From the Field: Practical Applications of Research

A Case Analysis of a School District’s Transition to College and Career Ready Standards

By Charles Russo, Ed.D.

Abstract

The following study closely details how the East Moriches Union Free School District made the transition to college and career-ready standards (CCSS), the impact that change had on reading scores for students, and the alteration in attitudes of parents and teachers to the shift in standards. Specifically, this report focuses on the male students who began Kindergarten in 2011, 2012, and 2013, as these were the cohorts that experienced the curriculum shift to one that was fully aligned to Common Core State Standards (CCSS). When appropriate, these cohorts were compared to older groups to establish a baseline.

Male students were a focus for this study because they lagged behind their female counterparts in reading and ELA scores for many years and anecdotally seemed to have shown improvement and increased interest in the subject after changes to align ELA curriculum to common core state standards according to their teachers.

This case analysis shows that despite some initial concerns and problems surrounding the changes in standards, assessments, and curriculum, the teachers and district successfully moved beyond disagreements and missteps toward an environment where reading was continuously encouraged and students visibly improved. As detailed in the report, there are some caveats to this conclusion, but the consensus remains the same: In this case study, an alignment of curriculum, materials, and instruction to common core state standards (CCSS) lead to improvement in student reading and literacy ability.

Introduction

When the CCSS were rolled out district leadership provided guidance for faculty, giving them the opportunity to focus on learning and using the CCSS and their supporting materials, prior to making curricular and instructional adjustments that would meet the needs of their district's culture and students. This mixed-methodology study was commissioned through High Achievement New York to ascertain the results of the implementation of the CCSS at the East Moriches School District and analyze its effect on student achievement and student disposition, quantitatively as well as qualitatively, through the lenses of parents and teachers.

The District had a particular interest in the effect of the CCSS implementation on male students. Their concern was borne of a dialogue in educational research about gender equity, wherein girls seem to be steadily outperforming boys in school nationally. The district had anecdotal data that suggested a hypothesis: CCSS help close the student achievement gap between male and female students. This study was designed to see if the hypothesis was accurate and to identify data-informed actions to enhance their efforts and is part of an ongoing effort by the East Moriches Board of Education, administration, faculty, staff, and community to ensure that the students under their care are, in fact, college and career-ready.

Statement of Purpose

The purpose of this preliminary study was to assess male student engagement since the promotion and implementation of CCSS. The project's scope focused on student cohorts who began Kindergarten in 2011, 2012, and 2013. Internal and external quantitative and qualitative data sources were analyzed for notable patterns. The district chose to view each cohort individually and each cohort was contrasted with each other to see if any pre-and post-CCSS patterns could be discerned.

This study should contribute to the District's continued efforts to examine academic and social outcomes, particularly of male students, through multiple lenses, informing curriculum, instruction, and professional development within its schools.
Research Questions

The following research questions were used to inform this study.

1. Has the Lexile level of male students changed, compared to female students, before and after the implementation of the CCSS curriculum revisions and aligned instructional practices?

2. How has the performance of male students compared to female students changed on the Grade 4 NYS Assessments before and after the implementation of the CCSS curriculum revisions and aligned instructional practices?

3. Has there been a decline in male student behavioral referrals before and after the implementation of the CCSS curriculum revisions and aligned instructional practices?

4. What are the perceptions of parents about the performance of their male children since the implementation of the CCSS curriculum revisions and aligned instructional practices?

5. What are the perceptions of teachers about the performance of their male students since the implementation of the CCSS curriculum revisions and aligned instructional practices?

Limitations of Study

The review and analysis of localized data has its limitations, given the limited cohort data available pre-implementation of the CCSS and the availability of data from only two K-4 cohorts post-implementation. Students who began Kindergarten in 2011 represent the only full set of K-4 data available through AimsWeb which preceded the CCSS and the district's full implementation process.

Students who entered Kindergarten in 2011 entered Grade 1 in 2012, Grade 2 in 2013, Grade 3 in 2014, and Grade 4 in 2015 had informal exposure to the CCSS and would likely have benefitted from curricular and instructional changes more in the later grades. From a faculty standpoint, in 2011 teachers were digesting and experimenting with the new CCSS and had just begun to consider curricular and instructional shifts necessary to comply with the new NYSED requirements. There were no requirements to implement the CCSS with the 2011 cohort, though some teachers may have been "experimenting" with the new standards as they were learning them. Students who entered Kindergarten in 2012 and 2013 were fully exposed to the CCSS in Grades K-4. Therefore, there are only two K-4 cohorts of students-2012 and 2013-that were completely exposed to instruction aligned to the CCSS starting in Kindergarten. While this is a serious limitation in the quantitative aspect of this study, the patterns are nonetheless noteworthy and informative.

Methodology

This study used a mixed methodology which included both quantitative and qualitative analysis of a variety of data sources. NYS assessment data was reviewed for each cohort. A review of localized, spring-to-spring Lexile levels as recorded in AimsWeb was also used to compare the performance of three cohorts of students who represent pre- and post-implementation of the CCSS. All district students received this ELA measurement system by taking AimsWeb, a school-administered universal screening data management system.

In addition, parents were invited to respond to a survey on SurveyMonkey when they attended their fall 2017 "Meet the Teacher Night." The school psychologist was interviewed and asked to review discipline through multiple lenses, including the district's Response to Intervention (RTI) behavioral referrals, which detail interventions made to support students with significant academic or behavioral issues. Her qualitative findings are included in the Teacher Focus Group discussions.

To document the findings, researchers examined the results of annual AimsWeb literacy assessments and the Grades 3-8 NYS ELA exams, conducted focus groups with district teachers, surveyed district parents, and reviewed academic and behavioral referrals with the district's psychologist.

The data were collected and triangulated through collection points that included parent and teacher surveys, Grade 4 NYS ELA Assessments, and student discipline data. As part of this study, using data in AimsWeb, the spring reading Lexile levels of K-4 students were examined as cohorts who began in 2011, 2012, and 2013. Their cohort data were compared within each and across cohorts. All the collected data informed this study that sought to investigate whether the data supported the directional hypothesis that male student engagement increased with the CCSS implementation.

Findings

1. Has the Lexile level of male students improved, compared to female students, before and after the implementation of the CCSS curriculum revisions and aligned instructional practices?

Data tracking in AimsWeb was initiated in 2011. The first Grades 1-4 cohort that had comparable data began in 2011. However, 2011 was the year that teachers were learning about the CCSS, auditing curricula and attempting to experiment with the common core state standards. Spring 2012 is the first Grades 1-4 cohort that was formally instructed using the CCSS with fidelity. The lack of a clear dichotomy of use of the common core standards among data sets, as well as the limited data sets make this data somewhat contaminated with common core standards
under implementation for one group and fully implemented for the other two cohorts. However, there are patterns showing an increase in the level of achievement in males and females which are valuable for discussion. It is also noteworthy that this data compares different cohorts of actual children and speaks to the growth of the teachers post-CCSS. Through this lens, as limited as it is, the data are impressive. Looking vertically at each grade, the growth trends in student achievement are positive.

Table 1.1 indicates Lexile growth by cohort across spring benchmarks beginning with Grade 1 and continuing the examination through spring of Grade 4 for each cohort. The progress of male student Lexile growth is noted in bold, as that was the focus of this study. Table 1.1 presents significant growth of female students as well. Examining the data horizontally, the males are showing solid growth and there is evidence that the males are now performing well in comparison to the females. In essence, there is evidence of gender equity beginning to emerge.

The data suggest a developing trend toward a plateauing effect of the NYSED's emphasis on professional development, observed by Michael Fullan (2001), who described the phenomenon as evidence of an "implementations dip." Looking at the quantitative data presented in this study, supplemented by the information provided by the focus groups, the summative conclusion supports Fullan's observations. A possible solution is more focused and highly aligned professional development, which the district continues to address.

2. Has the performance of male students improved, compared to female students, on the Grade 4 NYS Assessments before and after the implementation of the CCSS curriculum revisions and aligned instructional practices?

In viewing the data from year to year, it is often possible to miss the big picture. Looking at the data through the lens of Lexile Levels, ELA 3 and 4 combined, the story is positive for both males and females. Although the percentage of females scoring a Level 3 or 4 started and ended higher than the males, the males also show a positive trend upward. In 2016, there was equity between males and females scoring a Level 3 or 4. On the 2017 assessment, girls showed a larger gain compared to the males while male growth percentages were not statistically different from the females. Since the goal of the school district is proficiency or higher for all students, this is a promising trend.

There are a few caveats that must be noted when trying to compare one cohort of students to another using Grade 4 ELA assessment scores. This data reveal some significant patterns and trends that are more likely the result of the process the district has used to learn and implement the CCSS and the teachers’ responses to those interventions. This data must be viewed in the context of the other sources of information within this research design.

It is also important to note for this analysis that unlike the data for Lexile levels, there is more ELA assessment data...
There were no consistent Lexile data available for students who began Kindergarten in 2010. The "opt-out movement" is a compounding variable which influences this data and its analysis. The East Moriches Schools have been affected by the boycott of the Grades 3-8 NYS Assessments. Fourth-grade students taking the new CCSS-based NYS ELA assessments dropped by approximately 50 percent since 2014. Since the implementation of the CCSS assessments, there have been parents who objected to the CCSS and chose to opt their children out of the NYS assessments. This movement grew statewide in New York, peaking in 2015 and 2016, and last year well over 200,000 students statewide declined to take the State assessments. Cohorts 2010 and 2011 took the Grade 4 ELA Assessment in spring 2014 and 2015, respectively. These cohorts, particularly in the earlier grades, had limited access to the full implementation of the CCSS. It is notable that these two cohorts of students had teachers who had some training by the time these students reached the intermediate grades. Cohorts 2012 and 2013, tested in 2016 and 2017 respectively, had exposure to faculty who fully implemented the CCSS beginning with Kindergarten. The results of these assessments form the baseline for our comparison of cohorts starting in 2010, 2011, 2012, and 2013.

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<tr>
<th>Table 2.2: Number of Students Tested by Cohort and Level</th>
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<td>Cohort 2010</td>
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<td>Total Tested</td>
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Two parents declined to state the gender of their child. For the purposes of our research, the following data isolates the feeling of parents of males currently in Grades 4, 5 and 6.

The analysis begins with Question 3, which reflects parent perceptions of their male student’s feelings in Grades 4, 5 and 6 and school post CCSS Implementation. It is notable that parents perceive that their child feels no less successful as a result of the Standards implementation. More significant is that almost one-third of parents see their males as more successful.

From the parents’ perspective, they overwhelmingly see more success in their children in the areas of ELA and mathematics.

About one-third of parents felt that their male children are doing “about the same” as they did before implementing the CCSS. It is important to note that this question does not reveal the quality of the child’s performance in these subjects. For instance, a child with a 100% average in math who has retained this grade might be viewed as doing the same. As a result, the data are not as useful as those revealed by Questions 5 and 7.

Parents were asked about participation in the NYS Assessments. Among those parents who chose to not have their male children participate in the NYS assessments, the majority of parents relied on observation to monitor their child’s progress, which may or may not be aligned to the learning standards. There is clear reliance on teacher feedback and personal observations to track academic progress as well.

5. What are the perceptions of teachers about the performance of their male students since the implementation of the CCSS curriculum revisions and aligned instructional practices?

Elementary and middle school faculty were invited to attend one of two focus group sessions to inform this study. Two teacher focus groups were formed to discuss their impressions of the East Moriches School environment and student achievement before and after the implementation of the CCSS. All participants in the focus groups were from the elementary school. The same script and question pathways were used for both groups. Of special interest were the teacher’s thoughts about their male students.

Question: What specific interventions implemented in 2012 and beyond do you think contributed to the growth in average student Lexile levels?

Initially, after the CCSS were mandated in 2009 and the ELA and math modules were released, the district provided in-service to teachers on the Equip Tri-State Rubric. As part of this study’s scope, the pre-CCSS curriculum was reviewed using the rubric to compare the ELA shifts. There is an indication of some trepidation on the part of the teachers. Upon looking at the Modules and their current reality, one teacher said her initial response was, “Yeah, right! It is now cool to see what the students are capable of.”

It is fair to say that since that time, the teachers interviewed have become believers in the standards. They came to realize early into the implementation that “student capacity was beyond prior expectations.” The expected level of difficulty was “significant” but the students enjoyed the challenges. Students understood the challenges and approached their new learning with a “growth mindset.” Teachers reported an “uptick” in vocabulary and the expectations that teachers have of students, and students have of themselves.

Question: Of all these interventions, which had the greatest impact on the growth of student achievement?

Across the board, the greatest impact was a renewed emphasis on reading, particularly in the non-fiction genre and skill development. Reading logs were implemented for students requiring more parental involvement and supervision. Instructional emphasis was placed on reading fluency, which was new to them. Data was used more consistently to influence instruction and AimsWeb allowed teachers to track student achievement and growth. Students are more aware of their own progress and have greater awareness about the assessments, protocols and assessment terms, all of which hold the student more accountable. Many faculty members cited that students are writing more, particularly writing more analytically, even in math.

Question: How would you best describe your instructional environment now versus before the CCSS interventions? How do you think the parents would describe it and students?

Prior to the curriculum audit and significant “valuable professional development”, classrooms were “less focused.” Teachers acknowledged that it was hard “to give up control” of the classrooms and curricula. There was little time left for teachers’ “pet topics,” and their favorite literature and books. In particular, teachers cited that the professional development provided teachers with usable tools that could be readily implemented in their classrooms.

Teachers stated that their classrooms became more structured and that more students were exposed to a curriculum that was more relatable, especially for the males. They acknowledged the significantly greater rigor noting little “down time” during the day. Teachers admitted that it took time to “embrace” the new CCSS instructional models.

Teachers acknowledged that curriculum, instruction, and assessments were more aligned within each grade and progressively from grade to grade. Teachers also agreed there was more instructional equity in every classroom and teachers understood that what was going on in each classroom across the grade was more “predictable”
through the lenses of pacing, content, and expectations. This allowed more pertinent “team meetings” where teachers discussed upcoming strands and shared materials and pedagogy.

**Question:** Have you noticed any difference between the engagement of females and males since the CCSS interventions were instituted? If so, how has engagement in learning changed?

There seemed to be strong agreement that there are more “male readers” than ever before. The boys are “drawn to non-fiction” and the increased availability of non-fiction text in the classroom encouraged them to read. They noted there were more male “faces in books” than ever before. One teacher formed a “Guys Read” club in her classroom.

Teachers recognized the increased equity in the CCSS structure and materials. With an emphasis on non-fiction, teachers saw more literature that was “relatable to boys.” They also saw the diversity in characters as a means of creating different access points for wider groups of children. Male and female children continually ask for more books when they find a topic that interests them.

A discussion came up within this question about the value of reading logs to encourage reading at home. According to some, parents “all” complain about the reading logs and with the “peer pressure” among parents to fill them out. Questions arise about the validity and helpfulness of the reading logs. Teachers use a variety of incentives and disincentives to promote compliance with the reading logs. This is an area that seems to require additional discussion and guidance.

**Question:** What more can the district do to enable you to continue on the path of continued growth and professional achievement?

Respondents indicated that before the official implementation of the CCSS in the East Moriches School District, their principal was “relentless” about the need for the teachers to learn and follow the CCSS “modules” with “fidelity” and no modifications in year one. The teachers alleged that this was significantly different than other districts where they understood them more deeply. As a result of deeper understanding of the CCSS, principals and faculty identified gaps in the modules as well as where redundancies existed. This knowledge allowed for the development of supplemental materials, curricular revisions, and pedagogical adaptations to occur.

Within the modules, the strongest emphasis is on ELA and math with science and social studies relegated to certain domains depending on grade levels. Going forward teachers want balance and believe it may be time to revisit the modules, domains, and skills.

There was further conversation about the reduced focus on science and math in Grades 3 and 4 with the primary emphasis being on ELA and social studies. There is a perception that there is little time for doing fun experiments or prolonged social studies projects.

There was also concern that writing skills and conventions (grammar, punctuation, parts of speech, etc.) are no longer emphasized. However, teachers acknowledge a willingness to sacrifice some content in science, math and even writing conventions in exchange for having students read for meaning and understanding. They now have the skills and abilities to learn new things that were not present pre-CCSS.

It is fair to state that teachers were not willing participants in the first year; however, they now report an appreciation in the original design, which has resulted in professional pride. The teachers have had to set aside their long-held beliefs about what their students are capable of achieving as they witnessed their continuous growth in a more rigorous instructional environment. They report now how they appreciate the instructional continuity they have created.

Perhaps one of the most telling statements teachers made was references back to the old days, where on the first day of a new school year, a teacher knew exactly who a child’s prior year’s teacher was based on the skills the child possessed. Now, all students have had equal access to the same curricula and rigor when they enter the classroom on day one of a new school year.

**Conclusion**

This study identifies many positive trends that quantitatively and qualitatively demonstrate how the East Moriches School District is moving in the right direction instructionally with solid growth in multiple measures of student success.

On the quantitative side of this study, the Lexile data is clear. Since the district’s implementation of the CCSS, student reading levels have grown considerably for both male and female students. Growth in Lexile levels is especially interesting in that the focus of the CCSS reading requirements and strategies is on the non-fiction genre.

The knowledge, skills, and dispositions required of students reading non-fiction are considerably more challenging than that required in the fiction genre which used to dominate reading programs nationwide.
Success in reading and working within the domains of non-fiction, in particular, are required if students are truly to be “college and career ready” in the 21st century. The gains here are particularly impressive.

Teachers confirmed they were universally satisfied with their students’ interest and abilities within the non-fiction genre. Of great interest to the stated purpose of this investigation is how teachers indicated that the male students, in particular, were motivated more than ever before to read when the emphasis shifted to non-fiction.

Looking at student performance on the 4th grade NYS ELA Assessment, positive trends are emerging as well. The percentage of students achieving proficiency or higher (levels 3 and 4) has grown since the implementation of the CCSS. While females are still outperforming male students, trends are positive for both.

As stated, the ELA state test data are problematic to use for the purpose of making any significant changes in curriculum and instruction. There are many variables skewing this data, including the number of students refusing to take the test, the changes in the NYS scoring rubrics, and the changes in form and format of the assessment itself during multiple annual administrations.

One of the more data-rich environments of this research was the focus groups with teachers. While some of the faculty members were reticent at the start of the CCSS implementation, they report observations of the benefits in the CCSS implementation process.

Teachers noted an increased interest in vocabulary and readings and using information within the non-fiction genre. Tales of “boys” reading more than ever before were particularly encouraging and illustrative of one of the major instructional shifts espoused by the CCSS. Equally, and possibly more encouraging, was that the “girls” were equally engaged in the non-fiction and critical thinking.

The majority of parents of both male and female students who responded to the survey sensed that the children were doing about the same or better in the post-CCSS era. Their positivity was particularly evident in ELA. Student achievement in math seems to mirror the more universal concern among many parents that needs to be investigated further and addressed.

The last aspect that is noticeable concerns referrals through RTI for behavioral issues. Positive trends were noted, particularly since 2015. Often discipline referrals are the result of student frustrations in class with subject-matter, lack of success, frustration, or other factors. Given that the CCSS has higher expectations for instructional rigor and relevance, the downward trend in RTI referrals for discipline is impressive. In other words, as rigor goes up, more students appear to be engaged and excited about learning and RTI referrals are down. One might expect the opposite. This is worth celebrating.

This report details the following key findings:

- By 2017, male students in the 2012 and 2013 cohorts generally showed improvement in literacy both within each cohort’s progression—showing gains of at least 7.63%—and over the baseline 2011 cohort by a significant margin.

- Since the rollout of CCSS, the district teachers interviewed have increasingly supported the changes, noting that “student capacity was beyond prior expectations” and there are more “male readers” than ever before.

- Teachers reported a number of important factors that attributed to greater student success, including a greater emphasis on “close reading” and reading more non-fiction; growth in “sophisticated” student vocabulary; a more collaborative, student-centered environment; and more regular and improved parental engagement.

- Female students in the grades of study showed improvement in English Language Arts (ELA) proficiency and literacy, showing clear improvement within each successive cohort in each year’s test and growth of at least 7%. As a result of this fairly even pace, the ability gap between females and their male counterparts remained relatively constant.

- The focus of the new standards and curriculum was highly regarded by parents of the study participants. In spite of opting out of the Grades 3-8 New York State (NYS) Assessments, parents indicated that Mathematics and ELA were the subjects of greatest improvement for their children.

- School psychologists likewise saw a reduction in academically-related referrals since the implementation of CCSS, especially among male students, indicating a reduced need for interventions.

Recommendations

The lack of consistency and perceived reliability of the NYS assessments is a source of frustration for parents and educational professionals alike. The district should consider creating standards-based “aligned assessments” for all grades and subjects that create greater instructional continuity between and among all teachers and grades. The resultant data set would be more reliable and actionable for teachers and parents.
Given the high number of parents opting out of the state assessments, the district should consider widely dispersing the findings in the study so that parents have a stronger sense of what children are capable of doing within a culture of higher expectations and increased academic rigor.

To have a district’s standards, assessments, and curriculum operate in concert with one another and to promote literacy skills, it may be necessary for each district to create a culture of collaborative change for itself and shield all stakeholders from the volatile political climate at the state level where constant exam changes and shifting priorities can result in a lack of steady, actionable data.

Achieving collaborative change requires significant buy-in from all key members of the school community, as well as the time to make all the necessary changes with limited educational disruption. Additionally, school and district leaders have to ensure faculty and parents have regular time to reflect on the successes and failures of curricular and instructional efforts and make necessary modifications needed to foster continued improvement for all.

References


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