

Using Data to Drive Instruction
A Project for the Secondary Math Departments of Jeffco Schools
2003-2004
The Lesson Template

School: West Jeff Middle School

Lesson Title: "The Cube Problem" and "The Painted Cube"

Teachers/Participants: *What teachers in the department are participating?*

Cynda Hunt and Patti MacLennan

Standards/Benchmarks/Performance Expectations/Framework Statements Addressed:
What topics from the curriculum are being addressed?

Topics being addressed are: algebraic thinking, communicating reasoning clearly and directly, both verbally and in written form, applying vocabulary correctly, using models to find patterns, four faces of a function, group investigation, moving from patterns to rules, using technology appropriately, problem solving, making and testing conjectures about geometric shapes and their properties, exploring volume, linear and non-linear functions, and proving arguments.

How do you connect several topics into one lesson?

We are continually looking for problems which require multiple strategies, incorporate investigation with writing about reasoning and arguments, and lead to discovery through discourse. Such problems are naturally rich in opportunities to "cover a lot of territory" by integrating concepts and topics.

How does the teacher help students make connections between different parts of the curriculum?

Helping students to make connections can be accomplished through good questioning techniques: "where have you ever seen this before, how does this relate to...", or what math concepts do you use to solve the problem? Discussing similar problems and familiar vocabulary applied to the aspects of the problem can be useful to making connections.

Assessment Data Driving This Lesson:
What assessment is the source of this data?

The 2002-03 CSAP Test was the source of our data.

Lesson created by West Jeff Middle School Math Department—Spring 2004