

Creating Differentiated Math Lessons for Elementary Education

(Sloan Course – 15 hours)

Instructor:

Jude Carlini

jcarlini@stny.rr.com

Dates:

TBD

Course Description:

Have you noticed that classrooms today have become more diverse? As professionals we are challenged everyday to create quality and diverse lessons for each student we teach.

This course will provide educators exciting, practical, and immediately applicable ideas for differentiating math instruction in the elementary classroom. Participants will learn the process of math differentiation beginning with lesson planning, through implementation of a wide variety of research-proven strategies. Tiered assignments, compacting, interest centers, flexible grouping, choice boards, and learning contracts are some of the strategies that will be explored through-out this course. Plus, the participants will learn how to incorporate time-saving management tips for the differentiated classroom.

Course Outcomes:

Educators will be able to:

Create math lessons and assessments that measure conceptual understanding, procedural fluency, and problem solving.

Understand the connection between the New York State Math Standards and math differentiation.

Understand that the process and content strands define what students should know and be able to do as a result of their involvement in mathematics.

Learn different implementation methods and learn the role of on-going assessment.

Implement a variety of research-based instructional strategies that support differentiation.

Create differentiated math lessons using tiered assignments, compacting, interest centers and interest groups, learning contracts, and choice boards.

Discuss math differentiation with other participants.

NYS Standards:

MST 3

Five Content Strands: Number Sense and Operation, Algebra, Geometry, Measurement, Statistics and Probability

Five Process Strands: Problem Solving, Reasoning and Proof, Communication, Connections, and Representation

ELA

1,2,3,4

Information Systems – Standard 2

Recommendation of in-service credit:

One in-service credit will be recommended by the instructor on the satisfactory completion of all assignments and requirements.

Participation with all assignments is essential for success in this course.

There will be one required synchronous activity at the end of the course. We will meet in Elluminate. There will be two meeting times to choose from. One will be Wednesday night from 7:00-9:00 or Saturday morning from 10:00-11:00.

All materials taken from other sources must have the correct citations.

Prerequisite Skills/Requirements:

Participants should be able to access the Internet, open and download attachments, and send and receive email.

Participants should know how to use Microsoft Word and Microsoft Power Point.

A high speed connection to the Internet is recommended but not necessary

Office Hours:

I will have optional office hours using Elluminate three times during the course. You will need a speaker and microphone or headset with microphone for the computer.

Review the following:

http://eeznt3.nyiteez.org/nycgrants/nyc_info.htm

To download Elluminate go to: <http://www.illuminate.com/support>

Work Cited:

Eidson, Caroline Cunningham, Tomlinson, Carol Ann, (2003). *Differentiation in Practice*. Alexandria, VA: Association For Supervision and Curriculum Development.

Tomlinson, Carol Ann. (2003). *Fullfilling the Promise of the Differentiated Classroom*. Alexandria, VA: Association For Supervision and Curriculum Development.

Tomlinson, Carol Ann. (2001). *How to Differentiate Instruction in Mixed-Ability Classrooms*. Alexandria, VA: Association For Supervision and Curriculum Development.