

Newburgh Teacher Center
In-service Course Proposal
 Page #1
Return by October 30, 2009

Title:	The Basics of Teaching Fractions		
Curriculum Area:	Math		
Learning Standards:	MST-3 & NYS Core Math Curriculum		
Presenter(s):	Linda Apuzzo	Email:	lapuzzo@newburgh.k12.ny.us
Dates:	Tuesday:1/19, 1/26, 2/2, 2/9, 2/16		
Time:	4:15 – 7:15 PM		
Location:	Gardnertown Library		
Credit(s):	1		
Hours:	15		
Target Audience:	Open to all teachers. Preference will be given to grades 4-6 classroom, Special Education, Bi-lingual, AIS Teachers and any teachers new to the district.		
Course Description:	Teachers will become familiar with manipulative based activities that can be used specifically for developing and reinforcing concepts with fractions. Teachers will practice aligning activities for grade level appropriateness, increasing teacher knowledge of specific content regarding fractions required to be taught at specific grade levels.		
Course Requirements:	Attendance and participation at all sessions Create 2 Vocabulary activities Share and exchange best practice strategies to differentiate instruction and improve student performance. Align lessons with grade level performance indicators Recorded Self Reflections from each class		
Maximum	15		

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p. #2

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Name of In-service Proposal: The Basics of Teaching Fractions

Name of Instructor(s): Linda Apuzzo

Desired Results

Goal(s):

- To increase teachers' understanding of fractions
- To improve instructional delivery with the goal of increased student achievement.
- To increase teachers' comfort level with usage of various manipulatives for teaching fractions.
- Understanding the importance of teaching the foundation and language of fractions
- Importance of developing concepts of fractions through use of manipulatives
- NYS Core Math Curriculum, Content and Process Strands
- NECSD Math Curriculum Maps and State Curriculum
- Teaching specific and relevant vocabulary and emphasizing specific math terms throughout instruction
- To reinforce the need for math instruction to be developed from concrete learning, to representational to abstract

Understanding(s):

- NYS Core Math Curriculum and Performance Indicators
- NECSD Math Curriculum
- CrISS Strategies for developing vocabulary

Essential Question(s):

- How we can help teachers understand fractions, the essential vocabulary to be used during instruction of fractions, and the importance of building a strong foundation for fractions?
- How can we help teachers deliver lessons that support students' learning through experiences they can reflect back on, ultimately strengthening connections to mathematical concepts.
- How can we help teachers differentiate their instruction to meet the needs of all students through use of manipulatives?

Knowledge/Skills:

Strategies to support NECSD Math Curriculum Maps with manipulative based activities
Strategies to differentiate instruction
Strategies of using multiple variations of manipulatives
Strategies for reinforcing processing skills
Strategies to increase math vocabulary and writing in the content area

Assessment Evidence

Direct Evidence:

Informal Observations	Collection of activities practiced in in-service
Small group discussions	Shared reflections with the group
Student work sample from one lesson practiced in participant's classroom	

Learning Plan

Learning Activities:

Sharing experiences in small groups	Training on NECSD Curriculum Maps and State Curriculum
Evaluating activities for meeting NYS Math Standards	Sharing Resources
Using multiple manipulatives for teaching various concepts having to do with fractions	Creating vocabulary experiences to enhance student retention