

## *Everyday Mathematics* Authors Respond to EdReports

EdReports, a not-for-profit organization that reviews instructional materials with respect to the Common Core State Standards, has published a report asserting that *Everyday Mathematics 4* (EM4) does not align with the Common Core State Standards for Mathematics (CCSS-M). In this letter we, the EM4 authors, summarize our response to the EdReports review, which we found to be so appallingly replete with errors and misjudgments about both EM4 and the CCSS-M as to suggest ineptitude. The depth of misinformation in the EdReports review has compelled us to respond.

### **The EM4 Development Process**

When we began the development of EM4, we purposefully carried out a process that allowed us to adhere to both the letter and the spirit of the CCSS-M, while still building on the research-based strategies that have been foundational to the success of *Everyday Mathematics* for decades. The early stages of our work included months of careful analysis of the Common Core content and practice standards; in-depth research into key aspects of mathematics content and learning; and consultation with nationally recognized experts in mathematics education, including the Common Core writers themselves. As we moved into the writing phase, we attended meticulously to both the CCSS-M and the Publishers' Criteria, a document that provides stringent guidelines for developing CCSS-M programs. Once lessons were drafted, many were extensively tested in classrooms and revised, some of these undergoing multiple rounds of field testing and revision. This process is not the only one capable of producing a CCSS-M-aligned curriculum, but we believe it led to a high-quality product that is fully grounded in both the CCSS-M and the latest research on mathematics teaching and learning.

### **The EdReports Review Process**

EdReports claims that the CCSS-M and the Publishers' Criteria formed the basis of its review process, so given the care we took to adhere to the spirit and letter of those documents, we were initially shocked at the conclusions in the EdReports review. When we began looking at the specifics, our shock turned to dismay and anger. We found the "evidence" provided by reviewers to be largely based upon misconceptions of EM4, misinterpretations of the CCSS-M, outright errors, and what sometimes appear to be fabrications. When our publisher, McGraw Hill Education, pointed out a sampling of the problems, EdReports corrected some of the review's most egregious errors, but declined to substantively revise their conclusion.

This refusal to revise conclusions that were based on clearly erroneous findings stems from a flaw in the EdReports process, which is that feedback from curriculum developers is considered by the original reviewers, who have a conflict of interest, rather than an independent group. It is also problematic that the reviewers are anonymous. Anyone willing to claim that 132 exposures over 14 lessons are insufficient to meet standard 5.NBT.7 should also be willing to be identified by name. (See the original review for Grade 5, Indicator 1e. This may be an example of an egregious misjudgment that was removed from the final EdReports review, which we have not seen, without any corresponding change being made in the score. We have posted the original EdReports review, which includes this claim at <http://cemse.uchicago.edu/edreports>.)

The EdReports process does not allow for genuine dialogue between curriculum developers and EdReports, with honest feedback and modification when warranted. Comments from developers are allowed only during a two-week window just prior to the release of the review, leaving little time for careful analysis and needed revisions. The defense offered by EdReports, that the review is an iterative process and can be updated in the future, does a disservice to both developers and educators. What reason can there be for releasing a report that is not correctly done?

Finally, when we compare the EM4 reviews with reviews for the program that EdReports recommends most highly, it is clear that the same criteria were not applied to all programs across the board. The clear lack of consistency in ratings across programs is evidence of a double standard that undermines the credibility of the EdReports reviews for all programs.

Legitimate authority is based on competence and impartiality. The EdReports review process lacks both.

### **Some Categories of Specifics**

Below we sketch the major categories of deficiencies we found with the EdReports review of EM4.

- *Mistakes, misunderstandings, and misinterpretations of the CCSS-M.* The EdReports reviews contain a startling number of errors related to the CCSS-M content standards. Sometimes the reviewers fail to understand the mathematics in the CCSS-M; sometimes they misinterpret what the CCSS-M requires of students; sometimes they are mistaken about what mathematical vocabulary is correct.

Without a proper understanding of CCSS-M content, it is not possible for reviewers to carry out accurate reviews.

- *Standards for Mathematical Practice.* As we wrote EM4, we carefully analyzed the CCSS-M Standards for Mathematical Practice and operationalized them for the elementary grades. Many of the reviewers' comments reflect incomplete understandings of the practice standards beyond the "headlines," and they fail to follow the EdReports Evidence Guidelines in judging how EM4 treats the practices. The reviews also demonstrate a failure to understand how extensively the standards are treated in EM4.
- *The spiral.* EM4's spiral design is based on what may be the most established finding in the learning sciences, which is that spacing learning over time is more effective than "massing" learning, which is the usual approach. (See [here](#) for a brief summary of research supporting EM's spiral approach.) The EdReports reviewers show little awareness either of the value of spacing or about how a spaced approach might manifest itself in a spiral curriculum. As a result, they often overlooked or discounted key components of EM4 that are central to the program's spiraling design. Clearly, an "expert" review should reflect a deep understanding of curriculum-design principles, certainly including principles as well established in the learning sciences as spacing. (A call to "space learning over time" is Recommendation 1 in the IES Practice Guide on [Organizing Instruction and Study to Improve Student Learning](#)).
- *Mistakes, misunderstandings, and misinterpretations of EM4—beyond the spiral.* The EdReports reviews for all grades of EM4 are replete with errors and misunderstandings. Some comments appear to have been simply cut and pasted across grades, even where they do not apply. Other comments reflect content from earlier editions of *Everyday Mathematics* that is not in EM4. Many are based on miscounts of how often standards are addressed or misreadings of the clear intent of the program. Taken as a whole, these errors invalidate the conclusions in the EdReports review.
- *Flaws in the Evidence Guides.* The EdReports Evidence Guides include a number of criteria that invite subjectivity and bias. For example, Indicators 1c, 2a, 2b, 2c, 2g.i, and 2g.ii all charge reviewers to look for "missed opportunities"—and, in fact, the reviews of EM4 note "missed opportunities" for all these indicators. But the real issue should not be whether any opportunities are "missed," but whether good opportunities are called out with sufficient frequency.
- *Lack of competence and impartiality.* The EdReports Evidence Guides, imperfect as they are, were frequently misapplied. Extraneous criteria, inaccuracies, and inconsistencies abound. It often seems as though the reviewers had their conclusions before they started, and their work was largely a search for evidence

to support what they already believed. In addition, our analysis of how the EdReports review criteria were applied to the program that received the highest rating suggests that those criteria could not possibly have been applied impartially across programs.

- In the near future, as possible, we will provide a more complete accounting of problems with the review at <http://cemse.uchicago.edu/edreports>. We encourage interested individuals to check for information there before deciding whether to give credence to conclusions about EM4 or any other program EdReports has reviewed.

## Next Steps

Given the complexity involved in reviewing instructional materials, we had hopes that EdReports would provide a useful service to districts, schools, and teachers. Unfortunately, there is no evidence in its reviews to date that EdReports has come anywhere close to fulfilling expectations. The flawed review of EM4 is but one instance of the damage EdReports is doing to the Common Core movement and to mathematics education in our country. Although the authors of the Common Core State Standards have insisted that CCSS do not dictate a single right way for teachers to teach the Standards, EdReports is promoting a very narrow view of the Common Core and is attempting to constrict the curricular choices available to schools. As a result, EdReports is actually steering schools away from high-quality CCSS-M-aligned programs that they might otherwise consider. This is not good for *Everyday Mathematics* and other research-based programs. It is not good for the Common Core movement. And it is not good for schools, teachers, and children.

EdReports has failed. Since schools and districts still need to make decisions about instructional materials, they must look elsewhere for useful guidance. We are working with our professional organizations, including the National Council of Teachers of Mathematics and the National Council of Supervisors of Mathematics, to find better approaches. As better options become available, we will point to them from <http://cemse.uchicago.edu/edreports>.

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