**Teacher Work Sample**

**Alignment and Addendum for**

**2012 NCTM CAEP Pre-Service Mathematics Standards**

In addition to the prompts contained within the *Teacher Work Sample* (TWS*) Guidelines and Directions,* math teacher candidates should ensure that the following are contained within each section.

1. **Contextual Factors (**addresses NCTM 4a, 4b, 4c, 4d, 4e)
2. **Learning Goals (**addresses NCTM 3a, 3b)

* **TWS Prompt: Discuss why learning goals are appropriate in terms of development; pre-requisite knowledge, skills and other student needs.**
  + Within this discussion, teacher candidate might address naïve concepts, preconceptions and misconceptions that inform instructional planning. (NSTA 2C)

1. **Assessment Plan** (addresses NCTM 3f, 3g, 5a, 5c)

* The assessment should, in addition to any traditional mathematics skills problems, include at least one of each of the following components:
  + a question that asks for explanation of problem-solving strategies
  + a problem that requires some type of justification or reasoning of conclusions
  + a problem that assesses students’ mathematical thinking about a specific content idea.
  + Create a scoring guide or rubric that will provide informative feedback and includes an overall evaluation
  + score to report as pre-post test data for the Impact on Student Learning Report.

**4. Design for Instruction (**addresses NCTM 1a, 2a, 2b, 2c, 2d, 2e, 2f, 3c, 3d, 3e)

* **Activities:** 
  + Lesson designs should reflect a variety of approaches that provide students with opportunities to communicate about mathematics and make connections among mathematics, other content areas, everyday life and the workplace. (NCTM 3d)
  + Lesson designs would implement techniques related to student engagement and communication including the selection of high quality tasks, guiding and facilitating mathematics discussions, identifying key mathematical ideas, identifying and addressing student misconception sand employing a range of question strategies. (NCTM 3e)
* **Technology**
  + Plan lessons and units that incorporate a variety of strategies, differentiated instruction for diverse populations and mathematics-specific and instructional technology in building all students conceptual understanding and procedural proficiency. (NCTM 3c)

**5. Instructional Decision Making** (addresses NCTM 3f, 3g, 5c)

**6. Analysis of Student Learning** (addresses NCTM 5a, 5b, 5c)

**7. Evaluation and Reflection (**addresses NCTM 6a, 6b, 6c)