Assessment #4 Assessment of Student Teaching

This assessment assists teacher candidates, college supervisors, and cooperating teachers in evaluating teacher candidates’ work within the full-time student teaching practicum. This assessment, aligned with a subset of the NCTM CAEP Standards (2012) – Secondary (Initial Preparation), focuses on teacher candidates’ knowledge of and skill with mathematics pedagogy, knowledge of and skill in developing and maintaining a productive mathematical learning environment, and their impact on student learning. This assessment also allows for a reflection on the breadth and depth of teacher candidates’ work during the student teaching experience in a classroom, school, and professional community and their development as lifelong professional learners. As an assessment, this document should also serve as a guide for observation, discussion, and reflection throughout the student teaching practicum.

Standards 3 through 7 of the NCTM CAEP Standards (2012) – Secondary (Initial Preparation) are addressed in this assessment. Each standard is defined below and is followed by a set of elements, which explain teaching behaviors, skills, and competencies that teacher candidates may exhibit when meeting a particular standard. These performance indicators are by no means comprehensive and are not intended as a checklist. However, they may be helpful in the final assessment of the teacher candidate. Sources of evidence for the final evaluation may include lesson plans, unit plans, observations, teaching artifacts, samples of student work, samples of lesson materials, assessments (e.g., tests, quizzes, rubrics, etc.), classroom management plan, checklists, inventories, conference notes, anecdotal notes, interviews, letters to parents, etc.

The following levels of performance are to be used to indicate your assessment of the level that the teacher candidate has met each standard. **Our goal is that the majority of candidates would exit at the Proficient level for the beginning teacher.** That is, a beginning teacher may have lessons in which the behaviors are demonstrated quite well, followed sometimes by lessons that show less than mastery of the described behaviors. Most teacher candidates will perform at the Basic and Proficient levels. The Distinguished level should be reserved for performance that is above and beyond basic requirements.

**D – Distinguished:** The teacher candidate has demonstrated an exemplary ability to create a community of learners that has students highly motivated and engaged and assuming considerable responsibility for their own learning. Exemplary teaching behaviors are consistently observed. The performance is outstanding, above and beyond what is required.

**P – Proficient:** The teacher candidate clearly understands the concepts underlying the standard and implements it well. Effective teaching behaviors are frequently observed, and sometimes the candidate exceeds expectations for a beginning teacher.

**B – Basic:** The teacher candidate appears to understand the concepts underlying the standard and attempts to implement its elements. Implementation is intermittent and/or not entirely successful. The candidate has achieved the minimum level of performance. Additional reading, observation, and experience may enable the candidate to become proficient in this area.

**U – Unsatisfactory:** The teacher candidate does not appear to understand the concepts underlying the standard. Effective teaching behaviors were not observed. The candidate does not meet expectations for a beginning teacher.
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**NCTM CAEP Standards (2012) – Secondary (Initial Preparation)**

**Standard 3: Content Pedagogy**

Effective teachers of secondary mathematics apply knowledge of curriculum standards for mathematics and their relationship to student learning within and across mathematical domains. They incorporate research-based mathematical experiences and include multiple instructional strategies and mathematics-specific technological tools in their teaching to develop all students’ mathematical understanding and proficiency. They provide students with opportunities to do mathematics – talking about it and connecting it to both theoretical and real-world contexts. They plan, select, implement, interpret, and use formative and summative assessments for monitoring student learning, measuring student mathematical understanding, and informing practice.

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<td>3a Teacher candidate applies knowledge of curriculum standards for secondary mathematics and their relationship to student learning within and across mathematical domains.</td>
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<td>3b Teacher candidate analyzes and considers research in planning for and leading students in rich mathematical learning experiences.</td>
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<td>3c Teacher candidate plans lessons and units that incorporate a variety of strategies, differentiated instruction for diverse populations, and mathematics-specific and instructional technologies in building all students’ conceptual understanding and procedural proficiency.</td>
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<td>3d Teacher candidate provides students with opportunities to communicate about mathematics and make connections among mathematics, other content areas, everyday life, and the workplace.</td>
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<td>3e Teacher candidate implements techniques related to student engagement and communication including selecting high quality tasks, guiding mathematical discussions, identifying key mathematical ideas, identifying and addressing student misconceptions, and employing a range of questioning strategies.</td>
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<td>3f Teacher candidate plans, selects, implements, interprets, and uses formative and summative assessments to inform instruction by reflecting on mathematical proficiencies essential for all students.</td>
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<td>3g Teacher candidate monitors students’ progress, makes instructional decisions, and measures students’ mathematical understanding and ability using formative and summative assessments.</td>
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NCTM CAEP Standards (2012) – Secondary (Initial Preparation)

Standard 4: Mathematical Learning Environment

Effective teachers of secondary mathematics exhibit knowledge of adolescent learning, development, and behavior. They use this knowledge to plan and create sequential learning opportunities grounded in mathematics education research where students are actively engaged in the mathematics they are learning and building from prior knowledge and skills. They demonstrate a positive disposition toward mathematical practices and learning, include culturally relevant perspectives in teaching, and demonstrate equitable and ethical treatment of and high expectations for all students. They use instructional tools such as manipulatives, digital tools, and virtual resources to enhance learning while recognizing the possible limitations of such tools.

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<tr>
<td>Teacher candidate exhibits knowledge of adolescent learning, development, and behavior and demonstrates a positive disposition toward mathematical processes and learning.</td>
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<tr>
<td>Teacher candidate plans and creates developmentally appropriate, sequential, and challenging learning opportunities grounded in mathematics education research in which students are actively engaged in building new knowledge from prior knowledge and experiences.</td>
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<td>Teacher candidate incorporates knowledge of individual differences and the cultural and language diversity that exists within classrooms and includes culturally relevant perspectives as a means to motivate and engage students.</td>
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<td>Teacher candidate demonstrates equitable and ethical treatment of and high expectations for all students.</td>
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<td>Teacher candidate applies mathematical content and pedagogical knowledge to select and use instructional tools such as manipulatives and physical models, drawings, virtual environments, spreadsheets, presentation tools, and mathematics-specific technologies (e.g., graphing tools, interactive geometry software, computer algebra systems, and statistical packages); and makes sound decisions about when such tools enhance teaching and learning, recognizing both the insights to be gained and possible limitations of such tools.</td>
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Effective teachers of secondary mathematics provide evidence demonstrating that as a result of their instruction, secondary students’ conceptual understanding, procedural fluency, strategic competence, adaptive reasoning, and application of major mathematics concepts in varied contexts have increased. These teachers support the continual development of a productive disposition toward mathematics. They show that new student mathematical knowledge has been created as a consequence of their ability to engage students in mathematical experiences that are developmentally appropriate, require active engagement, and include mathematics-specific technology in building new knowledge.

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<td>5a Teacher candidate verifies that secondary students demonstrate conceptual understanding; procedural fluency; the ability to formulate, represent, and solve problems; logical reasoning and continuous reflection on that reasoning; productive disposition toward mathematics; and the application of mathematics in a variety of contexts within major mathematical domains.</td>
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<td>5b Teacher candidate engages students in developmentally appropriate mathematical activities and investigations that require active engagement and include mathematics-specific technology in building new knowledge.</td>
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<td>5c Teacher candidate collects, organizes, analyzes, and reflects on diagnostic, formative, and summative assessment evidence and determines the extent to which students’ mathematical proficiencies have increased as a result of their instruction.</td>
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NCTM CAEP Standards (2012) – Secondary (Initial Preparation)
Standard 6: Professional Knowledge and Skills
Effective teachers of secondary mathematics are lifelong 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.

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<td>6a Teacher candidate takes an active role in their professional growth by participating in professional development experiences that directly relate to the learning and teaching of mathematics.</td>
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<td>6b Teacher candidate engages in continuous and collaborative learning that draws upon research in mathematics education to inform practice; enhances learning opportunities for all students’ mathematical knowledge development; involves colleagues, other school professionals, families, and various stakeholders; and advances their development as a reflective practitioner.</td>
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<td>6c Teacher candidate utilizes resources from professional mathematics education organizations such as print, digital, and virtual resources/collections.</td>
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U – Unsatisfactory: The teacher candidate does not appear to understand the concepts underlying the standard. Effective teaching behaviors were not observed. The candidate does not meet expectations for a beginning teacher.

Effective teachers of secondary mathematics engage in a planned sequence of field experiences and clinical practice under the supervision of experienced and highly qualified mathematics teachers. They 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. Candidates experience a full-time student teaching/internship in secondary mathematics directed by university or college faculty with secondary mathematics teaching experience or equivalent knowledge base.

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<td>7a Teacher candidate <em>previously</em> engaged in a sequence of planned field experiences and clinical practice <em>prior to</em> a full-time student teaching/internship experience that included observing and participating in both middle and high school mathematics classrooms and working with a diverse range of students individually, in small groups, and in large class settings under the supervision of experienced and highly qualified mathematics teachers in varied settings that reflect cultural, ethnic, linguistic, gender, and learning differences.</td>
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<td>7b Teacher candidate experienced full-time student teaching/internship in secondary mathematics that was supervised by a highly qualified mathematics teacher and a university or college supervisor with secondary mathematics teaching experience or equivalent knowledge base.</td>
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<td>7c Teacher candidate developed knowledge, skills, and professional behaviors across both middle and high school settings; examined the nature of mathematics, how mathematics should be taught, and how students learn mathematics; and observed and analyzed a range of approaches to mathematics teaching and learning, focusing on tasks, discourse, environment, and assessment.</td>
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Additional Comments:
TEACHER CANDIDATE QUESTIONNAIRE

What mathematical topics have you encountered you felt thoroughly prepared to teach?

__________________________________________________________________________________________________________

What mathematical topics have you encountered you felt inadequately prepared to teach (if any)?

__________________________________________________________________________________________________________

What aspects of mathematics pedagogy have you felt thoroughly prepared to enact?

__________________________________________________________________________________________________________

What aspects of mathematics pedagogy have you felt inadequately prepared to enact?

__________________________________________________________________________________________________________

What has been your greatest concern/frustration with the student teaching experience?

__________________________________________________________________________________________________________

Other comments/observations

__________________________________________________________________________________________________________

__________________________________________________________________________________________________________

Date ___________________________ Grade Level ___________________________

Student Teacher Candidate ___________________________ School ___________________________
SUPERVISING TEACHER QUESTIONNAIRE

What mathematical topics did the candidate appear thoroughly prepared to teach?

________________________________________________________________________________________

________________________________________________________________________________________

Have you noticed any mathematical topics the candidate appeared inadequately prepared to teach (if any)?

________________________________________________________________________________________

________________________________________________________________________________________

What aspects of mathematics pedagogy did the candidate appear thoroughly prepared to enact?

________________________________________________________________________________________

________________________________________________________________________________________

What aspects of mathematics pedagogy did the candidate appear inadequately prepared to enact?

________________________________________________________________________________________

________________________________________________________________________________________

What has been your overall impression of the preparation of the candidate?

________________________________________________________________________________________

________________________________________________________________________________________

Other comments/observations

________________________________________________________________________________________

________________________________________________________________________________________

Date ___________________________ Grade Level ___________________________

Supervising Teacher ___________________________ School ___________________________
On the basis of observation and evaluation, we state that the performance of said teacher candidate met the professional teaching competencies in a _____ basic, _____ proficient or______ distinguished manner. (Please check one level as the overall performance.)

Comments:

______________________________________________________________________________

______________________________________________________________________________

Supervising Teacher  Signature  Date
(Please print)

Comments:

______________________________________________________________________________

______________________________________________________________________________

University Supervisor  Signature  Date
(Please print)

As the student teacher observed and evaluated, I have examined this assessment of my student teaching.

Comments:

______________________________________________________________________________

______________________________________________________________________________

Teacher Candidate  Signature  Date
(Please print)