Implementing the Nevada Academic Content Standards Talking About Computational Procedures (Option 1)

Slides	Slide Notes	Additional Notes
<section-header></section-header>	 Background for Facilitator: Option 1 and 2 p. 120 "About This Chapter" Presentation: Distribute "Stop and Jot" note taker document to teachers. Say, "Stop and Jot what your thoughts are regarding these statements in the middle column." After individuals have written their own thoughts, share out with a partner. This will be revisited at end of the presentation, as an exit ticket. 	
Instruction so students entry in mathematics What does this look and sound like?	Background for Facilitator: Specific to Option 1. Presentation:	
Conception of the second secon	Background: The purpose of this slide is to connect to prior learning from the Fall/Winter mathematics "pink" Wednesdays. Presentation: Connection to the work that was engaged in the Fall 2013. The four steps provide a structure for analyzing and planning for components of productive classroom discussion. Consider having participants think about the 'talk moves' they have been using to support the productive classroom discussion and moving student thinking and reasoning between these four steps.	
Guiding Question How can we use targeted and meaningful assessment for identifying students' fact fluency instructional needs?	Background for Facilitator: Specific to Option 1 Presentation: Here's our guiding question for today's work.	
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-Van de Walle points out that, "When taught basis facts via rememorization, many children with learning disabilities continue to use counting strategies because they do not independently develop thought processos or other strategies that move beyond counting. However, they can be very successful in learning their basis facts when the emphasis is on using strategies. In addition, drill can cuse unnecessary an advert and use of the strategies because they do not in mathematics." <u>Traching Student Centered Mathematics</u> Volume 1 Gr. Pre-4.3 Presentation: - Read from the beginning of the paragraph to the end of the highlighted portion. Say, "While the progressions do state that <i>fluent</i> is used to mean. 'fast and accurate fluency, 'involves a mature of just knowing some answers from the use of strategies." - Open up for questions and/or discussions Destructions of the states and advert is and patterns, and knowing some answers from the use of strategies." - Open up for questions and/or discussions Destructions of the two areas. Nonctay over portion, as your triad igasws note some ideas from the other two areas. Nonctay over portion, as your triad igasws note some ideas from the other two areas. Nonctay over portion, as your triad igasws note some ideas from the other two areas. Nonctay over portion, as your triad igasws note some ideas from the other two areas. Nonctay over portion, as your triad igasws note some ideas from the two areas. Nonctay over portion, was your triad igasws note some ideas from the other two areas. Nonctay over portion, was your triad igasws note some ideas from the other two areas. Nonctay over portion, was your triad igasws note some ideas from the other two areas. Nonctay over portion, was your triad igasws note some ideas from the other two areas. Nonctay over portion, so your t			
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Instruction from strategy focus to algorithm.		-	
		instruction from strategy focus to algorithm.	

	Background for Facilitator:	
Strategy vs. Algorithm Hunt In each grade level indicate whether students are using a strategy (5) or an algorithm (4) as directed by the standards. Make additional notes regarding strategy vs. algorithm work for whole and mission numbers	Notes: For time purposes you can choose whether or not to	
work for whole and rational numbers	show teachers the search tool on their app to speed up this	
	portion of the training.	
	Extension: If you need it to take longer, (depending on how	
	familiar teachers are with standards) have teachers include	
	the boundaries: (ie: 1 st grade addition strategies are "within	
W mentioned advertised	100, using concrete models or drawings and strategies based	
	on place value; relate this strategy to written method and	
	explain the reasoning used".) Presentation: Ask teachers to look at the standards for their	
	grade. After, review the grades below and above to complete	
	this chart. KINDER differentiation- After they've looked at 1 st	
	grade standards, ask kinder teachers to identify standards	
	that support the work in first grade.	
	Background for Facilitator:	
Strategy vs. Algorithm Hunt answers	Familiarize yourself with the standards and whether you're	
	relating the strategy to written form, concrete models,	
5 5 5	drawing or if strategies are to be based on place value.	
A A S S	Kinder only has "strategies" for comparing numbers by using	
A A A A A	matching and counting strategies.	
	Notes: For time purposes you can choose whether or not to	
W Reconstructions	show teachers the search tool on their app to speed up this	
	portion of the training.	
	Extension: If you need it to take longer, (depending on how	
	familiar teachers are with standards) have teachers include	
	the boundaries: (ie: 1 st grade addition strategies are "within	
	100, using concrete models or drawings and strategies based	
	on place value; relate this strategy to written method and	
	explain the reasoning used".)	
	KINDER differentiation: Consider asking Kinder teachers to	
	share out the standards they found that support the work of	
	first grade.	
	Presentation:	
	Teachers should also be familiar with standards and whether	
	they should relate the strategy to written form, concrete	
	models, drawing or if strategies are to be based on place	
	value.	
	Ask: "What are you noticing or What do you notice?", "In	
	what grade level do you see a strategy for rational numbers	
	and an algorithm for whole numbers?"	
	Background for Facilitator: Option 1 and 2	
X 1 2 3 4 5 6 Minus Rumber Addition and function g	-Hide this slide if you are doing this option after already	
White Number Heliptication C 9 3	presenting Option 2.	
When knower fivilian and subtraction of General Statements (Section and Subtraction Addition Add	-If unfamiliar with Partial Product login into	
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Construction of Constitution Constitution of a strategy and approximately with providence of the strategy and approximately and approximately approxima	 Click on "Algorithms" tab on far right side of page 	
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W Annual Materian Materian State	-Open "Multiplication"	
	-Choose any of the "Partial Products" videos	
	Presentation:	
	Explain that the information in this visual refers to the	
	computational expectations found in the CCSS-M (NACS) for	
	grades K-6.	
	Say, "You still need to look closely at your standards as under	
	a heading you may have some standards that are working on	
	conceptual understanding, while others are procedural."	
	This visual shows Whole Number Multiplication in grade 4 and	
	Whole Number Division in grade 5 as a Standard Algorithm	
	because of the phrase "relate to a written method" in the	
	standards. However, this can be the writing out of the	
	-	
	strategy, i.e. partial products.	

	Background For Facilitator: Note 3-6: For 3 rd grade teachers who are tempted to look at addition and subtraction: Tier 1 instruction should be focused on grade level standards, therefore they are looking at multiplication and division phases. If addition and subtraction is still a concern, then they should be addressed during intervention/remediation instructional blocks. *These articles are lengthy and it's unlikely that grade levels will finish all of the planning activities during this time. Consider formulating a plan with admin., following up in PLCs, etc. for completion and implementation. Teachers may consider looking at eSuite "Assessment Differentiation Activities" to support these phases. Presentation: Decide as a grade level who will read and share out the individual "Phases" articles for operations in your grade level. K-2: addition and subtraction	
	3-6: multiplication and division Fill out the note taker with your grade level team.	
<form></form>	 Presentation: "Stop and Jot any changes in thinking or evidence that strengthened your prior thinking in the final column." You may want to consider collecting this document to assess for future coaching needs. Consider: Invite participants to leave a comment on the bottom of document indicating whether they want additional support in computational procedures, classroom discussion, etc. 	

Additional Notes:

School Level Essential Question:

What strategies can we use to enhance our instruction so students learn mathematics with understanding? What does this look and sound like?

Talk Moves & Strategies

Turn & Talk Think, Pair, Share & Revoice Who can add on? Revoice/Restate Stop & Jot (then revise)

Additional Notes & Support: Chapter 4: Talking About Computational Procedures



Videos to support:
4A Adding Three Numbers (3:19)
4B Subtracting on the Number Line (4:37)
4C Comparing Subtraction Strategies (4:44)
4D Fraction Number Line (6:59)