

EdReports Publisher Commentary for Core Connections, Courses 1-3

Introduction

CPM Educational Corporation (CPM) celebrated the arrival of CCSSM in June 2010, because these standards finally brought together a balance of content and process standards as envisioned by CPM in 1989. The Directors of CPM believe that the EdReports review team was faithful to its evaluation device and performed their work in a professional manner. We agree with most of their assessment and commentary. We are pleased that *Core Connections, Course 3* meets expectations for all three "gateways" and that *Courses 1* and *2* received generally high marks. We believe that all three courses provide students with the materials necessary to meet the content and practice standards of CCSSM, with excellent teacher resources and professional development to support their implementation.

CPM courses are grounded in three research-based principles: (1) problem based lessons; (2) student discourse in a cooperative team setting; and, (3) mixed, spaced practice with concepts and procedures. (See cpm.org/research-base.) CPM has succeeded in creating courses that focus on fewer standards and teach them well in each course. Indeed, consider that for all three courses for Gateway 2 ("Rigor and Mathematical Practices"), CPM scored 18 of 18 points, with the comment:

Rigor and Mathematical Practices (Gateway 2) are very strong for this series. The instructional materials provide an excellent, seamless balance of conceptual understanding, procedural development, and application. The mathematical practices are embedded into rich problem solving tasks.

Part 1: Major Work Alignment (Gateway 1) for Core Connections, Courses 1 and 2

EdReports review for "Focus and Coherence" (Gateway 1) is inconsistent with CPM's nontraditional course design of *CC 1*-3. CPM course design focuses on major work in core lessons and then revisits topics, in increasing complexity, following the principle of "mastery over time" in subsequent lessons and homework sets. EdReports uses a methodology of counting lessons to determine how much of a course is devoted to "major work" and in their methodology no credit was given for focus on major work to CPM for the spiraled part of a topic's development. CPM maintains that the "major work" of the courses is sufficiently treated, just not easily counted nor fully credited by this review, since the courses are not designed in the traditional manner.

Teacher-authors considered the context in which the grade level standards appear. During the transition years to full CCSSM implementation, students need some brief, contextual work with related standards from previous grades that they may not have seen or mastered. This is not to say that they are retaught, but several lessons in the courses provide a "bridge" to some of the grade level standards. These lessons are not counted as "major work," even though they are intentionally written in preparation for the development of major focus work. Without them students would lack the context and prerequisites to

learn them. The lessons EdReports did not count as major work for this review are indeed geared toward the other standards for the grade level and are necessary to make CPM 100% aligned to the CCSSM.

In *Core Connections, Courses 1-3* the standards deemed "major work," as well as the remainder of the standards, receive sufficient attention by spreading initial work with ideas over subsequent lessons, even when that work may not be obvious to the casual observer.

Part 2: Usability

The 8th grade course scored 32 of 38 points and was deemed "meets expectations". Since the 6th and 7th grade courses follow the same program design and provide the same types of support materials, the reader may assume that had they been reviewed, the result would have been similar, also earning a "meets expectations" rating.

Criteria 3f:

The Directors find the last comment inappropriate because it is speculation. The comprehensive lesson notes support teachers to be professional and prepare for the lessons in a thorough manner. They reflect the experience of thousands of CPM teachers who have taught the course.

Criteria 3g, r & s:

The suggestions in the *Core Connections* Universal Access and Literacy Guidebooks provide 21 pages of suggestions for students of all abilities. They were created by a team of teachers who were experienced with working with diverse learners, especially those with special needs, students working below grade level, and English Language Learners. **The notes for most lessons in the Teacher Editions have lesson-specific suggestions for universal access.**

The eBooks (every student has one) offer the lessons in both English and Spanish, along with a translator for any other language. The 2014 California Mathematics Adoption panels each had an ELL expert as a member. Those reviewers praised the program's support for universal access and specifically ELL students, citing both the use of study teams for support and the printed universal access resources.

Criteria 3h & i:

The teacher resources for the course provide substantial support for teachers understanding the mathematics they will be teaching.

Each teacher using CPM materials attends eight days of professional development. Within these days, mentors "walk them through" the mathematics of the course, making sure the teachers understand the mathematics they will be covering. They also trace the mathematical threads through the courses to see how the mathematics stems from past courses or develops in future courses. No credit is given for this professional development support in this review. (See http://cpm.org/professional-development/.)

When the mathematics is more advanced or if the editors know of areas that might confuse teachers, they provide an additional section in the Teacher Notes titled "Mathematical Background." This section is included in the Teacher Notes in *CC 3* for lessons 1.2.2, 6.2.1, 7.2.3, 7.3.3, 8.2.3, 9.2.3, and 10.1.4.

When the Suggested Lesson Activity and the lesson MathCast are enough to explain the mathematics, editors do not provide this additional section.

The answers in the student lessons are used in tandem with the discussion of each problem in the "Suggested Lesson Activity". This discussion provides sufficient support for teachers to understand the mathematics in the course.

In addition, the Parent Guide provides a "direct instruction" format of the mathematical ideas in each chapter, including solved examples. The 2014 California Mathematics Adoption Review Panel recognized this booklet as the mathematical support resource for teachers.

Criterion 3o:

The last sentence in the reviewer commentary (and the fifth sentence in the 3M-3Q introduction) about insufficient student feedback is inaccurate. Simply stated, the teacher spends the bulk of class time in conversations with students, both in teams and individually. Teachers repeatedly report that by having these conversations, they know what their students understand and what they do not, well before any summative assessment. This format, as discussed by many experts in formative assessment, is the ideal process for providing students necessary feedback. The Directors find that this comment is totally opposite of what happens in the class. Study teams free up the teacher to work with the students who need individual attention.

Criterion 3p.ii:

A substantial part of the eight-day professional development workshops during the implementation year is devoted to using the assessment resources.

Criterion 3u:

The Directors of CPM are concerned about the comments in the second and fourth paragraphs. CPM authors followed research in developing team guidelines, especially for ELL students. The research, particularly that of Elizabeth Cohen and Complex Instruction, supports just the opposite of the reviewers' comment. When students see and hear that other students have struggles, this encourages students to participate when they might not otherwise do so. From Complex Instruction: Equity in the Cooperative Learning Classrooms (Cohen et al): "When students work in small groups, they talk and work together and serve as resources for one another. Students who do not read at grade level or who are not proficient in the language of instruction gain greater access to understanding the assignment and therefore have more opportunities to participate in the group's interactions."

Conclusion

In 2013 *CC 1-3* were evaluated by a trained panel of six teachers, one an ELL specialist, and a university mathematician for the California Mathematics Adoption, using an adaptation of a criteria (with 55 criteria) developed by Jason Zimba. The panel had 10 weeks to study the materials, and arrived at the deliberations virtually unanimous (and with almost no discussion) that the courses are CCSSM-aligned and provide strong student and teacher support. See the report about the California adoption deliberations. (See http://cpm.org/reviews/.)

The Directors of CPM invite you to review *Core Connections, Courses 1-3* for yourself. We believe that you will find that the three courses meet the letter and the spirit of the CCSSM developers! When you read the EdReports review of these courses, keep in mind that Course 1 and Course 2 are fully aligned to the CCSSM. With the math practices fully embedded in the materials, the classroom teacher can choose how to balance the class time on the lessons and standards to meet the needs of her individual class. We invite you to contact us to continue the discussion, cpm@cpm.org.