Los Angeles Unified School District Office of Curriculum, Instruction, and School Support

MATH MYTHS AND MISCONCEPTIONS SESSION 2 FACILATOR'S GUIDE

Concepts of Addition—Preventing Misconceptions

Materials: chart paper	markers for charting blank paper for note taking computer-if presenting PowerPoint live LCD-if	
presenting Power	Point live PowerPoint handout pages-optional timer-optional Handout #1-optional	

TIME	CONTENT	MATERIALS
	Notes to session Facilitator:	
	a longer time-block. Timing can be adjusted to fit your needs. The session can be done during a staff	Prepare ahead either one chart with three
	This document contains background information, speaking notes, and a listing of materials needed to present	sections, or three charts, one for each heading.
	o It is highly recommended that the facilitator become familiar with the content of this presentation in order to facilitate a productive and in-depth discussion with the participants.	The headings are: Combining
	O Handouts are indicated by the letters HO and the # symbol. These need to be copied and ready for each participant prior to the presentation of this session. Be sure to note and prepare ahead any other materials needed for the session, such as charts, manipulative, etc.	Examples; Increase from a Starting Point
	o Bold type font indicates specific speaking points for the facilitator, while (<i>Italized</i>) type font indicates notes or suggestions to the facilitator.	Examples; and, Missing
	o Prior to the session, be sure to set up projector, screen, and computer if you are presenting the PowerPoint live. Test equipment for proper functioning. The individual PowerPoint slides can also be Xeroxed and presented as hard copies if a projector and a computer is not available.	Addends Examples
	o Be sure materials, equipment, and room are set up prior to the arrival of the participants. Arrange desks/chairs to facilitate group discussion and interaction.	
	The PowerPoint can be printed out as a handout and can be provided to the participants at the beginning of the session as a note-taking tool or given at the end of the session as a reference sheet. Do not read the PowerPoint slides to the participants unless the facilitator's guide indicates that you should do so. Use the background notes to enhance the information on the slide.	
	o Consider having a co-presenter to help with charting group responses. Or ask for a participant volunteer to chart while you facilitate the discussion.	

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TIME	CONTENT	MATERIALS
	Slide 1:	
	(Have slide 1 projected as participants enter the session. Welcome participants to the session.)	
1 min	Slide 2: (Session 1 title slide)	
	This is another session in a series of professional development sessions focusing on the misconceptions our students may have in relation to mathematics and what we can do to repair, or better yet, prevent, these misconceptions. For this session, we will be looking at the concepts of addition and discussing teaching tips for our classrooms.	
3 min total	Slide 3 through Slide 5:	
	(Ask a volunteer to read the slide aloud to the group. Click to the next slide and ask another volunteer to read. Continue this for Slide 4 and Slide 5.)	
5 min	Slide 6: (Optional: provide [HO#1] for participants to record their own copy of addition examples)	HO#1-Addition Concepts
	One of the key concepts of addition is the idea of combining sets or quantities. In this example, we see a set of four green triangles being combined with a set of three blue triangles to create a new set of seven triangles. The	recording sheet
	idea of combining is one in which two, or more, sets or quantities are put together to form a new single set.	Record participants'
	What are some other examples which would show this concept of combining? (Ask volunteers to share ideas. Record those examples on the Combining Examples chart.)	examples on the Combining Examples chart
5 min	Slide 7:	•
		Record
	Another key concept of addition is one in which an increase from a starting point is shown. In this case, there is a single object, such as the tree, and it has increased in its height. The number of items has not changed—we	participants' examples on the
	still have one tree; it is the height of that item that has changed—in this case, the tree's height, from 60 feet to 68 feet.	Increase from a Starting Point

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TIME	CONTENT	MATERIALS
	What are some other examples which would show this concept of change from a starting point? (Ask volunteers to share ideas. Record those examples on the Increase from a Starting Point Examples chart.)	Examples chart
5 min	<u>Slide 8:</u>	
	A third key concept of addition is that of missing addends. This concept is also used in subtraction. The difference comes in how one approaches the situation. In this case of the boxes, the child has three already and then counts up until she reaches the desired quantity of ten. What are some other examples which would show this concept of change from a starting point? (Ask volunteers to share ideas. Record those examples on the Missing Addends Examples chart.)	Record participants' examples on the Missing Addends Examples chart
25 to 40 min	Slide 9 through Slide 14: (For the next 6 slides, spend a few minutes on each discussing the tip and how it impacts student learning and understanding of addition)	
	Wrap Up: (This can be done either orally as a group, or as a written reflection on the learning.) • How has the session supported you as you consider the instructional needs of your students?	