

Overall High School Mathematics Recommendation: *Core Connections Integrated*

We have concluded that *Core Connections Integrated* best meets the expectations and needs for Denver Public Schools. *Core Connections Integrated* stands out on several fronts: Spanish parity, Common Core Standards alignment and a clear response to the Common Core instructional shifts in mathematics evidenced by the focus and coherence of the lesson and chapter design (both within course and across courses) and a rigorous emphasis on conceptual understanding that precedes the development of procedural understanding, coupled with application embedded within both the conceptual and procedural. Further, the design of the lessons supports teachers in creating joyful, rigorous, and personalized learning opportunities for all students.

Core Connections: Integrated

Committee Findings:

These materials, published by the non-profit CPM Educational Program, received the **highest** interest and recommendation from the committee based on *Core Connections Integrated* key features:

- Strong alignment to the CCSS, both for content and practice standards in a coherent and integrated structure.
- Integration of concepts and topics across courses.
- Integrated sequence that better prepares students for the PSAT/SAT, better supports students developmentally, and eliminates the need for extensive review each year.
- An instructional model that is philosophically grounded in equitable practice and in strong alignment with indicators of the LEAP framework.
- The inclusion of rigorous tasks that are engaging, relevant, and culturally responsive and provide multiple entry points for students.
- Parent resources, checkpoints, and review and preview problems to support and provide additional practice for students.
- Embedded resources for teachers that support teachers in cooperative learning strategies and literacy strategies.

Assessment Overview:

- Individual chapter assessments (English and Spanish)
- Team chapter assessments
- Online assessment bank
- Checkpoints
- Portfolios

Potential Challenges:

- Will need to support a shift in teacher practice through developing an understanding of the pedagogical approach of the curriculum.
- Transition from a traditional sequence to an integrated sequence.

How will the *Core Connections Integrated* curriculum help DPS meet Denver Plan 2020 goals?

- Inclusion of strong instructional supports and strategies for struggling learners, English learners, and advanced learners
- Support for increased rigor of classroom instruction focused on strong implementation of the High School Colorado Academic Mathematics Standards, both content and practice standards
- Inclusion of learning activities that build students' academic and technical language while helping them to develop collaborative skills
- Increased coherence for K-12 mathematics program due to the integrated approach

Who has weighed in on the curriculum?

Secondary Mathematics Partners, Curriculum Specialists, Accountability, Research and Evaluation (ARE) Department, English Language Acquisition (ELA) Department, Gifted and Talented (GT) Department, Educational Technology Department, Student Equity and Opportunity Department, 16 DPS high school teachers, and ISs.

Expert Input: A team of three external experts reviewed the process and findings and provided feedback. All experts commended DPS on the process with the suggestion that this could be a model for other districts. Two of the experts joined on a conference call together with DPS leaders to engage in a conversation around their feedback. All were supportive of the *Core Connections Integrated* recommendation and provided considerations for supporting teachers in implementing the curriculum materials.

2017-2018 Curriculum Review Recommendation: High School Mathematics

Background Information:

DPS shared core values, the Academic Strategic Plan, Common Core shifts, and our moral responsibility to prepare all students for college and career render imperative the need to offer quality, joyful, rigorous and personalized CCSS-aligned curriculum for high school mathematics and middle school social studies beginning in the 2017-18 school year. The out-of-date curriculum resources currently offered by the district in these grade bands are not aligned to the CCSS, thus placing schools in the difficult position of either using these resources to their students' detriment or attempting to independently create CCSS-aligned materials from scratch. This is not a fair ask of our school-based teams and has not resulted in equitable or rigorous outcomes for students. The goals of the Denver 2020 plan demand an immediate response.

Overall Review Process

Request for Proposal: On August 1, 2016, Curriculum and Instruction released informal requests for proposals for high school mathematics and middle school social studies. For this review, we used an informal bidding process to ensure we are able to broaden the supplier pool to include: Charter management organizations, open education resources and traditional publishers for potential adoption in the 2017-2018 academic year.

Selection Criteria: The materials recommended for adoption are based on quality of materials, as determined by nationally normed, customized rubrics created for each content area. These rubrics are based in the IMET rubrics, with customization to fit the needs of students in Denver Public Schools. All review of materials is deeply grounded in these rubrics to ensure objectivity in the review process.

Committee Representation: Our priority in forming a review committee was to have exceptional teachers and staff members that are representative of the diverse needs of all Denver Public Schools. We not only selected exceptional teachers to serve on the review committee, but also targeted departments within DPS central office to collaborate on the review process, including Chief Schools Office, Assessment Research & Evaluation, English Language Acquisition, Curriculum & Instruction, Ed Tech, Gifted & Talented and Student Services.

Review Timeline: The review process began in September and ended in early November. All committee members spent extensive time grounding their review in rubrics and research-based resources to ensure objectivity in the selection process. From there, committee members began reviewing curricular submissions in depth. The first rounds of scoring occurred on 9/20, 9/24, 9/29, 10/8, and 10/18. From there finalists presented on 10/25 and the committee met again for a final vote on 11/1. Below is a synthesis of committee findings for each finalist, with key features, opportunities and considerations described.