

SAD #007, comprised of six elementary schools, a middle school, and a high school, had plenty going on. They were implementing a new middle school math curriculum. They were one of nine sites participating in a state Math Science Partnership project. They were providing all of their K-5 teachers with professional development to support the Investigations program for mathematics. They were preparing for a DOE site visit and worrying about AYP and NCLB. SAD #007, like most districts in Maine, had plenty going on.

SAD #007 teachers completed the Surveys of Enacted Curriculum in the spring of 2004. Since then, administrators had come and gone and very little had been done with the data. The original purpose for participating had been lost and there was plenty of other work to do.

When a Maine Mathematics and Science Alliance staff member offered to provide some technical assistance, helping the district review and analyze their SEC data. They said, "No thank you. We have plenty to do and that was over a year ago and no one even remembers why we did it." After several more approaches the district's curriculum coordinator agreed to convene a group of math committee members – administrators, teachers, and the math specialist.

The group spent time identifying "issues" that they wanted to investigate. They wanted to look at mathematics content, especially algebraic thinking/patterns & functions and reasoning. They were interested in the differences in student performance from one school to another. They were curious about the use of cooperative grouping and other instructional practices.

The group spent hours looking at the charts and tables that SEC produced. They identified some points of interest. There seemed to be quite a bit of variety in teacher practice and in teacher beliefs. For example,

- All elementary schools do *some* pair and small group work and it varies both across and within schools. (range 0% - 50% or more of instructional time)
- Variation in having students demonstrating/presenting with a range including 0% at all schools. (range of 0% - 35% of instructional time)
- Students explaining reasoning shows great variation across and within schools. (range 0% - 50% or more)
- Students solving non-routine problems shows great variation across and within schools, including "none". (range 0% - 35%)
- Students completing proofs/demonstrating reasoning varies widely from within and across schools. (range 0% - 35%)

- Range in opinion about the importance of learning basic math facts before problem solving across and within schools. (range: 0-4, strongly disagree to strongly agree)

The group agreed that the most significant feature of their findings was the great variety from teacher to teacher and school to school. This insight informed their next steps. They made a plan to

Share: Findings of CONSISTENCY and VARIATION in SAD #007 Data
Foster Discussion about CONSISTENCY and COHERENCE with the following groups

- Professional Development Committee
- Professional Development Providers/Consultants
- HS and MS Math Departments
- MATHS Maine Leadership Committee
- Math Curriculum Committee
- Administrators

They wanted to provide information to as many interested parties as possible. Their purpose was discussion and clarification of the data in order to build consensus and work toward more consistency and coherence in their mathematics program.

The review group agreed that the best thing about the data and about their process was that “There was no right or wrong and no good teachers/bad teachers”. The data gave them the chance to talk together about the variation in practice in order to decide together about where to go next.