

ELA & Math Curriculum and Course Leveling Updates and Summary - May 2021

Throughout the 2020-2021 school year, Pierce engaged in a review of its grade 7 and grade 8 English language arts (ELA) and math classes. This review provided an opportunity to look more closely at student achievement and growth data over the past few years, collect insights from educators, and examine practices around challenging students, supporting students when they struggle, and delivering curriculum in ways that meet each student where they are.

Foundational Beliefs & Guiding Principles

As a school community, we are committed to the belief that every student has the potential to grow and opportunity to succeed. This commitment is realized when:

- Every student engages in the highest quality curriculum every day
- Curriculum challenges every student to grow by offering multiple, embedded opportunities for rigorous learning experiences
- Curriculum gives each student varied learning experiences and opportunities to explore their interests

Pierce ELA and Math Curricula

Over the past few years, Pierce has adopted and implemented curricula and resources for both English language arts (*Amplify*) and math (*Illustrative Mathematics*) that are noted for their quality, rigor and adaptability. At the center of each research-based curricular program is the prevalence of **embedded opportunities** to both stretch the learning of students who are ready for more complex content while scaffolding learning experiences for students who may require support or instructional interventions.

- *Amplify* [Family Resources Page](#)
- *Amplify* [Review](#)
- *Illustrative Mathematics* [Curriculum Design Principles](#)
- *Illustrative Mathematics* [Review](#)

Parents and guardians are welcome to contact Ms. Catherine DesRoche (cdesroche@miltonps.org), K-8 literacy director, or Brian Selig (bselig@miltonps.org), K-12 mathematics director, with any inquiries about the ELA or math curriculum.

Key Takeaways

- Advancements in Pierce's ELA and math curricula have positioned the school to meet the needs of a broad range of learners in mixed-level classes.
- Pierce has recently adopted research-based curricula in both ELA and math that incorporate strategies to accommodate learners ready for more in-depth study as well as those in need of support. The school has been and will continue to provide teachers with the professional learning experiences to incorporate these strategies as a regular part of their practice.
- The practice of leveling at Pierce has not impacted students' achievement or growth in a material way. Grouping students by achievement level has not led to improved outcomes for students.
- Pierce will move forward without reinstating the accelerated level classes. To augment students' learning experiences, and attend to the special and specific interests that students may have, Pierce will refine its ELA and math intensive study exploratory classes to offer additional enrichment opportunities in these content areas.

Accelerated Level Curriculum Review: Key Findings

Prior to the 2020-21 school year, Pierce offered “leveled” (titled “accelerated” and “standard”) classes in ELA and math in 7th and 8th grade. Students in 6th grade attended ELA and math as one combined cohort in “unleveled” classes. The school administration, faculty, and Site Council engaged in a review of the accelerated level classes that included three prongs: an analysis of quantitative student assessment data, an analysis of qualitative data collected from teacher focus groups, and an exploration of research studies and articles.

Quantitative Data: Student Assessment Data

- The pattern of achievement (students’ scaled scores) and growth (student growth percentile) was very similar across the grade levels in both the unleveled model in grade 6 and the leveled model in grade 7 and grade 8. Students in the unleveled grade 6 ELA and math classes achieved and grew in the same range as the students in grade 7 and grade 8 where leveling occurred.
- A cohort analysis looking at the achievement of the group of students who attended Pierce for grade 6-8 (2016-2019) revealed that more students scored “meeting expectations” or “exceeding expectations” in the grade 6 unleveled model than did in the grade 7 or grade 8 leveled model for both ELA and math.
- A cohort analysis looking at the achievement of the group of students who attended Pierce for grade 6-7 (2017-2019) revealed that more students scored “meeting expectations” or “exceeding expectations” in the grade 6 unleveled model than did in the grade 7 leveled model for ELA. The same analysis showed that slightly more students scored “meeting expectations” or “exceeding expectations” in the leveled model for grade 7 math than in the unleveled model in grade 6.
- An analysis of the students who were in accelerated level classes showed that students demonstrated no growth or a decline in growth as measured by student growth percentile (SGP).

Qualitative Data: Educator Input

- Teachers commonly expressed skepticism about the practice of leveling.
 - The curriculum was the same for accelerated and standard level classes.
 - Recent curriculum enhancements have created higher expectations for all students’ learning.
 - Leveling can be damaging to students’ identity as learners.
- The newly adopted curriculum for ELA and math embeds opportunities for differentiation for a broad range of learners, interests, and abilities.
- Without the accelerated level classes this school year, teachers are seeing students benefit from high levels of engagement and the diversity of learners in the same classroom.

During the review, research articles and studies related to the practices of leveling in middle school were explored. The review of articles and studies yielded a number of practices and recommendations for schools that included:

- Organizing students in heterogeneous learning groups leads to diversity that can help students learn from each other (National Association of Secondary School Principals)
- An emphasis on providing a rigorous academic curriculum for all students leads to a focus on supporting teachers to implement curriculum that focuses on deeper rather than faster learning
- Detracked, heterogeneous mathematics instruction through early high school that meets students where they are and supports them with the high-quality instruction they need to develop powerful habits of thinking (National Council of Supervisors of Mathematics)
- Development and implementation of enrichment models based on students’ interests and talents in which students with shared interests engage in investigative learning and explore real-life problems.