

Student Teaching Portfolio -- Math - SP 13

Levels/Criteria	1	2	3	4	Score/Level
<p>I. Candidates demonstrate ability to impact student learning concerning NCTM 8.4 by providing a lesson plan that addresses appropriate learning goals and by providing pre and post test evidence and reflection</p>	<p>No sample(s) of student work prior to teaching the lessons are showcased, no lesson plan that addresses local, state, and national standards and legislative mandates provided, student teaching student work sample(s) are not showcased, and no clear relationship exists between the teaching methods described and the demonstrated improvement (or lack of improvement) in student performance can be seen. Reflections on such things as building mathematical knowledge through problem solving not provided.</p>	<p>No sample(s) of student work prior to teaching the lessons are showcased, however, a lesson plan that addresses local, state, and national standards and legislative mandates provided, post teaching student work sample(s) are showcased, however, no clear relationship between the teaching methods described and the demonstrated improvement (or lack of improvement) in student performance can be seen. Reflections on such things as building mathematical knowledge through problem solving not provided.</p>	<p>Sample(s) of student work prior to teaching the lessons are showcased, a lesson plan that addresses local, state, and national standards and legislative mandates provided, post teaching student work sample(s) are showcased, however, only a vague relationship between the teaching methods described and the demonstrated improvement (or lack of improvement) in student performance can be seen. Reflections on such things as building mathematical knowledge through problem solving were provided.</p>	<p>Sample(s) of student work prior to teaching the lessons are showcased, a lesson plan that addresses local, state, and national standards and legislative mandates provided, post teaching student work sample(s) are showcased, and a clear relationship between the teaching methods described and the demonstrated improvement (or lack of improvement) in student performance can be seen. Reflections on changes in teaching to better motivate students by using such ideas as building mathematical knowledge through problem solving were provided.</p>	
<p>Standards USA- INTASC: Principles from the Model Standards for Beginning Teacher Licensing and Development (1992) Principle: 1: The teacher understands the central concepts, tools of inquiry, and structures of the discipline(s) he or she teaches and can create learning experiences that make these aspects of subject matter meaningful for students. USA- NCTM (Nat. Council of Teachers of Mathematics): Professional Standards for Teaching Mathematics Level: Standards for Secondary Mathematics Teachers Area: Pedagogy Standard: Standard 8: Knowledge of Mathematics Pedagogy Candidates possess a deep understanding of how students learn mathematics and of the pedagogical knowledge specific to mathematics teaching and learning. Indicator: 8.4 Plans lessons, units and courses that address appropriate learning goals, including those that address local, state, and national mathematics standards and legislative mandates.</p>					
<p>II. Candidates demonstrate ability to impact student learning concerning NCTM 8.4 by providing a second lesson plan that addresses appropriate learning goals</p>	<p>No sample(s) of student work prior to teaching the lessons are showcased, no lesson plan that addresses local, state, and national standards and legislative mandates provided, student teaching student work sample(s) are not showcased, and no clear relationship exists between the teaching methods described and the demonstrated improvement (or lack of improvement) in student performance can be seen.</p>	<p>No sample(s) of student work prior to teaching the lessons are showcased, however, a lesson plan that addresses local, state, and national standards and legislative mandates provided, post teaching student work sample(s) are showcased, however, no clear relationship between the teaching methods described and the demonstrated improvement (or lack of improvement) in student</p>	<p>Sample(s) of student work prior to teaching the lessons are showcased, a lesson plan that addresses local, state, and national standards and legislative mandates provided, post teaching student work sample(s) are showcased, however, only a vague relationship between the teaching methods described and the demonstrated improvement (or lack of improvement) in student performance can be seen.</p>	<p>Sample(s) of student work prior to teaching the lessons are showcased, a lesson plan that addresses local, state, and national standards and legislative mandates provided, post teaching student work sample(s) are showcased, and a clear relationship between the teaching methods described and the demonstrated improvement (or lack of improvement) in student performance can be seen.</p>	

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and by providing pre and post test evidence and reflection	Reflections on such things as building mathematical knowledge through problem solving not provided.	performance can be seen. Reflections on such things as building mathematical knowledge through problem solving not provided.	Reflections on such things as building mathematical knowledge through problem solving were provided.	Reflections on changes in teaching to better motivate students by using such ideas as building mathematical knowledge through problem solving were provided.	
	<p>Standards USA- INTASC: Principles from the Model Standards for Beginning Teacher Licensing and Development (1992) Principle: 2: The teacher understands how children learn and develop, and can provide learning opportunities that support their intellectual, social and personal development. USA- NCTM (Nat. Council of Teachers of Mathematics): Professional Standards for Teaching Mathematics Level: Standards for Secondary Mathematics Teachers Area: Pedagogy Standard: Standard 8: Knowledge of Mathematics Pedagogy Candidates possess a deep understanding of how students learn mathematics and of the pedagogical knowledge specific to mathematics teaching and learning. Indicator: 8.4 Plans lessons, units and courses that address appropriate learning goals, including those that address local, state, and national mathematics standards and legislative mandates.</p>				
III. Candidates demonstrate ability to impact diverse student learning concerning NCTM Standards 8.1, 8.2, 8.3, 8.7, 7.1 (& INTASC Principle 3) by providing lesson plan and pre and post test evidence and reflection	No sample(s) of student work prior to teaching the lessons are showcased, no lesson plan describing a plan for teaching diverse students is provided, post teaching student work sample(s) are not showcased, and no clear relationship exists between the teaching methods described and the demonstrated improvement (or lack of improvement) in student performance can be seen. Reflections on changes in teaching concerning differentiating instruction that might have improved the results were not provided.	No sample(s) of student work prior to teaching the lessons are showcased, however, a lesson plan describing a plan for teaching diverse students is provided, post teaching student work sample(s) are showcased, however, no clear relationship between the teaching methods described and the demonstrated improvement (or lack of improvement) in student performance can be seen. Reflections on changes in teaching concerning differentiating instruction that might have improved the results were not provided.	Sample(s) of student work prior to teaching the lessons are showcased, a lesson plan describing a plan for teaching diverse students is provided, post teaching student work sample(s) are showcased, however, only a vague relationship between the teaching methods described and the demonstrated improvement (or lack of improvement) in student performance can be seen. Reflections on changes in teaching concerning differentiating instruction that might have improved the results were provided.	Sample(s) of student work prior to teaching the lessons are showcased, a lesson plan describing a plan for teaching diverse students provided, post teaching student work sample(s) are showcased, and a clear relationship between the teaching methods described and the demonstrated improvement (or lack of improvement) in student performance can be seen. Reflections on changes in teaching concerning this standard that might have improved the results demonstrated the ability to reflect on teaching and to consider improvements by applying pedagogical theory.	
Candidates demonstrate they understand how students differ in their approaches to	<p>Standards USA- INTASC: Principles from the Model Standards for Beginning Teacher Licensing and Development (1992) Principle: 3: The teacher understands how students differ in their approaches to learning and creates instructional opportunities that are adapted to diverse learners. USA- NCTM (Nat. Council of Teachers of Mathematics): Professional Standards for Teaching Mathematics Level: Standards for Secondary Mathematics Teachers Area: Process Standards Standard:</p>				

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<p>learning and create instructional opportunities that are adapted to diverse learners</p>	<p>Standard 7: Dispositions Candidates support a positive disposition toward mathematical processes and mathematical learning. Indicator: 7.1 Attention to equity Area: Pedagogy Standard: Standard 8: Knowledge of Mathematics Pedagogy Candidates possess a deep understanding of how students learn mathematics and of the pedagogical knowledge specific to mathematics teaching and learning. Indicator: 8.1 Selects, uses, and determines suitability of the wide variety of available mathematics curricula and teaching materials for all students including those with special needs such as the gifted, challenged and speakers of other languages. Indicator: 8.2 Selects and uses appropriate concrete materials for learning mathematics. Indicator: 8.3 Uses multiple strategies, including listening to and understanding the ways students think about mathematics, to assess students' mathematical knowledge. Indicator: 8.7 Uses knowledge of different types of instructional strategies in planning mathematics lessons.</p>				
<p>NCTM 8.3 IV Candidates demonstrate ability to impact student learning concerning NCTM 8.3 (& INTASC Principle 4) by providing lesson plan and pre and post test evidence and reflection</p> <p>Candidates demonstrate they understand how students learn and use a variety of instructional strategies to encourage students' development of</p>	<p>No sample(s) of student work prior to teaching the lessons are showcased, no lesson plan demonstrating the use of multiple strategies to reach appropriate learning goals provided, post teaching student work sample(s) are not showcased, and no clear relationship exists between the teaching methods described and the demonstrated improvement (or lack of improvement) in student performance can be seen. Reflections on changes in teaching concerning this standard that might have improved the results were not provided.</p>	<p>No sample(s) of student work prior to teaching the lessons are showcased, however, a lesson plan demonstrating the use of multiple strategies to reach appropriate learning goals provided, post teaching student work sample(s) are showcased, however, no clear relationship between the teaching methods described and the demonstrated improvement (or lack of improvement) in student performance can be seen. Reflections on changes in teaching concerning this standard that might have improved the results were not provided.</p>	<p>Sample(s) of student work prior to teaching the lessons are showcased, a lesson plan demonstrating the use of multiple strategies to reach appropriate learning goals provided, post teaching student work sample(s) are showcased, however, only a vague relationship between the teaching methods described and the demonstrated improvement (or lack of improvement) in student performance can be seen. Reflections on changes in teaching concerning this standard that might have improved the results were provided.</p>	<p>Sample(s) of student work prior to teaching the lessons are showcased, a lesson plan demonstrating the use of multiple strategies to reach appropriate learning goals provided, post teaching student work sample(s) are showcased, and a clear relationship between the teaching methods described and the demonstrated improvement (or lack of improvement) in student performance can be seen. Reflections on changes in teaching concerning this standard that might have improved the results demonstrated the ability to reflect on teaching and to consider improvements by applying pedagogical theory.</p>	
<p>Standards USA- INTASC: Principles from the Model Standards for Beginning Teacher Licensing and Development (1992) Principle: 4: The teacher understands and uses a variety of instructional strategies to encourage students' development of critical thinking, problem solving, and performance skills. USA- NCTM (Nat. Council of Teachers of Mathematics): Professional Standards for Teaching Mathematics Level: Standards for Secondary Mathematics Teachers Area: Pedagogy Standard: Standard 8: Knowledge of Mathematics Pedagogy Candidates possess a deep understanding of how students learn mathematics and of the pedagogical knowledge specific to mathematics teaching and learning. Indicator:</p>					

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<p>critical thinking, problem solving and performance skills including considerations of risks, costs, and benefits of alternative solutions; relating these to the knowledge, goals and values of the students</p>	<p>8.3 Uses multiple strategies, including listening to and understanding the ways students think about mathematics, to assess students' mathematical knowledge.</p>				
<p>V. Candidates demonstrate ability to impact student learning concerning NCTM 8.4 (& INTASC Principle 5) by providing lesson plan and pre and post test evidence and reflection</p> <p>Candidates align curriculum goals and teaching and use an understanding of individual and group motivation and behavior to create a learning</p>	<p>No sample(s) of student work prior to teaching the lessons are showcased, no lesson plan or description of learning experience aligned with appropriate curriculum goals provided, post teaching student work sample(s) are not showcased, and no clear relationship exists between the teaching methods described and the demonstrated improvement (or lack of improvement) in student performance can be seen. Reflections on changes in teaching concerning this standard that might have improved the results were not provided.</p>	<p>No sample(s) of student work prior to teaching the lessons are showcased, however, a lesson plan or description of learning experience aligned with appropriate curriculum goals provided, post teaching student work sample(s) are showcased, however, no clear relationship between the teaching methods described and the demonstrated improvement (or lack of improvement) in student performance can be seen. Reflections on changes in teaching concerning this standard that might have improved the results were not provided.</p>	<p>Sample(s) of student work prior to teaching the lessons are showcased, a lesson plan or description of learning experience aligned with appropriate curriculum goals provided, post teaching student work sample(s) are showcased, however, only a vague relationship between the teaching methods described and the demonstrated improvement (or lack of improvement) in student performance can be seen. Reflections on changes in teaching concerning this standard that might have improved the results were provided.</p>	<p>Sample(s) of student work prior to teaching the lessons are showcased, a lesson plan or description of learning experience that is aligned with appropriate curriculum goals provided, post teaching student work sample(s) are showcased, and a clear relationship between the teaching methods described and the demonstrated improvement (or lack of improvement) in student performance can be seen. Reflections on changes in teaching concerning this standard that might have improved the results demonstrated the ability to reflect on teaching and to consider improvements by better using whole-class, small-group, and individual work.</p>	
<p>Standards USA- INTASC: Principles from the Model Standards for Beginning Teacher Licensing and Development (1992) Principle: 5: The teacher uses an understanding of individual and group motivation and behavior to create a learning environment that encourages positive social interaction, active engagement in learning, and self-motivation. USA- NCTM (Nat. Council of Teachers of Mathematics): Professional Standards for Teaching Mathematics Level: Standards for Secondary Mathematics Teachers Area: Pedagogy Standard:</p>					

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<p>environment that encourages positive social interaction, active engagement in learning and self-motivation</p>	<p>Standard 8: Knowledge of Mathematics Pedagogy Candidates possess a deep understanding of how students learn mathematics and of the pedagogical knowledge specific to mathematics teaching and learning. Indicator: 8.4 Plans lessons, units and courses that address appropriate learning goals, including those that address local, state, and national mathematics standards and legislative mandates.</p>				
<p>VI. Candidates demonstrate ability to impact student learning concerning NCTM 6.1, 7.6 (& INTASC Principle 6) by providing lesson plan and pre and post test evidence and reflection</p> <p>Candidates use knowledge of effective verbal, nonverbal and media communication techniques to foster active inquiry, collaboration and supportive interaction</p>	<p>No sample(s) of student work prior to teaching the lessons are showcased, no lesson plan incorporating technology provided, post teaching student work sample(s) are not showcased, and no clear relationship exists between the teaching methods described and the demonstrated improvement (or lack of improvement) in student performance can be seen. Reflections on changes in teaching concerning this standard that might have improved the results were not provided.</p>	<p>No sample(s) of student work prior to teaching the lessons are showcased, however, a lesson plan incorporating technology provided, post teaching student work sample(s) are showcased, however, no clear relationship between the teaching methods described and the demonstrated improvement (or lack of improvement) in student performance can be seen. Reflections on changes in teaching concerning this standard that might have improved the results were not provided.</p>	<p>Sample(s) of student work prior to teaching the lessons are showcased, a lesson plan incorporating technology provided, post teaching student work sample(s) are showcased, however, only a vague relationship between the teaching methods described and the demonstrated improvement (or lack of improvement) in student performance can be seen. Reflections on changes in teaching concerning this standard that might have improved the results were provided.</p>	<p>Sample(s) of student work prior to teaching the lessons are showcased, a lesson plan incorporating technology provided, post teaching student work sample(s) are showcased, and a clear relationship between the teaching methods described and the demonstrated improvement (or lack of improvement) in student performance can be seen. Reflections on changes in teaching concerning this standard that might have improved the results demonstrated the ability to reflect on teaching and to consider improvements by applying pedagogical theory.</p>	
	<p>Standards USA- INTASC: Principles from the Model Standards for Beginning Teacher Licensing and Development (1992) Principle: 6: The teacher uses knowledge of effective verbal, nonverbal, and media communication techniques to foster active inquiry, collaboration, and supportive interaction in the classroom. USA- NCTM (Nat. Council of Teachers of Mathematics): Professional Standards for Teaching Mathematics Level: Standards for Secondary Mathematics Teachers Area: Process Standards Standard: Standard 6: Knowledge of Technology Candidates embrace technology as an essential tool for teaching and learning mathematics. Indicator: 6.1 Use knowledge of mathematics to select and use appropriate technological tools, such as but not limited to, spreadsheets, dynamic graphing tools, computer algebra systems, dynamic statistical packages, graphing calculators, data-collection devices, and presentation software. Standard: Standard 7: Dispositions Candidates support a positive disposition toward mathematical processes and mathematical learning. Indicator: 7.6 Use of various teaching tools including technology</p>				
<p>VII. Candidates</p>	<p>No sample(s) of student work prior to teaching the lessons are</p>	<p>No sample(s) of student work prior to teaching the lessons are</p>	<p>Sample(s) of student work prior to teaching the lessons are</p>	<p>Sample(s) of student work prior to teaching the lessons are</p>	

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<p>demonstrate ability to impact student learning concerning NCTM Standard 7.4 (& INTASC Principle 7) by providing lesson plan and pre and post test evidence and reflection</p> <p>Candidates plan instruction based on knowledge of subject matter, students, the community, curriculum goals, and NCTM standards</p>	<p>showcased, no lesson plan that goes beyond memorization and procedures to teach for understanding provided, post teaching student work sample(s) are not showcased, and no clear relationship exists between the teaching methods described and the demonstrated improvement (or lack of improvement) in student performance can be seen. Reflections on how to use discussions to reach curriculum goals were not provided.</p>	<p>showcased, however, a lesson plan that addresses understanding concepts and not mere memorization of procedures provided, post teaching student work sample(s) are showcased, however, no clear relationship between the teaching methods described and the demonstrated improvement (or lack of improvement) in student performance can be seen. Reflections on how to use discussions to reach curriculum goals were not provided.</p>	<p>showcased, a lesson plan or description of learning experience aligned with NCTM SPA and INTASC standard and appropriate State Content Standards provided, post teaching student work sample(s) are showcased, however, only a vague relationship between the teaching methods described and the demonstrated improvement (or lack of improvement) in student performance can be seen. Reflections on how to better start discussions were made.</p>	<p>showcased, a lesson plan or description of learning experience aligned with NCTM SPA and INTASC standard and appropriate State Content Standards provided, post teaching student work sample(s) are showcased, and a clear relationship between the teaching methods described and the demonstrated improvement (or lack of improvement) in student performance can be seen. Reflections on how to use ambiguities, problems, or student's preconceptions to start productive discussions were made.</p>	
<p>VIII. Candidates demonstrate ability to impact student learning concerning NCTM Standard 7.5, 8.3 (& INTASC Principle 8) by providing lesson plan and pre and post test evidence and reflection</p>	<p>No sample(s) of student work prior to teaching the lessons are showcased, no lesson plan or description of formal and informal assessments provided, post teaching student work sample(s) are not showcased, and no clear relationship exists between the teaching methods described and the demonstrated improvement (or lack of improvement) in student performance can be seen. Reflections on how to use discussion as an informal assessment and grading rubrics as a formal assessment were not provided.</p>	<p>No sample(s) of student work prior to teaching the lessons are showcased, however, a lesson plan or description of formal and informal assessments provided, post teaching student work sample(s) are showcased, however, no clear relationship between the teaching methods described and the demonstrated improvement (or lack of improvement) in student performance can be seen. Reflections on how to use discussion as an informal assessment and grading rubrics as a formal assessment were not provided.</p>	<p>Sample(s) of student work prior to teaching the lessons are showcased, a lesson plan or description of formal and informal assessments provided, post teaching student work sample(s) are showcased, however, only a vague relationship between the teaching methods described and the demonstrated improvement (or lack of improvement) in student performance can be seen. Reflections on how to use discussion as an informal assessment and grading rubrics as a formal assessment were provided.</p>	<p>Sample(s) of student work prior to teaching the lessons are showcased, a lesson plan or description of formal and informal assessments provided, post teaching student work sample(s) are showcased, and a clear relationship between the teaching methods described and the demonstrated improvement (or lack of improvement) in student performance can be seen. Reflections on how to use discussion as an informal assessment and, objective exams and project grading rubrics as a formal assessment were provided.</p>	
	<p>Standards USA- INTASC: Principles from the Model Standards for Beginning Teacher Licensing and Development (1992) Principle: 7: The teacher plans instruction based upon knowledge of subject matter, students, the community, and curriculum goals. USA- NCTM (Nat. Council of Teachers of Mathematics): Professional Standards for Teaching Mathematics Level: Standards for Secondary Mathematics Teachers Area: Process Standards Standard: Standard 7: Dispositions Candidates support a positive disposition toward mathematical processes and mathematical learning. Indicator: 7.4 Commitment to learning with understanding</p>				

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<p>Candidates understand and use formal and informal assessment strategies to ensure the continuous intellectual, social and physical development of the learner</p>	<p>Standards USA- INTASC: Principles from the Model Standards for Beginning Teacher Licensing and Development (1992) Principle: 8: The teacher understands and uses formal and informal assessment strategies to evaluate and ensure the continuous intellectual, social and physical development of the learner. USA- NCTM (Nat. Council of Teachers of Mathematics): Professional Standards for Teaching Mathematics Level: Standards for Secondary Mathematics Teachers Area: Process Standards Standard: Standard 7: Dispositions Candidates support a positive disposition toward mathematical processes and mathematical learning. Indicator: 7.5 Use of various assessments Area: Pedagogy Standard: Standard 8: Knowledge of Mathematics Pedagogy Candidates possess a deep understanding of how students learn mathematics and of the pedagogical knowledge specific to mathematics teaching and learning. Indicator: 8.3 Uses multiple strategies, including listening to and understanding the ways students think about mathematics, to assess students' mathematical knowledge.</p>				
<p>IX. INTASC Principle 9 a. Candidates are reflective practitioners who continually evaluate the effects of their choices and actions on others (students, parents, and other professionals in the learning community) and actively seek opportunities to grow professionally.</p>	<p>Does not clearly explain why the entries were included in portfolio and does not clearly explain how they relate to this INTASC standard</p>	<p>Gives a reason why the entries were included but fails to clearly explain how they relate to this INTASC standard</p>	<p>Very clearly explains why the samples have been included in the portfolio and how they relate to this INTASC standard</p>	<p>Very clearly explains why the samples have been included in the portfolio, describes how they relate to this INTASC standard, and elaborates on how they best exemplify an aspect of good teaching</p>	
<p>X. INTASC Principle 10 Candidates foster relationships</p>	<p>Does not clearly explain why the entries were included in portfolio and does not clearly explain how they relate to this INTASC standard</p>	<p>Gives a reason why the entries were included but fails to clearly explain how they relate to this INTASC standard</p>	<p>Very clearly explains why the samples have been included in the portfolio and how they relate this INTASC standard</p>	<p>Very clearly explains why the samples have been included in the portfolio, describes how they relate to this INTASC standard, and elaborates on how they best exemplify an aspect of good</p>	

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with school colleagues, parents and agencies in the larger community to support students' learning and well being.				teaching	
	Standards USA- INTASC: Principles from the Model Standards for Beginning Teacher Licensing and Development (1992) Principle: 10: The teacher fosters relationships with school colleagues, parents, and agencies in the larger community to support students' learning and well-being.				
Conventions	Minimal control of grammar, mechanics, spelling, usage, and sentence formation. Missing the following: is neatly typed using a 12 font, double-spaced, and includes appropriate citations.	Limited control of grammar, mechanics, spelling, usage, and sentence formation. Missing two of the following: is neatly typed using a 12 font, double spaced, and includes appropriate citations.	Sufficient control of grammar, mechanics, spelling, usage, and sentence formation. Missing one of the following: is neatly typed using a 12 font, double spaced, and includes appropriate citations.	Evident control of grammar, mechanics, spelling, usage, and sentence formation. Neatly typed using a 12 font, double spaced, and includes appropriate citations.	