

Seeing Math, Video Case Study-based Professional Development -- A Progress Report

Summary: Now in the project's second year, Seeing Math (funded through the ED Ready to Teach program) has developed a set of 9 video case studies delivered over the Internet, that assist elementary math teachers to improve their skills in teaching difficult-to-achieve NCTM standards. Seeing Math has been used by four diverse school districts as part of the project pilot study and research. We will discuss the different uses of video case studies in teacher professional development programs in our study.

The goal of the Seeing Math program is to provide a web-based professional development course for teachers using video case studies. By presenting a window into the practice of selected teachers, we provide a starting point for the user to begin a larger exploration of his/her own practice. The profiled classroom is not presented either for critique or as recipe for emulation. Rather, it is meant to be a basis for other teachers to reflect on their own practice. By following the lessons and the decision-making process the case teacher makes, the users are privy to the unique experience the teacher and students have. These are windows onto another professional's practice. Just as these teachers make decisions about their practice, we want our participants to use these cases as a way to inform their own practice.

The Seeing Math cases are not created to showcase flawless curriculum taught by brilliantly trained mathematicians to students whose only desire is to maximize their mathematics potential. Rather, the teachers who have invited us into their classrooms are real teachers, working with real students.

These teachers are courageous, for they have offered their classrooms to use as case studies. Many are trying curricula that are new to them and are still developing the best way to use it. By presenting the problems these teachers face, the mistakes they make and the solutions that grow from imperfect situations, Seeing Math provides a rich source of insight that all teachers can use to develop their own practice.

Each of the cases we present explores the way individual teachers meet the challenge of implementing standards. The surrounding course materials provide guidance and support for considering the cases in the light of the standards set forth by the National Council of Teachers of Mathematics (NCTM) in Principles and Standards for School Mathematics 2000.

The Seeing Math project in its initial phase (one to three years) also seeks to demonstrate the feasibility of delivering excellent teaching in mathematics through sustained, affordable professional development.

Four very different school districts have agreed to participate in the Seeing Math research project, incorporating the Seeing Math program into their teacher professional development strategy. A math educator, usually the school district Math Coordinator, assumes the role of onsite facilitator and guides the participating elementary and middle school teachers. Each site has implemented the Seeing Math materials in different ways.

The stories of these sites provide some guidance for the use of video case studies as part of the teacher training/teacher professional development process.