# Proficient Data Narrative

**Teaching Context**

I am a 2nd grade teacher at Pioneer Elementary in Preston, Idaho. Preston is a small town with about 5,000 people and just a pair of Elementary schools, one middle school, and one high school. We’re on the border of Idaho and Utah, located approximately 50 miles from the closest shopping mall. We are primarily an agricultural community, with about 33% of students’ families working in that sector. I really like Preston and feel very much at home there, as a member of the community and as a teacher.

Pioneer is a preK-2 school with 631 students enrolled. My classroom is self-contained, which means that I operate as the primary classroom teacher instructing students throughout the day. Occasionally, specialists or volunteers help out with teaching PE, Art, and Music, but the chief responsibility for student learning falls on my shoulders. There are a total of 21 students in my class, and as a class we have a positive culture of learning, and we work hard to support each other academically and socially.

The demographics of our 2nd grade class are fairly representative of Pioneer Elementary as a whole. Fifty-seven percent of my students (12 out of 21) are Caucasian, 33% (4 out of 21) are Latino, and the remaining two students are multiracial. The breakdown at our school is 55%, 35%, 10%, respectively. About half (10 out of 21) of my students were eligible for free/reduced- price lunch, which matches the school average of 45%. One unusual feature of my class this year was that I had five students who were closely related to each other. I had a pair of students who were twins, and by pure coincidence three of their first cousins were also in our class. This group was deliberately separated in 1st grade, but it seems the district forgot to consider the familial ties when determining the classroom roster this year.

Professor Donald Hernandez of Hunter College calls third grade a "pivot point,” given that 3rd graders who have fallen behind in reading are four times more likely to drop out of high school.1 These research findings inspired me to try my best to ensure that every one of my students is thoroughly prepared to succeed in 3rd grade and beyond. Early elementary is a critical time in a child’s life, and I respect the important role of classroom teacher in shaping children’s lives.

# Data Analysis for All Students

## Students’ learning, relative to the Proficient and Ambitious Goal:

As a self-contained classroom teacher, I assessed my students' learning in reading, math, science, and social studies. For my graduate studies at Relay GSE, I was asked to measure student achievement and present the data from the two subjects that represented the core curriculum of my class. Accordingly, I selected reading growth and math standards mastery as my areas of focus.

1 Double Jeopardy: How Poverty & Third-Grade Reading Skills Influence High School Graduation. Donald J. Hernandez. April 1, 2011

To measure reading growth, I began the year by collecting baseline data for all my students, using the STEP assessment. Throughout the year at regular intervals, I assessed students' STEP levels to gauge ongoing changes. At the end of the year, I computed overall reading growth by comparing diagnostic reading levels to end-of-year reading levels.

I measured math standards mastery against the 26 State Standards for 2nd grade math, which represent the set of knowledge and skills that students must acquire before advancing to 3rd grade. My instructional scope is designed to ensure that students demonstrate proficiency on these 26 standards, so it was sensible to measure student learning against this particular scope of content. Over the year, I administered four midterm assessments that included questions aligned to each of the math standards, and I averaged the results across all standards and all students to determine overall standards mastery.

Teddy Roosevelt is quoted as saying "Far and away the best prize that life has to offer is the chance to work hard at work worth doing." This was a mantra our classroom heeded on a daily basis. For both reading growth and math standards mastery, I was asked to set a whole-class "Ambitious Goal,” at the nexus of ambitious and feasible, and also a "Proficient Goal,” or minimum goal to strive for. For reading growth, our Proficient Goal was set at a minimum average growth of 1.0 grade levels in reading across all students, and our Ambitious Goal was for 80% of students to meet their Student-Specific Ambitious Goals.2 For math standards mastery, our whole-class Ambitious Goal was to achieve an overall average standards mastery of 80%. I was also asked to set our whole-class Proficient Goal at 70% overall average standards mastery for math.

Overall, for reading growth, we met the Proficient Goal but didn't meet the Ambitious Goal. Our overall average was 1.14 years of growth, which meets the Proficient Goal of 1.0. Only 41% of students met their Student-Specific Ambitious Goal (SSAG), so we didn't meet our Ambitious Goal of 80%.

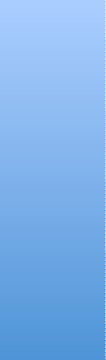
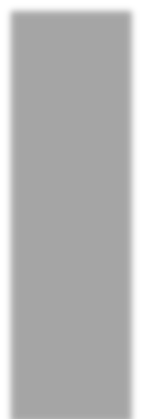
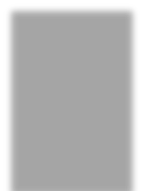
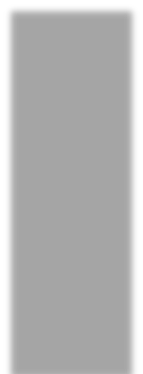
Overall, for math, we met the Proficient Goal of 70% average standards mastery, but we didn't meet the Ambitious Goal of 80%. Our overall average standards mastery across the 26 second- grade CCSS-M standards was 76%.

## All students' academic achievement, displayed relative to the Proficient and Ambitious Goal:

The graph below represents the performance groupings for reading growth relative to the Proficient and the Ambitious Goal (Figure 1.1).

2 These Student-Specific Ambitious Goals (SSAGs), based on baseline data, were designed to challenge both lower-level readers and higher-level readers, and ranged anywhere from 1.0 to 2.0 grade levels of reading growth.

*Figure 1.1 – Overall Reading Growth Achievement, Relative to the Proficient and Ambitious Goal*



10

9

8

7

6

5

4

3

2

1

0

**Yearlong Reading Growth, RelaBve to Goal**

n = 9

<1 yr growth > 1 yr growth, no SSAG SSAG

n = 4

n = 8

**Number of Students**

For reading growth, 8 students failed to make one year's worth of growth, 3 students made one year's worth of growth but didn't meet their Student-Specific Ambitious Goal (SSAG), and 9 students (41%) met their SSAG.

The performance groupings for math standards mastery relative to the Proficient and the Ambitious Goal can be seen in the graph below (Figure 1.2).



80%+

Amb. Goal

70% to <80%

Proﬁcient Goal, not Ambi>ous Goal

< 70%

No Proﬁcient Goal

n = 3

n = 7

**Overall Standards Mastery**

n = 11

12

10

8

6

4

2

0

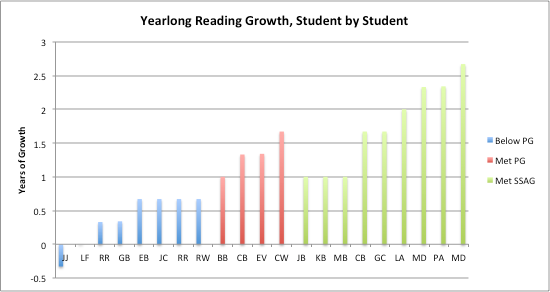
**Number of Students**

*Figure 1.2 – Overall Math Standards Mastery Achievement, Relative to the PG and AG*

For math standards mastery, 3 students failed to achieve 70% average standards mastery, 11 students achieved 70% average standards mastery but didn't meet the Goal of 80%, and 7 students met the Ambitious Goal of 80%.

## Distribution of academic performance for all students:

The performance distribution for individual students in reading growth can be seen in the graphic that follows (Figure 1.3).



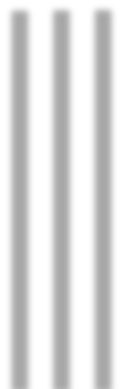
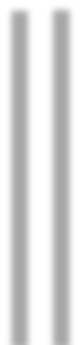
*Figure 1.3 – Distribution of Individual Student's Reading Growth Achievement*

The range of student performance in reading growth was especially wide. It included a student who ended the year reading lower than his starting point (minus 1 STEP level, equivalent to minus 0.33 grade levels of growth) and a student who ended the year reading 2.67 grade levels above his starting point (up 8 STEP levels).

In addition to the one student whose STEP level dropped over the course of the year, another student gained zero STEP levels (no change), and two other students increased only a single STEP level (equivalent to only +0.33 grade levels of growth). Our class average was still above 1 year of reading growth, presumably because scores of high-performers who achieved over 2 grade levels of growth balanced out those of the low performers. It is nevertheless worrisome that 19% (4 out of 21) of my students achieved essentially no growth in reading.

The performance distribution for individual students in math standards mastery can be seen in the graphic that follows (Figure 1.4).

*Figure 1.4 – Distribution of Individual Students’ Math Standards Mastery Achievement*



**Yearlong Math Standards Mastery, Student-by-Student**

100%

90%

80%

70%

60%

50%

40%

30%

20%

10%

0%

MDGC JB LF KB CB CB BB RR LA MDMBPA GB JC RW EB CWRR EV JJ

**Average Standards Mastery**

The range for student performance in math standards mastery was less pronounced than in reading growth. The lowest student's score was 63% average standards mastery, and the highest score was 88% average standards mastery.

Of my four lowest performers in reading growth, one of them overlapped with my two lowest performers in math standards mastery.

## My perspective on these whole-class results:

Overall, I’m proud that we met the Proficient Goal in both measures and that, on average, my class has learned slightly more than one year’s content in one year’s time. The data contains bright spots of high achievement and also areas where we fell behind, the latter indicating that there is room for improvement in my own practice.

I feel fairly confident and secure, albeit not pleased, with the results of my math standards mastery measure. Only 3 students missed the 70% mark for average standards mastery, and they only missed it by a few percentage points. We were of course striving for greater than 70%, but 70% was held as a threshold for proficiency to advance into the next grade level with sufficient preparedness. Although my 2nd graders are transferring to Oakwood Elementary (grades 3-5) next year and I won’t see them on campus, I am not particularly worried about how they’ll fare in 3rd grade mathematics—at this point they are relatively prepared, and no student is wholly unprepared.

That being said, I am extremely disappointed about the results of my reading growth measure. Eight students did not make a year’s worth of growth. Most of my students are not strong enough readers to fully comprehend 3rd grade texts and will therefore struggle with the increased rigor of upper elementary instruction. While Jerry met his Alternative Ambitious Goal and reads with great fluency, he still struggles with comprehension, which will impact his ability to interpret 3rd grade level texts. I know how much is at stake here, and I am saddened that students did not reach a stronger point of readiness for the years ahead.

# Data Analysis for Subgroups of Students

## Research question #1:

How did yearlong reading growth vary between students who started the year behind grade level and those who started the year at or above grade level?

## Rationale for selection of research question #1:

At the start of the academic year, my data coach informed me that I should expect students who begin the year behind in reading to grow *more* than students who begin the year ahead in reading. This contradicted what I would have expected—intuitively, it makes sense to me that historical high performance (leading to advancement in reading) would predict greater future success. As it turns out, struggling readers have the potential to soar when given the proper supports and attention, and they are developmentally ready to read at higher levels when given the opportunity.

The question of varying growth among students at different reading levels is critical in my classroom and for my commitment to closing the achievement gap. If my high performers were to exit my class above grade level (as they had begun) while my low-performers exited my class below grade level (also as they had begun), this would mean that I did not alter the historical gap patterns. Even if lower performers were to grow more than one year but still not reach grade level, this would place them at a disadvantage for next year. Average growth for the class was a little more than one grade level (1.14). It will be important to see how the growth varied depending on a student's starting point.

## Analysis of research question #1:

Overall, across all students, the average years of growth for those starting below grade-level in reading was 1.18, whereas the average years of growth for students who started at/above grade-level was 0.99. This is displayed in the following Table (1.1).

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Start Point | Avg starting GLE | Avg ending GLE | Avg growth | N count |
| Below | 0.52 | 1.7 | 1.18 | 16 |
| At/Above | 2.47 | 3.46 | 0.99 | 5 |

*Table 1.1 – Reading growth achievement, below vs. at/above grade-level readers*

*("GLE" represents "Grade-Level Equivalency" of reading level)*

For students starting the year below grade-level, the average Grade-Level Equivalency was 0.52, which means that they were reading at a level expected of students midway through kindergarten. For the students starting the year at/above grade-level, the average GLE was 2.47, which means that they were reading at a level expected of students midway through 2nd grade. Most (n=16) of my students entered the class below grade-level in reading.

While the average values displayed in Table 1.1 reveal that average reading growth was higher for students beginning the year below grade-level, the distribution of individual students’ reading growth should also be explored. It is important to look for any disaggregate trends in the data that might provide additional context to the question of performance relative to starting point.

Figure 1.5 below shows the individual growth on a student-by-student basis, comparing the 16 students who started below grade level against those 5 who started at/above grade level. Please note that the vertical axes here are STEP GLE, not STEP level.



**Overall Reading Growth StarBng Below vs. At/Above Grade Level**

3

2.5

2

1.5

1

0.5

0

-0.5

Started below

Started at/above

JJ LF RR GB RR RW JC BB CB EV CW GC LA MD PA MD EB JB KB MB CB

**Individual Students**

**Grade Levels of Growth (GLEs)**

*Figure 1.5 – Overall Reading Growth, Students Starting Below vs. At/Above Grade Level*

There is greater variation in overall reading growth among students who started the year below grade level versus those who started at/above grade level. Students starting at/above grade level only varied in growth from 0.67 years to 1.67 years overall (1 year differential), while students starting below grade level varied in growth from -0.33 years to 2.67 years overall (3 year differential).

The good news here is that some students starting below grade level really soared in the manner that my data coach suggested was possible. In fact, one student starting at GLE 1.33 (0.67 years below grade level) succeeded in finishing the year at GLE 3.67 (0.67 years above grade level), growing 2.34 grade levels in total. The bad news is that some students starting below grade level continued their historical trend of lower performance. Meanwhile, students starting at/above grade all grew enough to finish the year still reading at/above grade level.

In summary, there was only a slight difference in overall average reading growth relative to starting point. However, the range of growth trajectories was much more widespread for students starting below grade level. Looking back, I wish I had more thoughtfully considered that just as my lower-performing readers had great potential for success, they also had great risk of continued difficulty. It was my job to capitalize on their potential and buck the historical trends. Unfortunately, I was not able to do this with all of my students, and many students starting below grade level ended the school year in that same deficit position.

## Research question #2:

How did yearlong math standards mastery vary between girls and boys?

## Rationale for selection of research question #2:

In summer 2012, as I prepared to begin my first year of teaching, *Education Week* published an article citing persistent Science, Technology, Engineering and Math (STEM)3 achievement gaps between boys and girls, especially at the elementary level. The article described worldwide trends in this gap, and built a convincing case for how the United States (more than other nations) was failing to position girls to pursue opportunities for participation in STEM fields.

At its core, education opens doors. That's why I see value in my job, and it’s also why I see value in pushing my students to do better. I want to be sure that I am pushing all students equally hard, regardless of what societal conventions dictate about their skills or abilities to perform in any given subject area. That being said, it is important to me that I compare performance trends of girls versus boys, especially in math standards mastery.

## Analysis of research question #2:

For this analysis, I will begin as high-level as possible, and then cut deeper and deeper into the data. Table 1.2 below shows my results for overall standards mastery across all assessments, which reveal that girls (n=9) slightly outperformed boys (n=12) by a nominal difference.

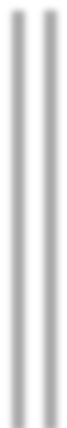
|  |  |
| --- | --- |
|  | Overall Avg Math SM |
| Girls | 75.93% |
| Boys | 75.30% |

*Table 1.2 –Girls vs. Boys, Overall Average Math Standards Mastery*

Figure 1.6 below unpacks the aggregate information contained in Table 1.3 above. Average standards mastery percentages are shown for each student, separating boys and girls by blue/red designations of the bars in the graph.

3 Robelen, Erik. Evidence Persists of STEM Achievement Gap for Girls. Education Week, June 2012.

*Figure 1.6 – Girls vs. Boys, Overall Average Math Standards Mastery, Student-by-Student*



**Girls vs. Boys, Overall Standards Mastery**

100%

90%

80%

70%

60%

50%

40%

30%

20%

10%

0%

Girls

Boys

MD GC JB LF KB CB CB BB RR LA MDMB PA GB JC RW EB CW RR EV JJ

**Individual Students**

**Overall Standards Mastery**

The spread of boys and girls across the math standards mastery distribution is fairly uniform— both categories are organized from the lowest to the highest performer. Both the highest performer and the lowest performer are girls. For overall assessment data for the year, there is no noteworthy difference in performance between boys and girls on math standards mastery.

It is important to bear in mind that even the overall average standards mastery scores are averages—taken across four midterm assessments which contained a multitude of items (including multiple choice and open response) measuring 26 math content standards.

Figure 1.7 shows the distribution of performance for boys versus girls across all four midterm assessments (the graph shows pure averages, not standards mastery). The scores are ordered from lowest to highest, assessment-by-assessment. An even distribution of boys and girls on each assessment would show no difference in performance; clusters of boys or girls at the high or low end of the score set would reveal disparities in assessment-level performance.

**Score (avg)**

*Figure 1.7 – Girls vs. Boys, Midterm-by-Midterm, Student-by-Student*



**Girls vs. Boys, Assessment-level, Student-level**

100%

90%

80%

70%

60%

50%

40%

30%

20%

10%

0%

Girls

Boys

**A#1 A#2 A#3 A#4**

*\*Midterm Score Avg represents pure assessment average, not standards mastery*

The alternating pattern of boy/girl interspersion in Figure 1.7 shows that performance on each midterm was balanced between boys and girls. This reflects overall standards mastery averages that were quite similar. The highest performer and lowest performer varied across midterms—a boy earned the highest score on A#4, and a girl earned the highest score on A#1, A#2, and A#3; a boy earned the lowest score on A#1 and A#3, and a girl earned the lowest score on A#2 and A#4.

From a yearlong standpoint, boys and girls performed more or less equally well, on average. No information or analysis revealed any other storyline or any other trend of interest.

# Data Analysis for One Student

## Student description:

Teachers are told not to have favorites, but Michael D. is the kind of child that got me excited about teaching in the first place. I remember the first day of school this year. Michael walked *up to me* on the recess yard before school started and *introduced himself*. "Hello Mr. Dynamite," he said, "I'm Michael, and I'm in your class this year." I was impressed by his maturity and willingness to approach his teacher to say hello. Looking back, I'm pretty certain his parents told him to make sure he formally introduced himself as soon as he saw me at school.

Michael treats school like my grandfather would treat the doctor's office. I remember how my grandfather would always wear a suit just to go see the doctor, even for a routine checkup, because he felt compelled to show reverence and appreciation for the physician and his training. Michael and his family think of teachers as professionals. I have met his mother and

father; they are very friendly and kind people who expressed a sincere gratitude and appreciation for my role as Michael's teacher.

My favorite Michael story is of the time he brought in a tattered baseball for show and tell. He had the full attention of everybody in the class as he told the story of a time when he was competing against his cousins to see who could throw it the furthest. He told the class how he always lost against his older cousins, and how this time, like usual, he watched his cousins throw with impressive strength and distance until finally it was his turn. Wanting desperately to win, Michael said he tried a new technique, spinning around repeatedly as he had seen on the television (shot put in the Olympics, I presume), and then hurling the ball. He recalled that it went so far he could barely see where it landed—plus, he was dizzy. As he and his cousins ran over to the spot where it landed, Michael realized he had emerged victorious! So this was his winning baseball, and he said it was proof that if you kept trying, you could accomplish anything. With an attitude like that, I know Michael has the potential to go far in life.

That being said, from an academic standpoint, Michael started the year in deep trouble. He was a non-reader according to the STEP diagnostic that I administered in September. He was reading below Kindergarten grade-level, and he couldn't tell letters apart from one another. In mathematics, he could score fairly well on straightforward computational problems, but he couldn't follow directions or complete any basic word problems (presumably because of his literacy deficiencies). I immediately saw Michael as a student with a great attitude who needed a lot of remediation and academic supports. The great news about Michael: At the end of the year, his reading growth outpaced that of all his classmates, and his mathematics standards mastery scores were equally impressive.

## Student's academic achievement throughout the year:

Figure 1.8 below shows Michael's performance trajectory over the course of the year for reading growth and math standards mastery. Michael's performance steadily improved over time.



**Michael's Scores: Reading and Math**

71% - A#2

77% - A#3

80% - A#4

69% - A#1

Midterm Score Avg\*

STEP Level

L7: GLE 2

L5: GLE 1.33

Pre: GLE -0.33 Pre Pre: GLE -0.66

L3: GLE 0.66

**Sep Oct Nov Dec Jan Feb Mar Apr May Jun**

*Figure 1.8 – Michael's Performance in Reading Growth and Math Standards Mastery*

*\*Midterm Score Avg represents pure assessment average, not standards mastery*

*\*"L3,” "L5,” etc. represent "Level 3,” "Level 5," etc. on the STEP assessment, with accompanying GLE*

Figure 1.9 below shows Michael's math midterm scores relative to the class average.



**Average Score, Assessment-by-Assesment**

85

80

75

70

65

60

55

50

80

80

77

71

77

74

73

69

Michael Avg\*

Class Avg\*

0 1 2 3 4 5

**Midterm #**

**Average Score (Percent)**

*Figure 1.9 – Michael's Performance vs. Class Performance for Math, by Assessment*

*\*Class Avg represents pure assessment average, not standards mastery*

Figure 1.9 reveals that Michael’s scores not only improved, but they also improved relative to the class average, to the extent that Michael was outpacing himself and his peers over time. For math standards mastery, Michael's scores improved beyond mere percentage increases. Each math midterm was increasingly difficult— the class average for the 3rd midterm was 74% and the class average for the 4th midterm was 73%, so Michael did better than the class on both of those assessments. Michael did not perform better than the class on the first, and easiest, midterm; this one had a class average of 80%, and Michael scored only a 69%. As mentioned previously, however, Michael began the school year greatly lacking proficiency in reading, and this spilled over into his math scores.

Overall, Michael had a very successful year in both reading and math. His reading improved +8 levels on STEP, equivalent to a growth of 2.67 years, which brought him closer to grade level. His yearlong math standards mastery average was 75%, which positioned him slightly below the class average but substantially above his starting point on the first midterm assessment.

## Connection to additional data source:

I think I have some good intuitions about why Michael did so well and kept getting better.

In my classroom, we had a slogan: "Reading is King… and Queen.” We kept both in-class and out-of-class reading logs, where students could earn points and prizes for the number of books they read. We had a big goal of reading 100 on-level books. Michael was really excited by that goal, but he entered the classroom with such low-level comprehension that reading was impossible. Plus, he told me that he had zero books at home that he could read.

That is why in December I started the "AfterSchool Book Club" (ABC), for students like Michael who were eager to read but needed a supervised place to do so. The school library closed at 4

pm and the Larsen-Sant Library in town closed at 5 pm; plus, kids need adult supervision, and Michael's parents worked late (his older cousins would typically walk him home from school). I convinced a couple of Michael's cousins to also join the ABC so that they could still get him home, and then I got permission from the librarian to start borrowing large quantities of books at a time to use in my classroom. It was a huge success, and kids like Michael really took to it.

Table 1.3 below shows Michael’s reading log, indicating the number of books read in and out of class.

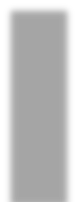
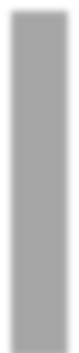
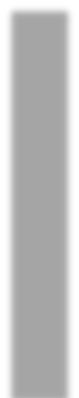
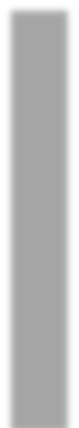
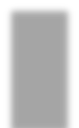
|  |  |  |  |
| --- | --- | --- | --- |
| Month | In-class books read | Out-of-class books read | Fav of the Month |
| Sep | 1 | 0 | All By Myself by Mayer |
| Oct | 4 | 0 | Bread Bread Bread by Morris |
| Nov | 2 | 1 | The Farmer in the Dell by O'Brien |
| Dec | 3 | 10 | Sunshine, Moonshine by Armstrong |
| Jan | 4 | 11 | The Foot Book by Suess |
| Feb | 5 | 9 | Sheep in a Jeep by Shaw |
| Mar | 4 | 8 | Morris the Moose by Wiseman |
| Apr | 5 | 6 | Is This You? by Krauss |
| May | 6 | 7 | Rosie's Walk by Hutchins |
| June | 2 | 11 | Just a Seed by Blaxland |
| **Total:** | 36 | 65 |  |

*Table 1.3 – Michael's Reading Log, In-class and Out-of-class*

Michael worked extremely hard to reach our goal of 100 books. Even in the month of June, when we had only 10 days of school, he stayed after school every day to read a total of 11 books outside of class. You can see that he read, and read, and read; and all the while his reading level was increasing rapidly. Michael's degree of reading jumped dramatically at the inception of the ABC, at which point he began reading more than 10 books every month (combined in/out of class).

Figure 1.10 compares Michael’s reading log against his levels of reading growth, by showing the rates at which he grew relative to the number of books he read.

*Figure 1.10 – Michael's Reading Growth, Compared Against Books Read Between STEP Rounds*



30

25

**Michael's STEP Growth vs. Books Read**

1 year

0.66 yrs

0.66 yrs

20

15

n/a

Number of books

10

0.33 yrs

5

0

Sep-Nov Dec-Jan Feb-Mar Apr-May

June

**Books Read**

Comparing Michael's reading log against his reading growth reveals another interesting, intuitive trend—Michael's reading growth increased at a rate paralleling his reading activity, meaning the intervals between STEP assessments, when Michael read the most books, resulted in the greatest gains in STEP reading level. For example, between the diagnostic STEP and Round 2 of STEP, Michael only read 8 books and only grew +1 STEP level. However, between Round 2 of STEP and Round 3 of STEP, Michael read 28 books and grew a whopping +3 STEP levels.

The more books Michael read, the faster his reading level grew. Additionally, as Michael became a better reader, his math scores also improved. Michael's increased reading levels could have been a contributing factor to his corresponding increased math ability. Michael's performance reinforces everything that reading advocates proclaim: reading proficiency really matters for student achievement. Michael is only a single student whose story doesn't speak for everybody, but I am now more convinced than ever that "Reading is King… and Queen!”

# Data Analysis for Character Results

## Character measure:

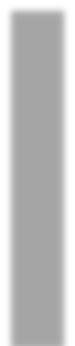
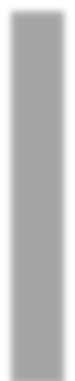
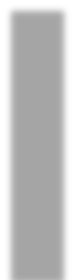
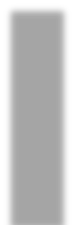
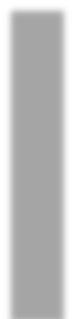
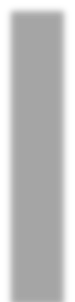
I want my students to succeed in my class academically, but I also want them to build greater excitement for school and life. College is many years away for them, and I’m eager to build their enthusiasm, passion, and gusto for all the great opportunities that await them. Further, when work is challenging, it’s natural to temporarily lose the big picture passion we have for our studies. I want my students to be able to draw upon their zestiness to help them through the hard times! For this reason, I measured my students’ levels of zest and sought to increase both their understanding of zest and also the degree of zest they demonstrated on a daily basis.

I also collected parent evaluations with the same set of indicators and schedule, in addition to collecting student zest journal data recorded bi-weekly. This supplementary data was used to guide my efforts to increase my students’ zest both inside and outside our classroom.

## Character Results Analysis

**Mastery-Based Results** In the final (fourth) round of data collection, across all the indicator evaluations for both teacher and student, the average score was 3.58. For teacher evaluations, the indicator average was 3.81; for student evaluations, the indicator average was 3.33.

Figure 1.11 below displays the average scores by individual indicator, disaggregated by type of evaluation (student vs. teacher).



**Average Final Indicator Score**

4.5

4

3.5

3

2.5 student avg.

2 teacher avg.

1.5

1

Indic. #1: Indic. #2: Indic. #3: acxvely part shows enth invig others

**Points (out of 5)**

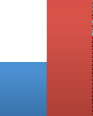
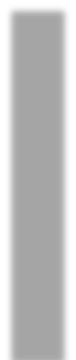
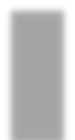
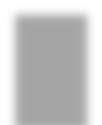
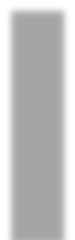
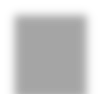
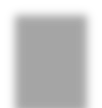
*Figure 1.11 – Average Scores by Individual Indicator, Based on Final Round of Data*

Not all indicators are created equal, nor were teacher and student evaluations always aligned. The lowest scoring student indicator, on average, was student evaluation of indicator #3: “*Invigorates others.*” The lowest scoring teacher indicator, on average, was teacher evaluation of indicator #1: “*Actively participates.*” The highest scoring indicator, on average, for both teacher and student evaluations, was indicator #2: “*Shows enthusiasm.*”

**Growth-Based Results** Between the baseline (first) and the final (fourth) round of data collection, across all the indicator evaluations for both teacher and student, the average growth was +0.61 points. For teacher evaluations, the average growth was +0.75; for student evaluations, the average growth was +0.48.

Figure 1.12 below displays the average growth by individual indicator, disaggregated by type of evaluation (student vs. teacher).

*Figure 1.12 – Average Growth by Individual Indicator, Comparing Baseline vs. Final Round of Data*



**Average Overall Indicator Growth**

1.6

1.4

1.2

1

0.8

0.6

0.4

0.2

0

student avg.

teacher avg.

Indic. #1: Indic. #2: Indic. #3: acxvely part shows enth invig others

**Growth, in points**

The indicator with the greatest degree of change for both teacher and student evaluations was indicator #3: “*invigorates others.*” For the other indicators, there was only slight positive change across the board for teacher and student evaluations. Indicator #2 (“shows enthusiasm”) had

~0.5 point average increase for teacher evaluations, but only ~0.2 point average increase for student evaluations. Indicator #1 (“actively participates”) had ~0.3 point average increase on teacher and student evaluations alike.

## Character Results Storyline:

***How did you build this strength with your students across the year?***

At the start of the year, I detected an unfortunate trend during peer work time: students were shy to cheer on their peers and show their passion for the material, presumably because it was uncool or unappreciated. Accordingly, I regularly modeled and praised efforts to infuse the group with energy and excitement. Simple gestures like high-fives and snaps were welcomed and encouraged, as were rallying compliments like “*you’re the best in the whole Mountain West*” or “*from Preston to Princeton you’re destined.*”

I also designed a system to track the zestiness of my class on a day-to-day balance. It was a simple class points tally system. The more students showed zest, the more zest points they earned. There were no actual prizes associated with the class points, just the challenge of meeting our points total from the previous week.

Finally, I taught a series of character lessons about zest heroes. We learned about Bono who is zesty about performing and charity work and Harriet Ball who was zesty about life and teaching. We read about our zest heroes stories and discussed how being zesty positively influenced their lives. I worked hard to highlight how our zest heroes’ zestiness invigorated others, not just themselves!

***Are these results reflective of your teacher actions?***

Overall my students grew in every zest indicator. However, I believe the third indicator best reflected my teacher actions from this year. The positive change from start-of-year to end-of- year in “invigorate others” rating was captured by both my teacher evaluations and by my students’ evaluations. Given the interventions that I continuously attempted, and the instruction that I continuously provided, the results make sense. I would like to think that this improvement is attributable to my efforts as a teacher—ultimately, the precise measure of any student outcome is intended to evidence teacher impact, and I feel confident that this result is indeed proof of my direct influence in the classroom.

That being said, student and teacher evaluations for “invigorates others” were not as high- scoring as other indicators. Moreover, average final student evaluations for “invigorates others” were over 1.0 point lower than my average teacher evaluation (2.86 vs. 3.90). Given how much progress we had made, I was eager to learn more about why my students were especially hard on themselves relative to this indicator scoring. I sat down with two of my students and performed a think-aloud while they narrated their self-evaluation scores for each indicator.

Both students treated the term “invigorate” very literally—for them, to proclaim that it was “like them” to “invigorate others” would have meant that they directly energized another through a specific action. For me, this idea of invigorating others was much more generalized. If a student brought positive energy and vitality to any group setting, I saw them as invigorating others, independent of how receptive those others were to the invigoration. Because “invigorate” was a vocabulary term we needed to define prior to completing our zest indicator, I realize now that students may have focused on the definition rather than the concept, and therefore assigned lower self-evaluation scores. This disconnect in interpretation seems even more plausible when looking at start-of-year indicator averages, where “invigorates others” is already substantially lower for student evaluations than for teacher evaluations.

# Next Steps from Analyses of Academic and Character Data

## Action step #1 (from academic analyses):

Reading was a central focus for my classroom and a central theme of this data narrative. But my data narrative has shown me that too many of my students didn't soar in terms of reading growth. In reviewing the analyses of reading levels for individual students like Michael, for subgroups of students like those who started below grade-level vs. at/above grade-level, and for the whole class, one shining message emerges for me: if you push kids to read more on-level books, you push them to improve their reading. Along those lines, there emerge a pair of sub- steps that I will take next year to actualize these findings from my academic analyses.

Firstly, I want to begin the upcoming year by enlisting all parents to enroll their children in the Afterschool Book Club *at least once a week* as a mandatory requirement. Watching Michael's growth, observing his investment, and sharing in his successes was worth every ounce of energy I poured into creating and facilitating the ABC. On a big-picture scale, I envision opening the ABC school-wide, such that peer groups of older/younger students are teaming up in order to read aloud together, to support new readers. My intention next year is to make the ABC a regular

part of school for my students, which will extend our day and make reading an even greater part of what we do.

Secondly, next year I need to create or procure formative assessments that serve as a proxy measure for students’ STEP reading levels. I was often surprised by the results from interim STEP rounds. I always had an intuition that students were going to grow more rapidly and substantially, but such growth never manifested. The instruction and assessment that I provided throughout the year did not give me enough ongoing feedback about students’ reading growth.

In order for me to really know students’ reading levels and the trajectories for growth that they were on, I needed more information. I needed a clearer sense of their decoding skills, their vocabularies, their comprehension, and their accuracy. Each time we did whole-class read- alouds, I thought I was able to gauge improvement by calling on students and considering their strengths/deficits in the moment. But this was not a truly scientific approach; it relied too much on my own holistic, subjective takeaways. For this reason, moving forward, I am going to be sure to assess students’ reading skills with a bona fide set of formative assessments that provide me with real-time, actionable data.

## Action step #2 (from character analysis):

One mistake I made this year was not paying closer attention to the trends in my character data earlier on. As previously discussed, I did some end-of-year detective work to determine why my students’ self-evaluations and my teacher evaluations were so disparate for the indicator “invigorates others,” and I discovered that we each had a distinct understanding of what the indicator meant and how to best interpret it. This was true for other indicators as well.

I worry that some of my most zestful students ended the year believing they lacked agency in the realm of zest because they didn’t necessarily affect zest in their peers, even though they demonstrated it themselves. Self-perception is arguably the greatest influence in all of our lives, and I missed invaluable meta-cognitive teaching moments for students to explain their thinking.

To help students self-reflect accurately and objectively next year, I want to leverage my character data to engage in frequent, meaningful conversations with my students about their character development. With the help of my “character expert” colleague, I want to generate an informal script to help facilitate these conversations asking students to describe their rationale for each self-evaluation score. I will also need to analyze both mastery-based and growth-based results after *each* round of assessment throughout the year to look for differences in my perceptions and students’ self-perceptions. The more I understand about my students’ thoughts and beliefs, the better I can support them and lead them to greater character development. Grappling with these important questions, and reflecting more deeply, can only help them know who they want to become and how to continuing growing toward becoming that person.