

Report to Subcommittee on the Johns Hopkins ELA Curriculum Analysis

Background

In the past few years, the Framingham Public Schools has comprehensively reviewed and revised processes and protocols, including curriculum review and revision. Along the way it became evident that curriculum was not necessarily aligned within or between grade levels or across schools. For this reason, the District developed a 7-year curriculum review cycle, and prioritized grades 6-12 English/English Language Arts (“ELA”) curriculum for review in the 2019-2020 school year. As part of this review, Framingham Public Schools (“FPS” or the “District”) worked with Johns Hopkins School of Education’s Institute for Education Policy¹ (“Johns Hopkins” or the “Institute”) to analyze the state of the ELA 6-12 curriculum in the District.

The analysis by Johns Hopkins lays a data informed foundation upon which the District can build a curriculum that is aligned within and between grade levels across schools. The report outlines the components of a curriculum that is standards-aligned, rigorous, and relevant to the demographic make-up of the District. This type of curriculum would comprise materials and practices that would:

- Build background knowledge in students on a broad range of worldly topics
- Include texts that are sufficiently complex for the students’ grade and reading levels
- Engage students in discussions and writing that are grounded in textual evidence

The conclusions from this report highlight the educator knowledge of the standards and the key shifts they require in classroom instruction. Now that the new ELA standards are established, and we have had several years of experience with them, this school year is the perfect time to review our secondary ELA curriculum. It is part of our efforts as a community to build a generation of young people with the knowledge, skills, and understanding of the world they need to succeed in college, career, and community.

Following is a summary of the reports from Johns Hopkins.

¹ The Johns Hopkins Institute for Education Policy conducts and connects scholarly research to education policy and practice to inform education leaders about best curricular resources and instructional structures and practices.

Introduction

In April 2019, FPS contracted with The Johns Hopkins Institute for Education Policy (the "Institute") to conduct a curriculum audit of Grades 6-12 to provide data and analysis on the core materials and instructional practices in English Language Arts. This work was funded by a grant from the Department of Elementary and Secondary Education (DESE).

The Institute partnered with the [Achievement Network](#) ("ANet") to conduct the review and analysis. An experienced team of reviewers employed the [Instructional Materials Evaluation Tool \(IMET\)](#), a nationally vetted tool aligned to the Common Core Standards, and standards of most states, including Massachusetts. This tool is designed to evaluate how well the curricular materials embody the three key shifts in ELA instruction required by the standards for students to master the standards:

- Text complexity- The curriculum calls for regular practice with complex texts and academic language
- Using evidence- The curriculum requires reading, writing, and speaking grounded in evidence from text, both literary and informational
- Building knowledge- The curriculum builds knowledge through content-rich non-fiction

FPS submitted a representative sample of units of instruction, along with a list of resources, from grades 6-12. ANet, using the IMET tool, conducted a review and analysis of the curriculum materials we submitted. The tool was applied in the following method:

- Non-Negotiables 1-3 (High-quality Text, Evidence-based Discussion and Writing, and Building Knowledge) were evaluated across grade bands 6-12. For the non-negotiables to be considered met, both indicators (text quality and coherent knowledge building) within each non-negotiable needed to be rated as "met"
- If a non-negotiable was met, reviewers further evaluated the alignment criterion (additional metrics that help determine if the materials are aligned to the standards and shifts) associated with that non-negotiable.
- If a non-negotiable was not met, reviewers did not rate the associated alignment criterion as there would not be sufficient evidence to evaluate it.

Based on the trends observed in the curriculum unit samples provided by Cameron, Fuller, Walsh, and Framingham High School (FHS), in August 2019, the Institute provided detailed reports of their findings and high-level recommendations that FPS can leverage to bring about change. These findings are described below in the form of key shifts and coherence analysis.

Key Shifts

Text Complexity

According to [Student Achievement Partners](#)², exposing students to complex texts and supporting them to deeply understand the text- and their complex language, structure and vocabulary - rather than just focusing on the skills of reading and writing, prepares students for post-secondary reading demands.

Findings:

- The high school core texts are high-quality and worthy of students' time and attention; however the majority of supplemental texts fall below the quantitative complexity required for the grade level.
- For grades 6-8, texts vary in quantitative and qualitative complexity. The majority of texts fall below the quantitative complexity required for the grade level; however, just some include qualitative features that are appropriate for the grade level. In general, materials do not include a sufficient mix of informational and literature.
- It does not appear that text analysis features are considered in choosing the middle school level texts (and high school supplemental texts), hindering teachers' ability to strategically plan to enhance student understanding or use the complexity of the high-quality texts.

Using Evidence

According to Student Achievement Partners, when evidence is drawn from sources used in the classroom, all students have equitable access to the information necessary to demonstrate mastery, instead of needing to rely solely on experience, which can vary considerably based on students' backgrounds.

Findings:

- At times, questions and tasks relate to the text but are not fully dependent on or specific to the text.
- The questions do not always stay focused on the text.

² Student Achievement Partners is a nonprofit dedicated to improving student achievement. They serve as an advisor to educators around the country as they align content and instruction to academic standards in literacy and mathematics.

Building Knowledge

According to Student Achievement Partners, reading or listening to a series of texts on the same topic (as opposed to theme) helps build deep understanding of a topic and its related vocabulary, which gives students access to increasingly complex texts.

Findings:

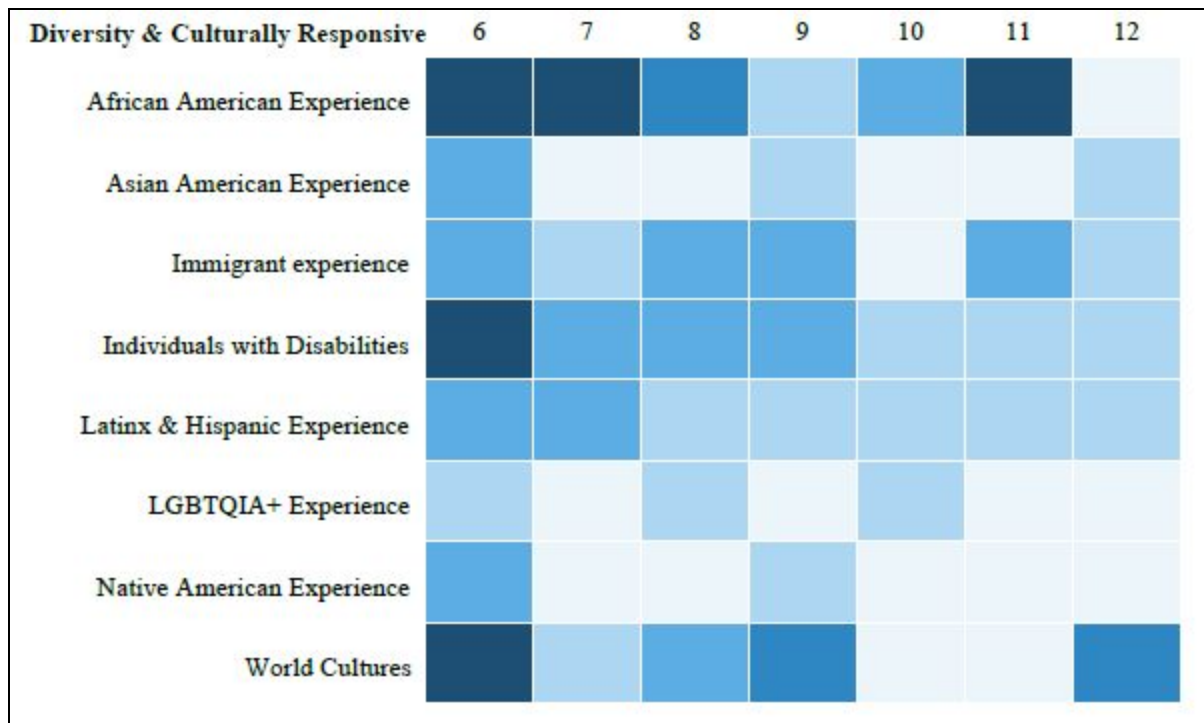
- The materials are often disjointed and are organized by theme instead of by topic.
- There are minimal opportunities for students to engage in a high volume of reading, limiting the extent to which students can build knowledge within and across grade levels.
- The tasks do not readily facilitate student understanding of vocabulary; vocabulary is predominantly assessed in a siloed context, as opposed to being grounded in the text.

The Institute analyzed for the three non-negotiables all materials provided by FPS that included assessments, writing tasks, scoring rubrics, lesson plans, projects/presentations, planning guides/packets, classroom activities/tasks, homework tasks, and other resources. A summary of their analysis is depicted in the chart below.

Grade	Text Complexity	Evidence based Discussions and Writing	Building Knowledge
6	Does not meet	Does not meet	Does not meet/ but approaching
7	Does not meet	Does not meet/ but approaching	Does not meet
8	Does not meet	Does not meet/ but approaching	Does not meet/ but approaching
9	Meets	Does not meet	Does not meet
10	Meets	Does not meet	Does not meet
11	Meets	Does not meet	Does not meet
12	Meets	Does not meet/ but approaching	Does not meet/ but approaching

Knowledge Map

This question is critical: “How much exposure do children receive to each important knowledge-building domain? The Institute measured coverage of the topics listed in the domain in the texts and materials used in FPS curriculum. The chart below illustrates this result for the domain of “Diversity & Culturally Responsive” knowledge, consisting of topics such as African American Experience, etc. The color gets darker as the number of knowledge-building texts increases for the corresponding topics.



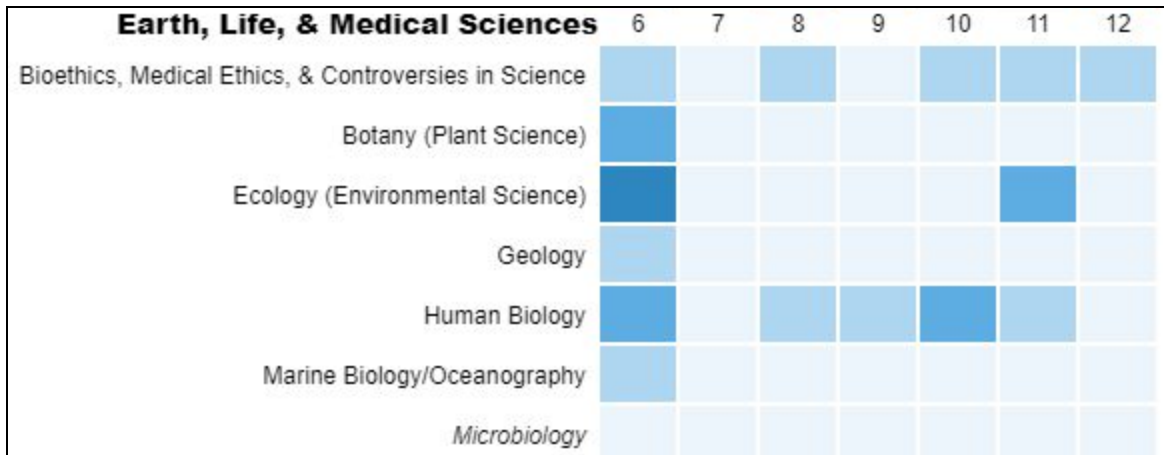
Color scheme key:

- Grades 6, 7, and 11 has strong coverage (8+ texts) of the African American Experience, but grade 9 (1 text) and grade 12 (no texts) do not cover this topic in any significant manner
- Immigrant Experience coverage is moderate (anywhere from 2-7 texts)
- Latinx & Hispanic Experience coverage is weak in grades 6 (2-4 texts) and 7 (2-4 texts); and it is barely covered in grades 8-12 (0-1 texts)

The Institute identified 22 domains and 250 topics within them that are considered to build background knowledge. They then counted the number of texts for each topic within each domain from the District’s curriculum for each grade level. See the [Knowledge Heatmaps](#) for a complete list of topics, domains, and text counts from the District’s curriculum.

An important point to keep in mind is that the 250 topics are listed as proven to build knowledge, but it is not necessary that all the topics need to be of equal priority. We need to rank the 250 topics in priority order and then build the curriculum around these priorities.

For example, in the chart below, you can see that botany and geology have one text each in 6th grade and are not covered after that; microbiology is not covered at all in grades 6-12. Whereas these topics build knowledge, in Framingham we may determine that they are not as important as immigrant experiences and world cultures.

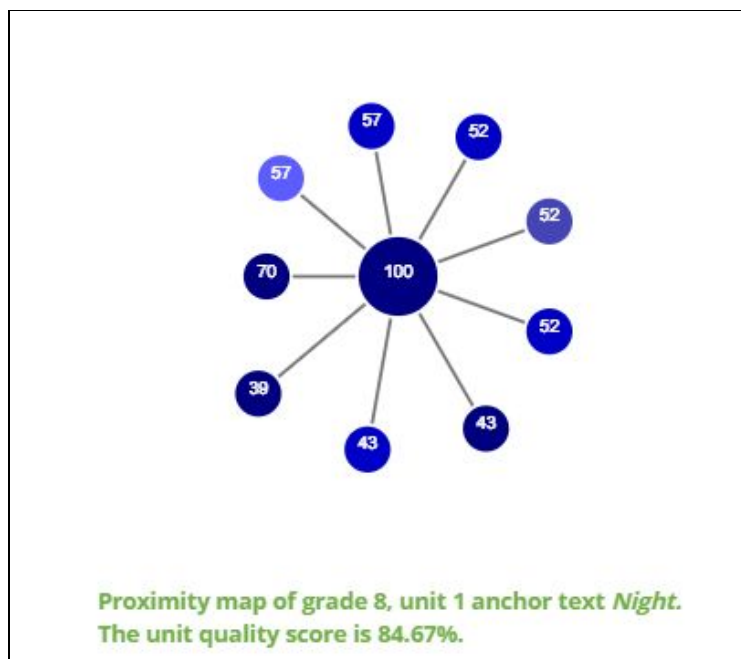


Coherence Analysis

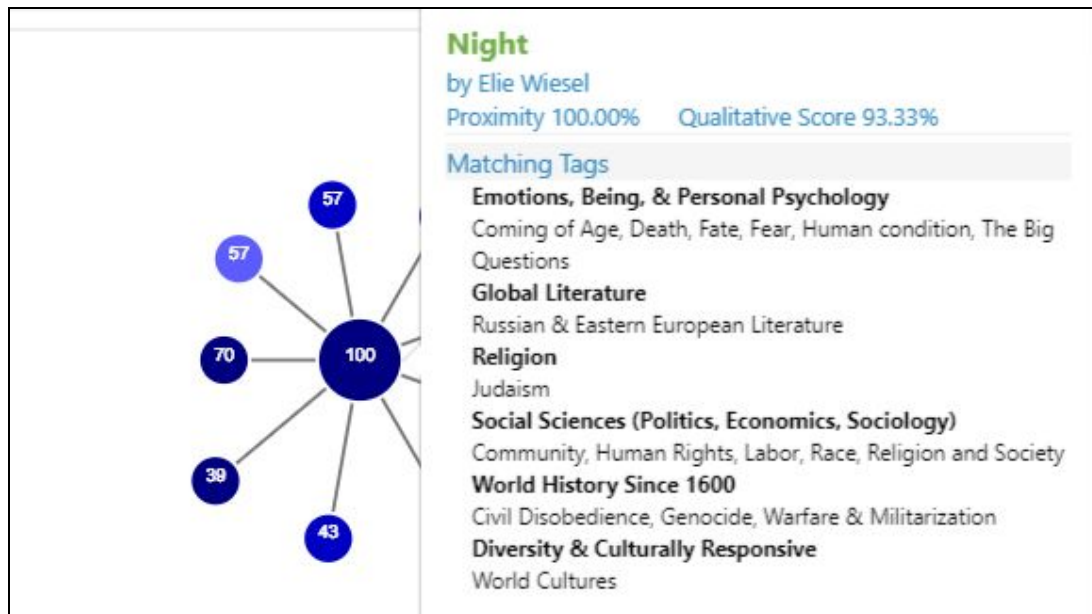
The Knowledge Map analysis above provided a unit level analysis of quality and coherence. The Institute began with the heatmaps, which illustrate coverage by grade bands of background knowledge building domains and topics. Then the Institute built upon that analysis with a quality score based on three different rubrics for analysis of individual text quality: a fiction rubric, a nonfiction rubric, and a literary nonfiction rubric. All three rubrics consider content knowledge and language. Further, the Institute conducted unit coherence analysis-- the extent to which all the texts relate to each other (proximity) and reinforce the knowledge built in the main text.

Minimum threshold score desired for the text to be considered high quality is 70%.

For example: Here is a proximity map of the 8th grade unit for the main (anchor) text *Night*. *Night* is represented in the center with a rating of 100%, since it is 100% aligned in topic with itself. Each surrounding circle represents a supporting text also used within this unit. The score within each of these circles compares that supporting text's proximity to the topics addressed in *Night*. **A proximity score of 70% or higher is considered acceptable.**



Furthermore, *Night* received a quality score of 93.33% and covers topics such as fate, society, religion. Six of the nine supplemental texts build knowledge of Judaism, central to the main text, *Night*.



Here is a complete list of [6-8](#) and [9-12](#) quality scores by grade and text level.

Key Strengths and Weaknesses in the Curriculum

The overall curriculum presents key strengths and weaknesses. These strengths and weaknesses were derived from analyzing individual texts used in each unit, and the essential topics explored in each unit. See the section on *Knowledge Map* for visual representation of the details.

Strengths

The most significant strength of the curriculum is that it exposes students to a variety of texts promoting social-emotional and societal awareness. This focus ensures that

- Students build and reinforce concepts on their own emotions and experiences, as well as those of the greater society.
- Similarly, Diversity & Culturally Responsive topics appear frequently throughout the curriculum.
- Students learn plenty of information about the African American Experience, Individuals with Disabilities, and World Cultures.

Weaknesses

- The most striking weakness is the low quality of the texts found across the Grades 6-8 curriculum. Grade 8 is the only grade level in Middle School to reach above the high-quality threshold (above 70%), with a score of 80.49%. Grade 6, the lowest quality grade, receives a rating of only 68.31%.
- Another concerning aspect of Framingham's curriculum is the inclusion of several very low-quality texts in these middle grades. For example, Aaron Shepard's *Forty Fortunes*, included in the Sixth-Grade curriculum, receives a qualitative score of 46.67%. This text, along with many others, is described as poorly written and difficult to understand. We recommend that the use of this book and some of the others described in our findings below be discontinued.

Recommendations by the Institute

The Institute's key recommendations are that FPS's leadership consider one of two courses of action:

- Adopt a stronger curriculum across 6-8 and supplement specific weaknesses in 9-12, or
- Re-design middle grades so as to remove low-quality texts and replace them with
 - higher-quality texts (middle schools); and ensure
 - proper coverage and quality in key domains such as Physical Sciences, U.S. Geography, World Geography, U.S. History to 1865, and World History to 1600 (middle and high schools).