Assessment 7: Internship Portfolio

a. Description of the Assessment:
The Secondary Mathematics Internship Portfolio assessment is administered during the internship semester to all candidates. The primary purpose of this portfolio is to showcase the candidate's unique observations, insights, reflections, understanding and application of the professional knowledge and skills associated to being an effective secondary mathematics teacher. The portfolio is based on the National Council of Teachers of Mathematics (NCTM) CAEP standards (2012).

During internship, each candidate is assigned to a middle school (grade 7 or 8) for half of their internship and a high school (grade 9-12) for the remainder. The candidate is placed into a classroom under the direct supervision of a highly qualified mathematics teacher. Each candidate has a content supervisor and a clinical supervisor during his or her internship. The content supervisor is a highly qualified university supervisor with secondary mathematics teaching experience.

The assessment requires that each candidate submit no fewer than two (2) artifacts per rubric criteria. Each artifact must relate directly to the teaching or learning of mathematics and be created by the candidate personally or in collaboration. (There are a few exceptions.) Artifacts should provide a clear picture of how the candidate is using mathematics-specific best practices in the classroom. A reflection must accompany **each** artifact describing how it has informed the candidate's teaching.

The content supervisor will assess the content portfolio using the Secondary Mathematics Internship Portfolio Rubric (Appendix). Candidates must earn a rating of acceptable or target for each rubric criteria in order to successfully complete the portfolio. Candidates must successfully complete this portfolio in order to pass internship.

b. Alignment of Assessment to the NCTM Standards and Elements:
This assessment is administered to secondary mathematics candidates during their internship semester prior to graduation. The successful completion of this assessment is a requirement for course credit. Please see the Scoring Guide in Part f for a more detailed alignment.

Program Standard	Elements Addressed
Standard 4: Mathematical Learning Environment	4d
Standard 6: Professional Knowledge and Skills	6a, 6b, 6c
Standard 7: Secondary Mathematics Field Experiences and Clinical Practice	7c

c. Analysis of the data findings:

This assessment was revised in the fall of 2013 to better align the 2012 NCTM CAEP Standards. The program did not have any candidates enrolled in internship at that time. [redacted] candidates were enrolled in the spring of 2014, and t[redacted] candidates were enrolled in the fall of 2014. So the data collected represents two administrations of the assessment and provides the performance of a total of f[redacted] candidates.

Data Table A summarizes candidate portfolio ratings by rubric criteria. All [redacted] candidates successfully completed the portfolio. The data shows that each candidate earned a rating at the acceptable level in each of the rubric criteria. The mean score (Data Table B) corresponding to each NCTM CAEP element represented was 2.00 corresponding to acceptable on the 3-point rubric.

See Data Table A for the complete data set.

d. Interpretation of how that data provides evidence for meeting standards:

The Secondary Mathematics Internship Portfolio Assessment provides evidence that the candidates can have the professional knowledge and skills associated to effective secondary mathematics teachers. The candidates documented collaborative learning experiences spanning both middle and high school mathematics classroom experiences. Candidates documented their participation in professional development specific to the mathematics and mathematics education as well as how they specifically used mathematics educational research using (NCTM, MAA, etc.) resources to inform their practice.

f. Assessment Tool:

Internship portfolios are compiled to document the candidate's unique observations, insights, reflections, understanding and application of the professional knowledge and skills associated to being an effective secondary mathematics teacher. The portfolio is based on the National Council of Teachers of Mathematics (NCTM) CAEP standards (2012).

Portfolio Guidelines

There should be no fewer than two (2) artifacts per criteria. All artifacts should relate directly to the teaching or learning of mathematics and be created by the intern personally or in collaboration. (There are a few exceptions.) There are many possible artifacts that can be placed in your portfolio that will provide a clear picture of how you are using best practices in your classroom. Following are some examples. **Each** artifact should be accompanied by your reflections on the artifact, and how it has informed your teaching.

Possible Artifacts:

- Lesson plans
- Unit plans
- Teaching video
- Projects
- Cooperative learning activities
- Student work with specific reflections on instructional impact and future planning
- Individualized lesson plans/IEP's
- Case studies
- Tutoring
- Samples of student journals
- Photographs of students engaged in learning
- Multimedia presentations
- Formative and Summative Assessments with specific reflections on how results inform planning
- Assessment Rubrics
- Evaluations/Observations done by peers or supervisors
- Observation reports from visiting other classrooms
- Self-assessment instruments
- Mathematics Education research article summaries and critiques
- Mathematics education professional development certificates
- Volunteer experience descriptions related to mathematics education
- Work experience descriptions related to mathematics education
- Community resource documents related to mathematics education
- Letters to parents
- Interviews with students, teachers, and parents about mathematics education

Reflection Guidelines:

Reflections should detail the importance of the artifact and the criteria to which it relates. You should address three major questions per artifact:

- What? Describe what the artifact is and provide context.
- So What? How does this artifact demonstrate your understanding or implementation of the criteria?

  For example, indicate how the artifact impacted your students' learning. This might be best accomplished using the lesson plan, samples of anonymous student work, a scoring rubric, a photo of the students engaged in the process of learning, and the reflection, which clearly provides evidence that the students learned from the instruction.
- Now what? What is the next step? How can you improve next time? Set appropriate goals that can show growth and development over time.

g. The Scoring Guide:

Appendix

Secondary Mathematics Internship Portfolio Rubric

h. Data:

Data Table A Secondary Mathematics Internship Portfolio Undergraduate Program Completers *Each indicator is rated as: target (3), acceptable (2), or unacceptable (1).						
Rubric Criteria (NCTM CAEP Sub-Element Alignment)	**Spring 2014**			**Fall 2014**		
	Mean Criteria Score* and (Range)	**Number of Completers**	**% of Completers Meeting Minimum Expectation (Acceptable better)**	**Mean Criteria Score* and (Range)**	**Number of Completers**	**% of Completers Meeting Minimum Expectation (Acceptable better)**
Mathematical Learning Environment (4d)	2.0 (2-2)	[redacted]	100%	2.0 (2-2)	[redacted]	100%
Professional Knowledge and Skills (6a)	2.0 (2-2)	[redacted]	100%	2.0 (2-2)	[redacted]	100%
Professional Knowledge and Skills (6b.1)	2.0 (2-2)	[redacted]	100%	2.0 (2-2)	[redacted]	100%
Professional Knowledge and Skills (6b.2)	2.0 (2-2)	[redacted]	100%	2.0 (2-2)	[redacted]	100%
Professional Knowledge and Skills (6c)	2.0 (2-2)	[redacted]	100%	2.0 (2-2)	[redacted]	100%
Secondary Mathematics Clinical Practice (7c.1)	2.0 (2-2)	[redacted]	100%	2.0 (2-2)	[redacted]	100%
Secondary Mathematics Clinical Practice (7c.2)	2.0 (2-2)	[redacted]	100%	2.0 (2-2)	[redacted]	100%

Data Table B Secondary Mathematics Internship Portfolio Undergraduate Program Completers *Each indicator is rated as: target (3), acceptable (2), or unacceptable (1).		
Rubric Criteria (NCTM CAEP Element Alignment)	**Spring 2014**	**Fall 2014**
	Mean Criteria Score*	Mean Criteria Score*
4d	2.00	2.00
6a	2.00	2.00
6b	2.00	2.00
6c	2.00	2.00
7c	2.00	2.00

SECONDARY MATHEMATICS INTERNSHIP PORTFOLIO RUBRIC

(NCTM CAEP Element Alignment)	Target (3)	Acceptable (2)	Unacceptable (1)
4d	Candidate includes a reflection describing a personal instructional experience demonstrating equitable and ethical treatment of all students, and a personal instructional experience demonstrating high expectations for all students and persistence in helping students reach their full potential.	Candidate includes a reflection describing a personal instructional experience demonstrating equitable and ethical treatment of and a personal instructional experience demonstrating high expectations for all students.	No evidence of equitable and ethical treatment of and high expectations for all students.
Professional Knowledge and Skills – Effective teachers of secondary mathematics are life long learners and recognize that learning is often collaborative. They participate in professional development experiences specific to mathematics and mathematics education, draw upon mathematics education research to inform practice, continuously reflect on their practice, and utilize resources from professional mathematics organizations.			
6a	Candidate participates in conducting a professional development directly related to the learning and teaching of mathematics at either Hot Topics or the Southwest Arkansas Regional Common Core Standards Summit.	Candidate participates in professional development experiences directly related to the learning and teaching of mathematics. PD might include mathematics related Teachers College Hot Topics and or Southwest Arkansas Regional Common Core Standards Summit.	No evidence that candidate participates in professional development experiences directly related to the learning and teaching of mathematics.
6b.1	Candidates documents a *variety* of collaborative learning experiences that draws upon research in mathematics education to inform practice to enhance learning opportunities for all students' mathematical knowledge development.	Candidates documents a collaborative learning experience that draws upon research in mathematics education to inform practice to enhance learning opportunities for all students' mathematical knowledge development.	Collaborative learning experience no based upon research in mathematics education or is not related to enhancing learning opportunities for all students' mathematical knowledge development.
6b.2	Candidate documents ways in which they involve colleagues, other school professionals, families, *and* various stakeholders to advance their development as a reflective practitioner.	Candidate documents ways in which they involve colleagues, other school professionals, families, ***or*** various stakeholders to advance their development as a reflective practitioner.	Candidate superficially involves colleagues, other school professionals, families, and various stakeholders or involvement does not directly advance their development as a reflective practitioner.
6c	Documents use of a *variety* of resources from professional mathematics education organizations including print, digital, and or virtual resources.	Documents use of resources from professional mathematics education organizations such as print, digital, or virtual resources.	Documentation does not include resources from professional mathematics education organizations or relate directly to the teaching and learning of mathematics.

SECONDARY MATHEMATICS INTERNSHIP PORTFOLIO RUBRIC

Secondary Mathematics Field Experiences and Clinical Practice – Effective teachers develop a broad experiential base of knowledge, skills, effective approaches to mathematics teaching and learning, and professional behaviors across both middle and high school settings that involve a diverse range and varied groupings of students. Candidate's ***Impact on Student Learning Project*** and ***Content Observations*** will inform the below ratings.			
7c.1	Portfolio provides evidence the teacher candidate has developed the knowledge, skills and professional behaviors necessary to examine the nature of mathematics, how mathematics should be taught, and how students learn mathematics. Evidence spans both middle and high school mathematics *and* documents specific ways in which candidate has drawn upon research in mathematics education and professional development to inform practice.	Portfolio provides evidence the teacher candidate has developed the knowledge, skills and professional behaviors necessary to examine the nature of mathematics, how mathematics should be taught, and how students learn mathematics. Evidence spans both middle and high school mathematics.	Portfolio does not provide evidence the teacher candidate has developed the knowledge, skills or professional behaviors necessary to examine the nature of mathematics, how mathematics should be taught, and how students learn mathematics.
7c.2	Portfolio provides evidence the teacher candidate has developed the knowledge, skills and professional behaviors necessary to analyze a range of approaches to mathematics teaching and learning, focusing on tasks, discourse, environment, and assessment. Candidate documents specific collaborations with cooperating teacher, peers, *and* university supervisors.	Portfolio provides evidence the teacher candidate has developed the knowledge, skills and professional behaviors necessary to analyze a range of approaches to mathematics teaching and learning, focusing on tasks, discourse, environment, and assessment.	Portfolio does not provide evidence that the candidate has developed the knowledge, skills or professional behaviors necessary to analyze approaches to mathematics teaching and learning, tasks, discourse, environment, or assessment.