Part 1: Secondary MATH Assessment (NCTM SPA Standards)

INDIANA UNIVERSITY - PURDUE UNIVERSITY FORT WAYNE (IPFW)
College of Education and Public Policy

Department of Educational Studies
Secondary Mathematics Student Teaching FINAL Evaluation

As part of understanding what knowledge, skills, and dispositions our students possess, we are asking you to complete an end-of-clinical evaluation. This tool is comprised of three different parts. The first part is based on the National Council of Teachers of Mathematics (NCTM) standards for beginning teachers. The second part contains knowledge and skills as outlined by InTASC and CAEP, our accreditating body. The last part asks to you to consider the dispositions that are valued by the faculty at IPFW. In other words, these dispositions align with our Conceptual Framework. You will also be asked to provide a narrative summary of the Student Teacher's performance. Thank you in advance for the time you put into this evaluation -- it is very important to us and the Student Teacher.

Evaluation Information:

Date of Evaluation mm/dd/yyyy	
Teacher Candidate (Student) Name	
Teacher Candidate (Student) email	
School	
Grade Level	
University Supervisor Name	
University Supervisor email	
Cooperating Teacher Name	
Cooperating Teacher email	

Number of students:

NCTM 2a - Mathematical Practices

Use problem solving to develop conceptual understanding, make sense of a wide variety of problems and persevere in solving them, apply and adapt a variety of strategies in solving problems confronted within the field of mathematics and other contexts, and formulate and test conjectures in order to frame generalizations.

ACCEPTABLE

Candidates use problem solving to
- develop conceptual understanding and to formulate and test generalizations;
- make sense of a wide variety of problems and persevere in solving them;
- apply and adapt a variety of strategies in solving problems confronted within the field of mathematics and other contexts; AND
- formulate and test conjectures in order to frame generalizations.
○

UNACCEPTABLE

Candidate
- engages in minimal problem solving,
- does not persist at tasks,
- applies strategies ineffectively to solve a problem, and/or
- does not work toward generalizations.
○

TARGET

Everything at acceptable level plus:
- monitors and reflects on the process of mathematical problem solving.
○

NCTM 2b - Mathematical Practices

Reason abstractly, reflectively, and quantitatively with attention to units, constructing viable arguments and proofs, and critiquing the reasoning of others; represent and model generalizations using mathematics; recognize structure and express regularity in patterns of mathematical reasoning;use multiple representations to model and describe mathematics; and utilize appropriate math vocabulary and symbols to communicate math ideas to others.

TARGET	ACCEPTABLE	UNACCEPTABLE
Everything at acceptable level plus: - demonstrates an appreciation for mathematical rigor and inquiry.	Candidate: - reasons abstractly, reflectively, and quantitatively with attention to units, constructing viable arguments and proofs, and critiquing the reasoning of others; - represents and models generalizations using mathematics; - recognizes structure and expresses regularity in patterns of mathematical reasoning; - uses multiple representations to model and describe mathematics; AND - uses appropriate mathematical vocabulary and symbols to communicate mathematical ideas to others.	Candidate - reasons concretely, - represents and models specific equations using one familiar approach, - fails to search for or recognize patterns in reasoning, and/or - uses inaccurate or misleading vocabulary when communicating.
○	○	○

NCTM 2C - Mathematical Practices

Formulate, represent, analyze, and interpret mathematical models derived from real-world contexts or mathematical problems.

TARGET	ACCEPTABLE	UNACCEPTABLE
Item at acceptable level, plus: - demonstrates flexibility in mathematical modeling when confronted with different purposes or contexts..	Candidate: - formulates, represents, analyzes, interprets, and validates mathematical models derived from real-world contexts or mathematical problems.	Candidate struggles to - formulate and represent mathematical models derived from mathematical problems.
○	○	○

NCTM 2d - Mathematical Practices

2d) Organize mathematical thinking and use the language of mathematics to express ideas precisely, both orally and in writing to multiple audiences.

TARGET	**ACCEPTABLE**	**UNACCEPTABLE**
Candidate: - organizes mathematical thinking, AND - uses the language of mathematics to express ideas precisely, both orally and in writing to multiple audiences including peers, teachers, students, school professionals, and/or other stakeholders. ○	Candidate: - organizes mathematical thinking, AND - uses the language of mathematics to express ideas precisely, both orally and in writing to peers, teachers, or students. ○	Candidate - is disorganized in mathematical thinking and/or - uses the language of mathematics, both orally and in writing, imprecisely with one or more audiences. ○

Comments for NCTM 2:

NCTM 3a - Content Pedagogy

Apply knowledge of curriculum standards for secondary mathematics and their relationship to student learning within and across mathematical domains.

TARGET	**ACCEPTABLE**	**UNACCEPTABLE**
Both items at acceptable evel plus: - demonstrates how mathematics curriculum standards and learning progressions impact the teaching of secondary students at different developmental levels. ○	Candidate: - applies knowledge of mathematics curriculum standards for secondary in their teaching within and across mathematical domains. - relates mathematics curriculum standards to student learning. ○	Candidate - teaches standards and/or concepts in isolation, demonstrating minimal links within and across mathematical domains and to student learning. ○

NCTM 3b - Content Pedagogy

Analyze and consider research in planning for and leading students in rich mathematical learning experiences.

TARGET
Both items at acceptable level plus:
- extends their repertoire of research-based instructional methods that address students' diverse learning needs through participation in leadership opportunities such as conferences, use of journals and on-line resources, and engagement with professional organizations.
○

ACCEPTABLE
Candidate:
- analyzes and considers research in planning for mathematics instruction, AND
- incorporates research-based methods when leading students in rich mathematical learning experiences.
○

UNACCEPTABLE
Candidate
- relies on instructors' manual for guidance when planning instruction.
○

NCTM 3c - Content Pedagogy

Plan 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.

ACCEPTABLE
Candidate:
- plans lessons and units that incorporate a variety of strategies;
- plans lessons and units addressing student differences and diverse populations and how these differences influence student learning of mathematics;

TARGET
Everything at acceptable level plus:
- includes in planned lessons and units multiple opportunities and solution avenues for students to demonstrate conceptual understanding and procedural proficiency.
○

- includes mathematics-specific and instructional technologies in planned lessons and units; AND
- builds all students' conceptual understanding and procedural proficiency in planned lessons and units.
○

UNACCEPTABLE
Candidate
- plans lessons based on their favorite strategy, plans for two or fewer aspects of learners characteristics,
- misses opportunities for incorporating technology, and/or
- focuses exclusively on students' procedural proficiency.
○

NCTM 3f - Content Pedagogy

Plan, select, implement, interpret, and use formative and summative assessments to inform instruction by reflecting on mathematical proficiencies essential for all students.

TARGET	ACCEPTABLE	UNACCEPTABLE
Both items at acceptable level plus - uses assessment results for subsequent instructional planning.	Candidate: - plans, selects, and implements formative and summative assessments, AND - interprets and uses formative and summative assessments to inform instruction by reflecting on mathematical proficiencies essential for all students.	Candidate - implements primarily summative assessments; and/or - is unclear as to the influence of the data collected on instruction.
○	○	○

Comments for NCTM 3:

NCTM 4b - Mathematical Learning Environment

Plan and create 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.

TARGET	ACCEPTABLE	UNACCEPTABLE
Both items at acceptable level plus - creates a developmentally appropriate and challenging sequence of instruction for all students that shows a progression of learning over time toward proficiency and understanding.	Candidate: - plans and creates sequential learning opportunities in which students connect new learning to prior knowledge and experiences, AND - creates a sequence of developmentally appropriate and challenging learning opportunities grounded in mathematics education research in which students are actively engaged in building new knowledge.	Candidate plans learning opportunities that - seem independent from each other, not clearly linking prior knowledge to new knowledge; or - are not sequential, developmentally appropriate, or challenging.
○	○	○

NCTM 4d - Mathematical Learning Environment

Demonstrate equitable and ethical treatment of and high expectations for all students.

TARGET
Candidate:
- demonstrates equitable and ethical treatment of all students.
- has high expectations for all students and persist in helping each student reach his/her full potential.
- demonstrates respect for and responsiveness to the cultural backgrounds and differing perspectives students bring to the classroom.
○

ACCEPTABLE
Candidate:
- demonstrates equitable and ethical treatment of all students.
- has high expectations for all students.
○

UNACCEPTABLE
Candidate
- demonstrates bias toward one or more student(s) resulting in inequitable and unethical treatment for one or more students; and/or
- has lower expectations for some students.
○

NCTM 4e - Mathematical Learning Environment

Apply 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 make sound decisions about when such tools enhance teaching and learning, recognizing both the insights to be gained and possible limitations of such tools.

TARGET
Both items at acceptable level plus
- participates in learning opportunities (i.e., professional development) that address current and emerging technologies in support of mathematics learning and teaching.
○

ACCEPTABLE
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; AND
- makes sound decisions about when instructional tools enhance teaching and learning and recognize both the insights to be gained and possible limitations of such tools.
○

UNACCEPTABLE
Candidate
- has a preferred instructional tool and uses it frequently, to the exclusion of other appropriate tools or when the preferred tool is not the most appropriate one for the task.
○

Comments for ACEI Standard 4:

NCTM 5b - Impact on Student Learning

Engage students in developmentally appropriate mathematical activities and investigations that require active engagement and include mathematics-specific technology in building new knowledge.

TARGET	ACCEPTABLE	UNACCEPTABLE
Both items at acceptable level plus - facilitates students' ability to develop future inquiries based on current analyses. ○	Candidates: -engages students in developmentally appropriate mathematical activities and investigations that require active engagement in building new knowledge AND - engages students in developmentally appropriate mathematical activities and investigations that include mathematics-specific technology in building new knowledge. ○	Candidate plans mathematical activities that - are not at the appropriate level – either too hard or too easy; - do not actively engage the learner; and/or - do not include mathematics-specific technology to facilitate the building of new knowledge. ○

NCTM 5c -Impact on Student Learning

Collect, organize, analyze, and reflect on diagnostic, formative, and summative assessment evidence and determine the extent to which students' mathematical proficiencies have increased as a result of their instruction.

TARGET	ACCEPTABLE	UNACCEPTABLE
Both items at acceptable level plus - uses assessment results as a basis for designing and modifying their instruction as a means to meet group and individual needs and increase student performance. ○	Candidate: - collects, organizes, analyzes, and reflects on diagnostic, formative, and summative assessment data AND - determines the extent to which students' mathematical proficiencies have increased as a result of their instruction. ○	Candidate - collects formative and summative data, but doesn't link it to the strengths or weaknesses of their instruction. ○

Comments for NCTM 5:

NCTM 6b - Professional Knowledge & Skills

Engage in continuous and collaborative learning that draws upon research in mathematics education to inform practice; enhance learning opportunities for all students' mathematical knowledge development; involve colleagues, other school professionals, families, and various stakeholders; and advance their development as a reflective practitioner.

TARGET	ACCEPTABLE	UNACCEPTABLE
Everything at acceptable level plus - uses resources, analyses of instruction, and professional development experiences to enhance student learning of mathematics.	Candidate: - engages in continuous and collaborative learning as a means of enhancing students' learning opportunities in mathematics; - uses research in mathematics education to inform practice; - enhances all students' knowledge of mathematics; - involves colleagues, other school professionals, families, and various stakeholders in the educational process; AND - continues her/his development as a reflective practitioner.	Candidate - engages in learning opportunities as required, not to enhance students' learning; - bases practices on past experiences as a learner or on feedback from others; - acts independently in the educational process, rather than in collaboration with others; and/or - development as a reflective practitioner is inconsistent.
○	○	○

NCTM 6c - Professional Knowledge & Skills

Utilize resources from professional mathematics education organizations such as print, digital, and virtual resources/collections.

TARGET	ACCEPTABLE	UNACCEPTABLE
Item at acceptable level plus - uses research-based resources from professional mathematics education organizations that target positively impacting student learning.	Candidate: - uses resources from professional mathematics education organizations such as print, digital, and virtual resources and collections.	Candidate - uses print, digital, and virtual resources and collections without consideration or evaluation of the source(s).
○	○	○

Comments for NCTM 6:

** You have completed Part 1. Please verify your answers before hitting the button below to continue to Parts 2 and 3.**

Part 2 - Unit-wide Assessment (CAEP/InTASC Stnds)

Learners & Learning

The candidate regularly assesses development and learning of each student and uses that information to scaffold to next levels.

InTASC #1

CAEP 1.1

Target	**Acceptable**	**Unacceptable**
Candidate regularly assesses learning (e.g., performance, abilities, and skills) of individuals and the group. Data are used to design responsive curriculum and instruction to scaffold the next level of learning.	Candidate assesses, albeit inconsistently, learning (e.g., performance, abilities, and skills) of individuals and the group. Data are used to design responsive curriculum and instruction to meet learners' needs.	Candidate infrequently assesses learning for individuals and group. Curriculum and instruction are selected without reference to learning characteristics.
○	○	○

Content Knowledge

Candidate uses interactive technology efficiently and effectively to achieve content-specific learning goals.

InTASC #5

CAEP 1.5

Unacceptable

Target
Candidate engages students in use of and critical analysis of different media and communication technologies in their content area to achieve specific learning goals. The media are used in such a way that students are helped to reflect on the content of their learning.
○

Acceptable
Candidate engages students in use and critical analysis of different media and communication technologies that are applicable and connected to the specific learning goals for the content area.
○

Candidate uses different media and communication technologies that are generic in nature (i.e., not connected directly to the specific content area) or have limited utility for enriching learning in the content area. Students are not encouraged to respond critically to the technology selected.
○

Content Knowledge

Candidate engages students in making meaning of the content by examining it through diverse perspectives and personal responses.

InTASC #4

CAEP 1.1

Target
Candidate engages students in discovering meaning of the content by questioning and analyzing ideas from diverse perspectives in content texts, materials, performances, and/or labs. Students are challenged to connect their personal responses to other larger meanings and critical stances in the content area.
○

Acceptable
Candidate engages students in making meaning of content texts, materials, performances, or labs by providing diverse materials and opportunities for personal response.
○

Unacceptable
Candidate provides content text, materials, performances, and/or labs from limited perspectives, thus restricting the students' ability to engage in making meaning. Or, candidates might over-emphasize students' personal responses to the content.
○

Instructional Practice

Candidate uses both formative and summative assessment to document learning.

InTASC #6

CAEP 1.1

Target	**Acceptable**	**Unacceptable**
Candidate balances the use of formative and summative assessments, as appropriate, to support, verify, and document learning.	Candidate uses both formative and summative assessments to document learning.	Candidate relies significantly on one assessment method over the other. Data are used to demonstrate what students do not know or are unable to do.
O	O	O

Instructional Practice

The candidate selects learning experiences that reflect curriculum goals and content standards while being relevant to learners.

InTASC #7

CAEP 1.1

Target	**Acceptable**	**Unacceptable**
Candidate creates learning experiences that are meaningful to learners due to students' contextual variables and prior knowledge. The experiences also align to curriculum and content standards	Candidate selects learning experiences based on students' prior knowledge. The experiences also reflect curriculum and content standards, yet sometimes not directly.	Candidate follows curriculum guides or sequence with minimal consideration to how meaningful experiences are for learners or for addressing content standards.
O	O	O

Instructional Practice

Candidates use technology to support student learning through gathering, interpreting, evaluating, and applying information.

InTASC #8

CAEP 1.1

Target		**Unacceptable**
Technology tools are used to access, interpret, evaluate, and apply information. Candidate uses the technology to engage the students in higher order thinking skills. In addition, technology is age appropriate, and builds student creativity, communication, and/or collaboration skills.	**Acceptable** Technology is used to access, interpret, evaluate, and apply information. In addition, it is age appropriate and supports student learning.	Technology use focuses on accessing information or repeating information, rather than supporting student learning. The approach may also lack engagement or be age inappropriate.
◯	◯	◯

Professional Responsibility

The candidate uses a variety of self-assessment strategies to analyze and reflect on his/her practice.

InTASC #9

CAEP 3.6

Target		**Unacceptable**
Candidate creates a plan for reflecting on practices during and after instruction. The data gathered via the strategies are analyzed and used to make a variety of adaptations/ adjustments (e.g., organizational, instructional, materials, etc.) that benefit the students.	**Acceptable** Candidate creates a plan for reflecting on practice after instruction occurs. The data gathered via the strategies are analyzed and used to make improvements to future instructional plans.	Candidate reflects on practice in an unplanned, unsystematic way or only when prompted by someone to do so. Experiences are reflected on in a holistic manner without reference to specific data. In addition, the candidate may lack links between changes made and data collected.
◯	◯	◯

Professional Responsibility

The candidate understands laws related to learners' rights and teacher responsibilities.

InTASC #9

CAEP 3.6

Target	Acceptable	Unacceptable
Candidate understands and appropriately applies educational laws, especially confidentiality, requirements for reporting child abuse and neglect and discrimination/ harassment/bullying.	Candidate demonstrates a firm understanding of educational laws, especially confidentiality, requirements for reporting child abuse and neglect and discrimination/harassment /bullying.	Candidate demonstrates misunderstandings or gaps in knowledge concerning educational laws, especially confidentiality, requirements for reporting child abuse and neglect and/or discrimination/ harassment/bullying.
◯	◯	◯

Professional Responsibility

The candidate demonstrates professional ethics and respect for others in the use of technology (e.g., learning management system, social media).

InTASC #9

CAEP 1.5

Target	Acceptable	Unacceptable
Candidate explicitly teaches and supports students' application of digital citizenship characteristics.When necessary, family members are notified in advance of classroom activities.	Candidate follows characteristics of digital citizenship when developing lesson plans that incorporate technology. Reminders or prompts for students are outlined. When necessary, family members are notified in advance of classroom activities.	Candidate does not acknowledge, support, or follow components of digital citizenship for self or students. Family members are not notified in advance of classroom activities when it was necessary.
◯	◯	◯

You have completed Parts 1 and 2. Please verify your answers before hitting the button below to continue to Part 3.

Part 3: Unit-wide Disposition Assessment (CAEP/InTASC Stnds)

College of Education and Public Policy

Disposition Assessment

Indicator 1: DEMOCRACY & COMMUNITY: Builds a community based on belief that each **child/adolescent (c/a**) can learn to high levels.

InTASC #2

CAEP 3.3

Target	**ACCEPTABLE**	**UNACCEPTABLE**
Communicates through words and actions that each c/a can learn to high levels. Communicates faith in values, strengths, and competencies of each c/a and family. Communicates high expectations through design and delivery of challenging curriculum and assessments that foster high-level skills for each c/a. ◯	Communicates through words and actions that each c/a can learn to high levels. Communicates positive perspectives about c/a and families. Supplements prescribed curriculum with enrichment experiences that reflect some c/a's lives outside of school. ◯	Communicates through words and actions that some (not all) c/a can learn to high levels. Communicates negative perspectives about a c/a or families. Sets minimal expectations for c/a performance. Seeks minimal information about c/a's lives outside of school, usually in response to a problem. ◯

Indicator 2: DEMOCRACY & COMMUNITY: Values diversity and uses it to create inclusive classroom.

InTASC # 2

CAEP 3.3

TARGET	**ACCEPTABLE**	**UNACCEPTABLE**
Value in culturally responsive practices is evident in delivery of instruction, such as cooperative learning, storytelling, and acceptance of code-switching in oral and written discourse. In conjunction with c/a, identifies biases in curricular materials, pedagogical practices, and assessments, and makes appropriate adjustments. ◯	Supplements prescribed curriculum through integration of multicultural literature and content. Engages c/a in dialogue to find out their perceptions and understandings about the world and their place in it. Builds multiple perspectives into classroom activities and assignments. ◯	Displays a negative attitude towards diversity OR displays a superficial understanding of it. Perspective of dominant group dictates classroom materials, activities, and assignments. ◯

Indicator 3: HABITS OF MIND: Relentless in belief about the importance of teachers using critical thinking, reflection, and professional development to grow as a teacher.
InTASC # 9

TARGET	ACCEPTABLE	UNACCEPTABLE
Independently reflects on effectiveness of teaching by asking critical questions. Approaches professional growth from a critical thinking, inquiry perspective. Seeks out opportunities within learning environment to grow as a professional.	Makes changes to practices in response to feedback. Participates in professional development opportunities, including professional learning communities, scholarly endeavors, and/or teacher research.	Overly dependent on feedback from others OR disregards feedback provided. Actively avoids engaging intellectually in professional development opportunities
◯	◯	◯

Indicator 4: HABITS OF MIND: Committed to designing meaningful, intellectually engaging curriculum.
InTASC # 7
CAEP 3.3

TARGET	ACCEPTABLE	UNACCEPTABLE
Makes c/a's habits of mind visible through inquiries or investigations (critiquing, questioning, analyzing, evaluating). Ties together multiple concepts so that similarities and differences are understood by c/a.	Creates a context that is supportive in developing c/a's habits of mind. Encourages multiple pathways for solving problems. Judiciously utilizes worksheets or tests.	Engages in behaviors that result in intellectual dependency of c/a, for example, show, tell, and demonstrate. Teaches one way to solve a problem and accepts only that method. Follows teaching manual, curriculum guides, or colleagues without evaluating potential engagement levels by c/a's.
◯	◯	◯

Indicator 5: ADVOCACY:

Willingness to engage ethical responsibilities to help each child learn.

InTASC # 9

CAEP 3.3

TARGET	**ACCEPTABLE**	**UNACCEPTABLE**
Creates innovative solutions to issues of classroom complexity and learning environments. Collaborates with multiple stakeholders before developing a plan for success for a c/a. Consistently uses ethical guidelines to inform decision making.	Generates standard, technical, or traditional solutions to issues. Coordinates actions with colleagues to meet students' learning needs. Uses ethical guidelines, albeit inconsistently, in decision making.	Relies on others to identify issues and/or solutions. Important educational decisions are made independently without communicating with families or colleagues. Violates ethical guidelines such as confidentiality when making decisions.
○	○	○

Indicator 6: ADVOCACY: Persistent in advocating for and promoting the profession.

InTASC # 10

CAEP 3.3

TARGET	**ACCEPTABLE**	**UNACCEPTABLE**
Advocates for the mission of the school through involvement in events that extend beyond the school day. OR Engages in public pedagogy on educational issues or the teaching profession.	Projects positive view of profession to others. When appropriate, reframes negative comments about c/a, families, colleagues, or the profession.	Initiates or adds to negativity about c/a, families, colleagues, or profession, projecting a negative view of the profession to others.
○	○	○

COMMENTS - FOR FINAL EVALUATION ONLY:

This is the most important part of the rating of the student teacher. This narrative summary should be reasonably detailed, complete, and accurate, including reference to specific examples of the student teacher's skills. It should address the student teacher's abilities and readiness to be a first-year teacher. The summary should include your recommendation of the student teacher's potential as a member of the profession. Please remember that many times candidates are required to include this as part of their job application packet.

Final Recommendation

○ Recommend for licensing

○ Recommend for licensing with reservations

○ I do not recommend for licensing

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