

The Cathedral Project

Reflection by Erin Peppel

I loved teaching and participating in this lesson plan. It was a wonderful break from our regular classroom activities in the midst of our Central New York winter blahs. We took an entire week and devoted all of our learning time to this project.

We began with a field trip to St. Mary's Church across the street from our school. It is a beautiful church with great history, art, and (now we know) filled with mathematics. Both of the goals of this project were to make mathematics "real" to my students and to make connections to other subject areas in school. Both of these goals were accomplished.

On the day of our field trip, we "lucked out". The weather was beautiful, and it was great to be outside for the walk to church or other places. The students worked well within their groups, and the parent's comments on the performance sheets confirmed things I had known and felt about my students' work, capabilities, and group relationships. They also allowed me to see new "sides" of some of my students. Put a clipboard in the hands of a second grader, and they become so much more confident and powerful!

Back in the classroom the next day, the kids were anxious to put together the information they had collected and come up with ways to solve their problems.

The next time I do this learning experience, I will ask a parent or two to help us out with this part of the project. I felt very stretched between six groups of students, who were all working on different tasks. Group 1 had a more difficult mathematics problem for this grade level. They accomplished the goal and answered the problem, but more guidance from me may have made the task more worthwhile for all involved. Again, this is a common problem that should be taken into account in any classroom with a large number of students.

Originally, we had planned to do creative story writing as part of this project. However, I modified these plans, when one of the students had the idea to develop a newspaper around the cathedral project. We had just read the book **Deadline! From News to Newspaper** by Gail Gibbons. Thus, not only did we write stories about being trapped in the cathedral overnight, we developed a newspaper about the project as well.

We have a volunteer who works with my students on the computers twice a week. He devoted the week to Internet research on church history. With this information, the students were able to confirm, change, or enhance some of their problem solving strategies.

The presentations were great. Each student in each group participated. Some were leaders. Some were followers. Some were quieter than others. Some took over the presentations at times, but all students got involved at some level. I noticed that those who were not as confident to share in other situations were more comfortable this day. There were probably many reasons for this comfort. One reason is the day we presented happened to be "Pajama Day" at our school. We were all comfy cozy in our PJs and gathered in sleeping bags for the presentations. Another reason is that kids who have not been as successful at paper and pencil tasks felt very successful about the feats they had accomplished this week. They were proud to show off their graphs, diagrams, charts, and tools used to solve their group's problems. The NCTM Standards tell us that "knowing mathematics is doing mathematics." That is what occurred here. The activities grew out of problem-solving situations and the learning occurred through active involvement in mathematics.

Understanding the need for students to be able to communicate mathematically, I was very pleased with the different ways in which this occurred. They reflected their thoughts and feelings orally and in journals. These reflections indicated a new awareness of mathematical topics and their enjoyment of the learning experience. On a subsequent visit to the church, my students were pointing to the windows, discussing the pews and the number of people in the church, and noticing shapes and objects. They were able to make mathematical connections in their own world. This was exciting!