

Background Information for the Edreports review of The Utah Middle School Math Project, Grade 6

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First, we want to thank you and your team for a comprehensive, detailed and accurate report on our sixth-grade materials. We are very pleased that we have met expectations on the majority of the concerns, and accept as accurate the criticism on those concerns on which we have been found to not meet expectations. We want to take this opportunity to provide our thinking and that of our funders that is background for the perceived failings.

The goal of the project was to create a free rigorous core aligned text for teachers. This was intended to complement texts for grades 7 and 8, previously written by our group and funded by the state of Utah. As you look through the text, note that we explain the scaffolding of content and learning activities; highlight what we believed might be teaching challenges or concepts students may struggle to learn; and deliver the materials in a way teachers can mold to best meet the needs of their students. We believe in, and advocate for, the professionalism of teachers.

The criticisms fall under these headings: we failed to

1. provide research findings to support our methods;
2. integrate the use of specific technology into our materials;
3. provide sufficient material to assess performance and progress of students;
4. provide material to mitigate student shortfalls.

These criticisms are accurate, and we wish to explain why, in our view and that of our funders, we accept this criticism, but feel it does not detract from the value of our materials.

The view of the funders of these materials. The RFP from the state of Utah, to which we responded, explained very well what it is that the State wanted. This was: rigor and accuracy, attention to the standards of mathematical practices, broad enough to meet the needs of student who will leave school as soon as they can, to those who will go on to STEM professions, either immediately, or through higher education.

The view of the writing team. The writing team consists of three master secondary teachers of mathematics (one on the faculty at the University of Utah) and a professor of mathematics at the University of Utah. Our conception of the need we were trying to meet is this: teaching is done by teachers in the classroom, and is best performed with access to usable and versatile material. It is the teacher who understands that teaching is measured by student learning, and that comes from the teacher's abilities to use the available materials. NOT from the teacher's ability to follow instruction from texts.

Now, let us turn to the specific criticisms:

1. *provide research findings to support our methods.* We would have liked to have a math educational researcher on our team, but our priority was on the in-class experience of our master teachers, whose excellence is based on current best-practices research prior to, as well as during, their careers as teachers. Our materials may not have references from the research on which the best-practices rely, but they are research based best practices none the less.
2. *integrate the use of specific technology into our materials.* We hope that you do not mean prepared substitute material, such as many *Kahn Academy* like videos on *Youtube*. We rejected inclusion of these materials on principle: our goal is to provide usable materials for the teachers, not to substitute for them. The teachers who want to use these materials will, we feel, make the appropriate choices. However, if you mean resources such as *Geogebra* and *Maple* and so forth, we agree that these are useful and important. Had we the funding for the expertise, we would have gone that way. We even contacted the owners of *Geogebra* and they expressed interest in our project.
3. *provide sufficient material to assess performance and progress of students.* The RFP did not stress the necessity for assessment materials, and in fact, once we had the contract we were told that this need was being met in other ways. We accept this criticism's validity.
4. *provide material to mitigate student shortfalls.* We accept this criticism and share it. To do this right, we would need another colleague whose professional interest is in this area. In fact, we do have such colleagues in the College of Education and our work has been informed informally by them. But the funding for the project was insufficient to have brought such colleagues into our working team. In particular, in Salt Lake City we have a large immigrant population, of people who come from particularly stressed areas, and whose children have had little or no formal education, and they speak the language of their tribe, amounting to over 35 different languages in use in homes in the city. The view in our state is that this is a problem to be solved locally, and indeed the most impacted districts have mounted specific programs to address these issues.