



Course Follow-up Activities

Early Steps Count: Teaching Arithmetic to Prepare Students for Algebra—(K-5)

Linda Plattner

Note: It is recommended that participants in the video course complete follow-up activities to deepen their knowledge and skills. When these activities are completed in accordance with local staff development guidelines, participants may be able to earn additional professional development credit. Contact your local staff development office for determining how you might receive credit for completing the video program and additional credit for completing follow-up activities.

Activity 1 Plan a lesson

The Post-Office Numbers lesson plan from the Illuminations Website supports the standard for Number Operations - **Understand numbers, ways of representing numbers, relationships among numbers and number systems**. Select the link below to go to the lesson pages. Print out the lesson and the supplemental pages to use with your class.

http://illuminations.nctm.org/index_d.aspx?id=217

Outline your plans for implementing the lesson and include the following:

- What do I want students to know and be able to do?
- How will I know if students have learned the content?
- What will I do if students do not learn the content?
- What will I do if students already know the content?

Implement the lesson and give feedback on the success of the lesson.

What would you change about the lesson?

Activity 2 Algorithm for Division

Work with a group of teachers to evaluate the new algorithm for Division shared in the presentation.

- Is this approach more procedural or conceptual?

- Which algebraic concepts does it support?
- How could it be enhanced to better support algebraic thinking?
- Would you use this approach? Why or why not?

Activity 3 Identify the Algebra Concepts

Take one lesson from your text, identify the core math that is being taught and identify the algebraic concepts that are included or that could be strengthened. If possible, discuss with grade-level group.

Describe what concepts you found in the lesson you chose to review.

Activity 3 Explore and Share Resources

Using one of the references listed below; summarize at least 5 key points that would enhance your teaching. Develop a handout to share these ideas with your colleagues.

Carpenter, Thomas, et al.(2003). *Thinking mathematically*. Heimann, Portsmouth, NH 03801-3912.

National Research Council. (2001). *Adding it up: Helping children learn mathematics*. J. Kilpatrick, J. Swafford, and B. Findell (Eds.) Washington, DC: National Academy Press.

Annenberg/CPB. (1997). *Teaching math: A video library, K-4*. Retrieved from the Internet February 13, 2005 at <http://www.learner.org/resources/series32.html>