



REFLECTION OF PROJECT ZERO PRESENTATION

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INTRODUCTION

I teach 7th grade pre-algebra and 8th grade algebra at Brandeis Hillel Day School. Last year was my first year, and in that year, I felt that the algebra curriculum had purpose to it, because one concept so clearly built onto the next. In 7th grade, though, I frequently found myself thinking, “Why am teaching this concept to the students?”

I decided that re-stating the chapter objectives for the 7th grade textbook could help me to focus in on why I was teaching the concepts that I was. This is how I came upon my project idea. I decided to turn the many broad chapter objectives into concrete and more precise “understanding goals (UG’s).” I made these UG’s public to the students, and hung them on the front board throughout the entirety of the chapter. This forced myself to remember they were there and to refer back to them often. I tried to question the students about these UG’s to get an idea of what they were gaining from having them there, and also would ask extra credit questions on tests pertaining to these UG’s.

It took time to learn how to write effective understanding goals, but I became confident in my ability to re-write the chapter objectives. I feel like my project has been a success for both myself and for my 7th graders.

Project Zero Presentation Notes April 24, 2004

Constructing Understanding Goals for Topics of Study: Helping Students and Teacher Focus in on WHAT and WHY we are Learning the Concepts we are

UNDERSTANDING GOAL for presentation:

By the end of my presentation, teachers will understand how to better construct understanding goals in order to focus in on what and why they are teaching the concepts they are.

Outline:

Share my understanding goal for the presentation with the teachers.

Explain what I chose to do for my project, what didn’t feel right to me about CPM objectives, and my teaching of CPM (felt scattered, no real purpose, one thing didn’t built on to the next like 8th grade algebra).

Tell how I wanted to change so teaching/concepts were more meaningful to me and to the students, RE-WRITE chapter objectives/understanding goals!

Go through chapters one by one, share old objectives and my “thinking” page, most importantly share questions I asked myself and questions Ann asked of me in writing my understanding goals.

Explain how my teaching feels different because of doing this project and zeroing in on WHY I am teaching what I am

Look towards next year, how can I continue this positive change?

Continue to re-work 7th grade UG’s, or move on to 8th grade UG’s, or GT’s, or Performances of Understanding for my UG’s, etc....

In conclusion, translate to own teaching, whole idea of re-connecting to curriculum for yourself and for your students

Questions to generate discussion:

How can you relate this to your own teaching?

Are there parts of your curriculum that you are not happy with? Doesn’t flow to you?

How can re-writing objectives give more meaning to what you teach?

REFLECTION OF PRESENTATION

I found it very refreshing to have the opportunity to speak aloud about the project zero ideas that I have been working with this year. Having to present this information held me accountable for it, and knowing that I was going to share this information with others caused me to think about what I had learned this year was most useful. Hearing other PZ fellows’ experiences was wonderful! We have all had similar successes and struggles. I look forward to deciding where I will turn my project zero focus to next year. I hope to continue working with these ideas even though I might not be a fellow again. I really think these are things so important to always think about when teaching!

7th GRADE PRE-ALGEBRA CHAPTER 3 Generative topic:

PROBABILITY Understanding Goals: Students will: develop an understanding for the definition of mathematical probability. create probability rectangles as a way to organize information and to help calculate the probability of independent events. investigate the relationship between fractions, decimals, and percents. 7th GRADE PRE-ALGEBRA CHAPTER 4 Generative topic:

EXPRESSIONS AND EQUATIONS Understanding Goals:

Students will: learn to perform important operations in understanding expressions and equations discover an algebraic way to solve realistic word problems

CHAPTER 8 TOPIC: Pythagorean Theorem and Surface Area and Volume of 3-D figures

UNDERSTANDING GOALS:

Students will: discover relationships that exist in right triangles and solve realistic word problems using these relationships. Transfer thinking to 3-D (extend knowledge of 2-D figures to 3-D).

CHAPTER 9

Topic of study: SLOPES AND RATES OF CHANGE Understanding Goal:

Students will develop a further understanding of linear equations by studying the concept of slope and rates of change. Knowledge of this concept will be used to analyze, interpret, and predict data involving realistic word problems.

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