Over the last five years, the principals and teachers in the Lincoln School district focused their attention and resources on improving reading instruction. The result of those efforts was an increase in student reading scores. Given this success, the administrative personnel at the district level now wish to do the same for their students’ mathematics performance.
6. To begin, the district superintendent hires a consultant.

7. To observe and to informally interview a representative sample of kindergarten through twelfth-grade teachers.

8. The consultant collects information about the practices and activities the teachers implement during mathematics instruction.

9. She also reviews the current curricula for each grade level.

10. Finally, the consultant issues a report of her findings.
The good news is that the curriculum aligns with their state’s standards. However, many school personnel are not using all of the included materials or are not able to cover all the skills outlined in the scope and sequence of each grade level’s curriculum. Additionally, some school personnel are not teaching the skills correctly or aligning their instruction with the curriculum materials.
More, most are emphasizing teaching computational skills over real-world problem-solving skills. Because of this, the students do not develop a strong understanding of mathematics concepts. They also struggle to make connections between them. As a result, the consultant has concluded that a number of issues have arisen, for instance: Upper-level teachers must reteach topics covered in the earlier grades.
A majority of students across grade levels perform poorly on high-stakes standardized tests.

A large number of students have difficulty meeting high school graduation requirements related to mathematics.

A disproportionate number of students have to take remedial mathematics courses in college.

To address these issues, the consultant recommends that the teachers implement high-quality mathematics instruction. By doing so, school personnel should see an improvement in student performance.
The district personnel reply that—as far as they knew—they were already using high-quality mathematics instruction and had been all along.

Given this revelation, they are unsure of what they need to do differently.

Here is your Challenge:

What is high-quality mathematics instruction and why is it important?

What evidence-based mathematics instructional practices can teachers employ?