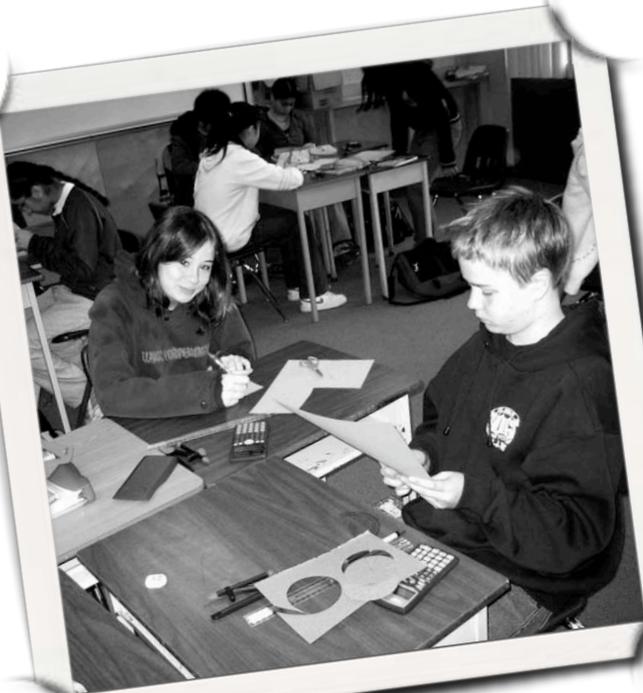


Differentiated Instruction

Meeting the Needs of All Learners in the Mathematics Classroom



But isn't it different in math class?

Traditionally, differentiating instruction in the math classroom meant relegating children who did not grasp concepts to endless drills of basic facts. The belief was that, until these students mastered basic skills, they could not participate in rich, deep, and meaningful mathematical tasks.

Rich mathematics is accessible to all members of our class. We can accomplish this by structuring our math lessons around tasks that help students make sense of math instead of drills designed to have them practice skills and procedures.

"Then, by allowing students to interact with and struggle with the mathematics using their ideas and their strategies - a student centered approach - the mathematics they learn will be integrated with their ideas; it will make sense to them, be understood, and be enjoyed."

Robert Sidley
Program Consultant - Mathematics and Science
Burnaby School District #41
604 664 8217
Rob.Sidley@sd41.bc.ca

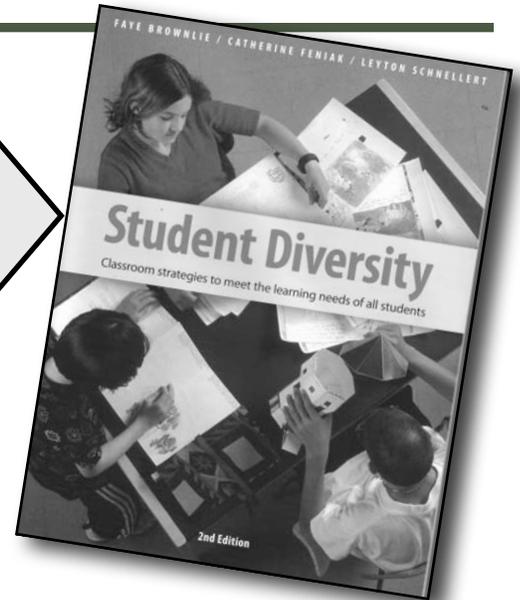
What Differentiated Instruction is . . . and isn't

When we talk about differentiating instruction, many teachers think that we are talking about creating individualized programs within our classrooms. While this may be ideal, it is not feasible. Differentiated instruction is not about developing 30 different lesson plans. It is about implementing patterns of instruction that are likely to serve multiple needs.

The lesson should be structured to provide multiple access points through which students can engage with the content. This allows students to connect from where they are on the continuum.

John Van de Walle and LouAnn Lovin, in
Teaching Student-Centered Mathematics
2006

Make sure to read chapter 11 in Student Diversity. It was contributed by Carole Saundry and gives a great example of what teaching to diversity in the math classroom looks like.



CHECK IT OUT!

This website contains a document that connects differentiated instruction with Universal Design for Learning. http://www.k8accesscenter.org/training_resources/udl/diffinstruction.asp

This website is a cool website by ABC Canada. Great literacy connections: http://www.abc-canada.org/math_literacy/

Finally, check out the NCTM's suggestions for helping families understand how to support their kids in math: <http://www.nctm.org/resources/families.aspx>

Why Teaching Math Through Problem Solving Supports Diversity

- Helps students make their own sense out to concepts and procedures. This helps personalize the learning process.
- Provides multiple entry points for students at various levels of mathematical development.
- Makes math more relevant by connecting it to students own experiences with the real world
- Provides opportunities for adaptation within the context of the problem.
- Integrating concepts, procedures, and problem solving saves time. This time can be used for remediation and enrichment.

“IF LEARNING DOESN’T HAPPEN, THERE HAS BEEN NO TEACHING. THE ACTIONS OF LEARNING AND TEACHING ARE INSEPARABLE.”

FOSNOT & DOLK IN “YOUNG MATHEMATICIANS AT WORK”

