

## **Appendices**

### **Appendix A: Sample Webinar Proposal**

#### LEARNS Webinar Proposal

##### *Title*

I Can Do Math! Making Math Fun for Children and Members/Volunteers

##### *Description*

Math skills are practical and increasingly important skills for children to have. With the right motivation and resources, members and volunteers can provide positive reinforcement of math concepts for children. In this webinar, staff from LEARNS and the Northwest Regional Educational Laboratory will present tips and tools to make math education meaningful and enjoyable for both adults and children.

##### *Target Audience*

1. Managers of national service education and youth-development programs that provide remedial and/or enrichment tutoring to school-aged children
2. Members of national service education and youth-development programs that provide remedial and/or enrichment tutoring to school-aged children

##### *Pre-Session Activities*

1. Determine if other NWREL staff who collaborated on the *Tutor* are available to sit in and provide support
2. Verify final number of registrants to determine if an interactive or lecture-style approach needs to be taken and modify outline/format accordingly
3. One week prior to meeting, send confirmation email to registrants with:
  - a. Login information
  - b. Copy of the Spring 2006 *Tutor*
  - c. Any additional materials/documentation

##### *Outline*

- I. Housekeeping/Warmup
  - A. Welcome participants
  - B. Introduce selves and key participants
  - C. [If fewer than 10 participants] Allow participants to BRIEFLY introduce themselves, their organizations, and their experience and familiarity with math topics
    1. If one or more participants has extensive math experience, invite them to serve as a resource during the call for content knowledge or tutoring/mentoring practice

- D. Note webinar housekeeping items
  - 1. Mute phone to reduce background noise
  - 2. How to ask questions [depends on number of participants present]

## II. Topic Introduction

- A. Like literacy, “numeracy” (math proficiency) and logical problem solving are fundamental and essential skill sets for school-aged children to develop
  - 1. They are utilized in multiple daily activities of adults
  - 2. They are becoming increasingly important skills in the 21st century workforce
  - 3. Schoolchildren are subject to high-stakes math assessments
- B. National service tutoring, mentoring, and youth development programs can play an active and vital role in supporting children’s acquisition of math skills
- C. Math coaching may not be as widely implemented in national service programs as literacy, for a variety of reasons:
  - 1. Literacy often has priority in the minds of funders and programmers, as it is the foundation on which all other learning rests
  - 2. Math can sometimes be a more challenging content area for coaching, resulting from real or perceived anxiety or difficulty in learning/teaching math on the part of:
    - a. Children:
      - i. Pressures of high-stakes math testing
      - ii. Overcrowded classrooms with little time for one-on-one support
      - iii. Unsupportive family and peer environments; “math is boring”
    - b. Adults coaches:
      - i. History of math instruction based on rote memorization rather than comprehension
      - ii. Old assumptions about math as innate skill
      - iii. Distance from childhood math instruction
      - iv. Lack of interest in teaching math versus literacy and other topics; “math is boring”
- D. With the proper resources and support, adult members and volunteers can provide math coaching that is engaging and productive

## III. Preparing Coaches for Math Instruction

- A. Coaches should be trained in how math has changed since they learned it as children
  - 1. Emphasis on problem solving; multiple approaches to a problem; “getting there” as important as right answer
  - 2. NRC model (Engaging, Understanding, . . .)
- B. Help coaches overcome any anxiety or concern regarding their abilities in math
- C. Prepare coaches to address math anxiety/reluctance on the part of the children
  - 1. Be careful how you respond to statements like “I don’t get it”
    - a. Provide “Encouraging Comments” box from *Tutor*, p. 3
- D. Equip coaches with general approaches to making math engaging and relevant
  - 1. Encourage coaches to look for opportunities to demonstrate to children how the concepts they are learning are relevant in life

- a. Examples from their own lives, making sure they do not involve too-advanced concepts for children’s abilities or education levels (e.g., geometry involved in painting a house)
  - b. Asking children to describe a time they used a concept, or make up a scenario in which they would use it
2. Help coaches model a problem-solving and methodical approach to a problem or question; breaking a problem into steps and comparing it to what the student already knows can reduce anxiety
  - a. Use guiding questions provided on *Tutor* p. 13
3. Identify sources of games and activities that reinforce math concepts that coaches can incorporate into their tutoring and mentoring. These include:
  - a. Math workbooks, activity books, and manipulatives programs have
  - b. Math workbooks, activity books, and manipulatives schools have
  - c. Math specialists (if accessible)
  - d. Online resources
  - e. Activities described in the next section

#### IV. Sample Activities and Games for Reinforcing Basic Math Concepts

##### A. Addition and Subtraction

1. Dice
  - a. Use example from *Tutor* p. 5
2. Money
  - a. Use example from *Tutor* p. 5
3. Everyday objects
  - a. Use example from *Tutor* p. 5
4. Finish the 10
  - a. Use example from *Tutor* p. 11
5. Go Fish for 10
  - a. Use example from *Tutor* p. 12

##### B. Multiplication

1. Grid
  - a. Use example from *Tutor* pp. 7–8

##### C. Place value

1. Index cards
  - a. Use example from *Tutor* p. 5

##### D. Fractions

1. Cardboard pizza
  - a. Use example from *Tutor* p. 5
2. Chocolate bar
  - a. Use example from *Tutor* p. 5
3. Folding Strip
  - a. Use example from *Tutor* p. 14

*Resources*

1. LEARNS Spring 2006 *Tutor* newsletter
2. Judith's list of reading books that incorporate math concepts
3. Vetted list of math and math-tutoring websites