

Istation average beginning of year score for Reading Quest students = 309

Istation average end of year score for Reading Quest students = 351

Istation average end of year growth for Reading Quest Students = 42 points



23 students total

Istation average beginning of year score for Reading Quest students = 337

Istation average end of year score for Reading Quest students = 380

Istation average end of year growth for Reading Quest Students = 43 points