

RESET Understanding Procedures-Mathematics Rubric

Video Code: _____

SCORING

3 Implemented

2 +

2 Partially Implemented

2 -

1 Not Implemented

NA Not Applicable

Components	Item	3 Implemented	2 + Partially Implemented	2 - Partially Implemented	1 Not Implemented	Score	Explanation
Content of Instruction	1	The lesson is consistently focused on understanding of critical mathematics procedures (amount appropriate for meaningful development).	The lesson addresses understanding of critical procedures but not consistently , OR the lesson addresses too many procedures for meaningful development.		The lesson is not focused on understanding procedures, OR the lesson does not address critical content.		
	2	The teacher uses visual representations that support understanding of the procedure, e.g., representations show the appropriate size relations, map to meaning of numbers when in context, and map directly to algorithm.	The teacher uses visual representations that somewhat support understanding of the procedure, OR some of the visual representations support understanding of the procedure.		The teacher does not use visual representations, OR the teacher uses visual representations that do not support understanding of the procedure.		
	3	The teacher reviews and checks that students have the conceptual background knowledge and skills necessary for understanding the procedure.	The teacher reviews but does not check that students have the conceptual background knowledge and skills necessary for understanding the procedure.		The teacher does not review or check that students have the conceptual background knowledge and skills necessary for understanding the procedure.		

Components	Item	3 Implemented	2 + Partially Implemented	2 - Not Implemented	1 Not Implemented	Score	Explanation
Design of Instruction	4	To begin instruction, the teacher selects a simple or familiar context or representation that effectively provides meaning for the procedure and/or operation.	To begin instruction, the teacher selects a context or representation that does not effectively provide meaning for the procedure and/or operation.	To begin instruction, the teacher does not use a context or a representation, OR the teacher selects a context or representation is confusing or inaccurate .			
	5	The teacher effectively reviews or teaches key vocabulary and/or symbols.	The teacher reviews or teaches key vocabulary and/or symbols but not effectively , OR the teacher reviews or teaches some key vocabulary and/or symbols.	The teacher does not review or teach key vocabulary and/or symbols.			
	6	There is an explicit, systematic progression within and/or across lessons that supports understanding, e.g., a step-by-step presentation, a graduated sequence of representations, or explicit connections to previous lessons.	There is a somewhat explicit or somewhat systematic progression within and/or across lessons, OR there is an explicit, systematic progression within and/or across lessons that somewhat supports understanding.	There is not an explicit or systematic progression within or across lessons that supports understanding.			
	7	The teacher clearly explains and sufficiently emphasizes the conceptual meaning of the procedure and/or operation.	The teacher explains the conceptual meaning of the procedure and/or operation but not clearly or with insufficient emphasis.	The teacher does not explain the conceptual meaning of the procedure and/or operation, OR the explanation is confusing or inaccurate .			

Components	Item	3 Implemented	2 + Partially Implemented	2 - Not Implemented	1 Not Implemented	Score	Explanation
	8	The teacher engages students in making connections between representations, meanings of operations, and procedures.	The teacher demonstrates connections between representations, meanings of operations, and procedures but does not engage students, OR the connections are limited due to missed opportunities.		The teacher does not make connections between representations, meanings of operations, and procedures.		
Delivery of Instruction	9	The teacher provides clear explanations for all of the mathematical reasons for the steps in the procedure.	The teacher provides explanations for some of the mathematical reasons for the steps in the procedure, OR the explanations are not always clear .		The teacher does not provide explanations for the mathematical reasons for the steps in the procedure, OR the explanations are confusing or inaccurate .		
	10	The teacher presents a range of examples that is responsive to the needs of the students.	The teacher presents a range of examples that is somewhat responsive to the needs of the students.		The teacher does not present a range of examples that is responsive to the needs of the students.		
	11	The teacher consistently discusses mathematical ideas with language that is clear, accurate, and precise.	The teacher discusses mathematical ideas with language that is clear, accurate, and precise but not consistently .		The teacher does not discuss mathematical ideas with language that is clear, accurate, and precise.		
	12	The teacher clearly and sufficiently verbalizes and models reasoning (i.e., think-aloud).	The teacher verbalizes and models reasoning but not clearly and/or sufficiently .		The teacher does not verbalize and model reasoning, OR the teacher's reasoning is confusing or inaccurate .		
	13	The teacher provides students with sufficient opportunity to verbalize their understanding and/or reasoning.	The teacher provides students with limited opportunity to verbalize their understanding and/or reasoning.		The teacher does not ask students to verbalize their understanding and/or reasoning.		

Components	Item	3 Implemented	2 + Partially Implemented	2 - Partially Implemented	1 Not Implemented	Score	Explanation
Student Engagement	14	The teacher encourages students to use mathematical vocabulary and/or symbols throughout the lesson.	The teacher encourages students to use mathematical vocabulary and/or symbols but not consistently throughout the lesson.		The teacher does not encourage students to use mathematical vocabulary and/or symbols.		
	15	The teacher provides students with practice adequate to supporting the development of understanding of the procedure.	The teacher provides students with practice somewhat adequate to supporting the development of understanding of the procedure.		The teacher provides students with practice inadequate to supporting the development of understanding the procedure.		
Providing Feedback	16	The teacher uses questions and prompts related to visual representations, strategies, rules, and/or application of memory techniques to encourage students to develop independence.	The teacher does not effectively use questions and prompts related to visual representations, strategies, rules, and/or application of memory techniques to encourage students to develop independence.		The teacher does not use questions and prompts related to visual representations, strategies, rules, and/or application of memory techniques to encourage students to develop independence .		
	17	Feedback is consistently linked to mathematical reasoning and concepts.	Feedback is not consistently linked to mathematical reasoning and concepts.		There is no feedback, OR feedback is not linked to mathematical reasoning and concepts.		