

# Teacher Reflections

Teacher: Mrs. Yonina Lerner

I have been teaching fifth grade for the past 6 years. The principal wanted to integrate a unit focusing on inventors and inventions into the fifth grade curriculum. It seemed natural to add it to our science curriculum. As the students learned about the scientific method in the laboratory, we thought of ways to show them how scientists and inventors use this method to generate new ideas and discoveries. In addition, to add a literacy component, the students researched specific inventors and read about their work. We ended the year with an “Invention Convention.” Here, students displayed inventions of their own creation, using all that they had learned.

In truth, while the program was successful, I was never fully satisfied with the result. I felt that there was more our students could derive from such a curriculum. For the following three years, we tweaked the various lessons, making them fuller and richer, but I was still unsatisfied.

At that point, my mentor and coach, Mrs. Karen Simon, encouraged me to join her in a year-long program studying Design Thinking at the Jewish Education Project (JEP). I was fascinated by their focus on problem solving as the key to innovation and discovery. I realized then that problem solving was exactly what inventors do and what children and adults face daily! I was quickly convinced that Design Thinking should be incorporated into our Science/Literacy curriculum.

The following year, instead of the annual “Invention Convention” we implemented a new curriculum which is presented in this entry. The difference both in the students’ engagement and their product was dramatic. They were

encouraged, perhaps even “forced” to think more deeply about their chosen problems and about the several viewpoints that they suggested. They now had the language to describe the problem solving process.

Further, as a direct result of Design Thinking and its protocols, they learned both to seek out unfulfilled needs that demanded resolution and to be empathetic to the viewpoints of those who would be served. We may naturally jump to the quickest or simplest solutions, but those may not be the best, most efficient, or productive.

Finally, and perhaps most importantly, students learned that failure is an integral part of success. It should happen often.