

# NATIONAL RECOGNITION REPORT

## Initial Preparation of Mathematics Teachers at the Secondary Level (2012 Standards)

National recognition of this program is dependent on the review of the program by representatives of the National Council of Teachers of Mathematics (NCTM).

### COVER PAGE

**Name of Institution**

Lehman College - CUNY School of Education, NY

**Date of Review**

MM DD YYYY

02 / 01 / 2021

**This report is in response to a(n):**

- Initial Review
- Revised Report
- Response to Conditions Report

**Program Covered by this Review**

Mathematics Education (G) - Accelerated

**Grade Level<sup>(1)</sup>**

7-12

(1) e.g. Early Childhood; Elementary K-6

**Program Type**

First teaching license

**Award or Degree Level**

- Baccalaureate
- Post Baccalaureate
- Master's

### PART A - RECOGNITION DECISION

**SPA decision on national recognition of the program(s):**

- Nationally recognized
- Nationally recognized with conditions
- Further development required **OR** Nationally recognized with probation **OR** Not nationally recognized [See Part G]

**Test Results (from information supplied in Assessment #1, if applicable)****The program meets or exceeds SPA benchmarked licensure test data requirement, if applicable:**

- Yes
- No
- Not applicable
- Not able to determine

**Comments, if necessary, concerning Test Results:**

Under CAEP, there is no stated policy and no CAEP standard stating an 80% pass rate requirement on licensure tests. Additional information can be found at <http://www.caepnet.org/accreditation/caep-accreditation/spa-program-review-process/data-requirements-for-spa-review>.

**Summary of Strengths:**

The field experiences and student teaching provide candidates opportunities to engage with students from diverse backgrounds including ethnic and cultural differences, socioeconomically disadvantaged students, students who are English language learners, and students with exceptionalities.

## PART B - STATUS OF MEETING SPA STANDARDS

### Standard 1: Content Knowledge

**Effective teachers of secondary mathematics demonstrate and apply knowledge of major mathematics concepts, algorithms, procedures, connections, and applications within and among mathematical content domains.**

Preservice teacher candidates:

1a) Demonstrate and apply knowledge of major mathematics concepts, algorithms, procedures, applications in varied contexts, and connections within and among mathematical domains (Number, Algebra, Geometry, Trigonometry, Statistics, Probability, Calculus, and Discrete Mathematics) as outlined in the *NCTM Mathematics Content for Secondary*.

Met



Met with Conditions



Not Met



**Standard 1 Comments:**

State-required licensure test(s) aligned to NCTM CAEP Mathematics Content for Secondary and at least one additional assessment collectively demonstrating at least an 80% alignment to each domain of the NCTM CAEP Mathematics Content for Secondary providing evidence that Element 1a\* is met at the acceptable or target level are required in order to satisfy the preponderance of evidence for Standard 1.

\*: Indicates essential (required) element

Section III of the program report indicates Assessments 1 and 2 address this standard.

\*Element 1a: MET

Assessment 1 (NY CST 04/004) provides evidence for the mathematical domain competencies specified in the NCTM CAEP Mathematics Content for Secondary alignment on the NCTM website ([www.nctm.org/caep](http://www.nctm.org/caep)) and noted in the feedback section below.

Assessment 2 (Course Grades) provides evidence for the mathematical domain competencies noted in the Feedback section below.

Feedback on the NCTM CAEP Mathematics Content for Secondary alignment:

A.1 Number and Quantity Competencies SATISFIED (At least 80% competency alignment)

Assessment 1 (NY CST 004) continues to provide evidence for A.1.1, A.1.3, and A.1.4. Assessment 2 (Course Grades) provides evidence for A.1.1 (MAT 237, 314, CMP 167),

A.1.2 (MAT 236, 314, CMP 167), A.1.3 (MAT 175, 176), A.1.4 (MAT 313, 237), and A.1.5 (MAT 343).

A.2 Algebra Competencies SATISFIED (At least 80% competency alignment)

Assessment 1 (NY CST 004) provides evidence for A.2.1, A.2.2, A.2.3, A.2.4, and A.2.6.

Assessment 2 (Course Grades) provides evidence for A.2.1 (MAT 175, 176, 237), A.2.2 (MAT 175, 176, 237, CMP 167), A.2.3 (MAT 175, 237), A.2.4 (MAT 175, 176), A.2.5 (MAT 313), A.2.6 (MAT 314), and A.2.7 (MAT 343).

A.3 Geometry and Trigonometry Competencies SATISFIED (At least 80% competency alignment)

Assessment 1 (NY CST 004) provides evidence for A.3.1, A.3.2, A.3.3, A.3.4, A.3.5, A.3.6, A.3.8, and A.3.9.

Assessment 2 (Course Grades) provides evidence for A.3.1 (MAT 345), A.3.2 (MAT 314, 345), A.3.3 (MAT 345, 314), A.3.4 (MAT 345, 176), A.3.5 (MAT 175, 176), A.3.6 (MAT 226, 345), A.3.8 (MAT 345), and A.3.10 (MAT 343, 345). MAT 345 provides partial evidence for A.3.9 (does not address conics). There is insufficient evidence for A.3.7 (MAT 345 does not clearly address the competency).

A.4 Statistics and Probability Competencies SATISFIED (At least 80% competency alignment)

Assessment 1 (NY CST 004) provides evidence for A.4.3, A.4.4, and A.4.5.

Assessment 2 (Course Grades) provides evidence for A.4.2 (ESC 301), A.4.4 (MAT 237), and A.4.6 (MAT 343). There is partial evidence for A.4.3 (ESC 301 and MAT 237 do not address graphical representations of data). There is insufficient evidence for A.4.1 (ESC 301 does not clearly address the competency) and A.4.5 (ESC 301 and MAT 237 do not clearly address the competency).

A.5 Calculus Competencies SATISFIED (At least 80% competency alignment)

Assessment 1 (NY CST 004) provides evidence for A.5.1, A.5.3, and A.5.5.

Assessment 2 (Course Grades) provides evidence for A.5.1 (MAT 175, 176), A.5.3 (MAT 175, 320), A.5.4 (MAT 226), A.5.5 (MAT 175, 176, 226), and A.5.6 (MAT 343). There is partial evidence for A.5.2 (MAT 225 does not address polar functions).

A.6 Discrete Mathematics Competencies SATISFIED (At least 80% competency alignment)

Assessment 2 (Course Grades) provides evidence for A.6.1 (MAT 237), A.6.2. (MAT 237), A.6.3 (MAT 237), A.6.4 (MAT 237, CMP 167), and A.6.5 (MAT 343).

## **Standard 2: Mathematical Practices**

**Effective teachers of secondary mathematics solve problems, represent mathematical ideas, reason, prove, use mathematical models, attend to precision, identify elements of structure, generalize, engage in mathematical communication, and make connections as essential mathematical practices. They understand that these practices intersect with mathematical content and that understanding relies on the ability to demonstrate these practices within and among mathematical domains and in their teaching.**

Preservice teacher candidates:

2a) 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.

2b) 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 mathematical vocabulary and symbols to communicate mathematical ideas to others.

2c) Formulate, represent, analyze, and interpret mathematical models derived from real-world contexts or mathematical problems.

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

2e) Demonstrate the interconnectedness of mathematical ideas and how they build on one another and recognize and apply mathematical connections among mathematical ideas and across various content areas and real-world contexts.

2f) Model how the development of mathematical understanding within and among mathematical domains intersects with the mathematical practices of problem solving, reasoning, communicating, connecting, and representing.

Met

Met with Conditions

Not Met

**Standard 2 Comments:**

In order to satisfy the preponderance of evidence for Standard 2, Elements 2a\*, 2b\*, and at least 2 additional elements must be met at the acceptable or target level; at least two assessments must provide collective evidence for the overall Standard.

\*: Indicates essential (required) elements

Section III of the program report indicates Assessments 2, 3, 4, and 6 address this standard.

\*Element 2a: MET

Assessment 2 (Course Grades) provides evidence for Element 2a.

Assessment 3 (Plan for Instruction) provides evidence for Element 2a.

Assessment 4 (Student Teacher Observation Evaluation) provides evidence for Element 2a.

Assessment 6 (Problem Solving Episode) provides evidence for Element 2a.

\*Element 2b: MET

Assessment 2 (Course Grades) provides evidence for Element 2b.

Assessment 3 (Plan for Instruction) provides evidence for Element 2b.

Assessment 4 (Student Teacher Observation Evaluation) provides evidence for Element 2b.

Assessment 6 (Problem Solving Episode) provides evidence for Element 2b.

Element 2c: MET

Assessment 2 (Course Grades) provides evidence for Element 2c.

Assessment 3 (Plan for Instruction) provides evidence for Element 2c.

Assessment 4 (Student Teacher Observation Evaluation) provides evidence for Element 2c.

Assessment 6 (Problem Solving Episode) provides evidence for Element 2c.

Element 2d: MET

Assessment 2 (Course Grades) provides evidence for Element 2d.

Assessment 4 (Student Teacher Observation Evaluation) provides evidence for Element 2d.

Assessment 6 (Problem Solving Episode) provides evidence for Element 2d.

Element 2e: MET

Assessment 2 (Course Grades) provides evidence for Element 2e.

Assessment 6 (Problem Solving Episode) provides evidence for Element 2e.

## Element 2f: MET

Assessment 2 (Course Grades) provides evidence for Element 2f.

Assessment 6 (Problem Solving Episode) provides evidence for Element 2f.

### 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.**

Preservice teacher candidates:

3a) Apply knowledge of curriculum standards for secondary mathematics and their relationship to student learning within and across mathematical domains.

3b) Analyze and consider research in planning for and leading students in rich mathematical learning experiences.

3c) 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.

3d) Provide students with opportunities to communicate about mathematics and make connections among mathematics, other content areas, everyday life, and the workplace.

3e) Implement 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

3f) Plan, select, implement, interpret, and use formative and summative assessments to inform instruction by reflecting on mathematical proficiencies essential for all students.

3g) Monitor students' progress, make instructional decisions, and measure students' mathematical understanding and ability using formative and summative assessments.

Met

Met with Conditions

Not Met



#### Standard 3 Comments:

In order to satisfy the preponderance of evidence for Standard 3, Elements 3a\*, 3c\*, 3f\* and at least 1 additional element must be met at the acceptable or target level; at least two assessments must provide collective evidence for the overall Standard.

\*: Indicates essential (required) elements

Section III of the program report indicates Assessments 3, 4, 5, 6, and 8 address this standard.

#### \*Element 3a: MET

Assessment 3 (Plan for Instruction) provides evidence for Element 3a.

Assessment 4 (STEF) provides insufficient evidence for Element 3a. Rubric descriptions (particularly those using words like consistently, regularly, mostly, rarely, most, some, few) do not sufficiently convey specific and discernible candidate behaviors that would characterize performance at each level and assure interrater reliability.

Assessment 6 (Problem Solving Episodes) provides evidence for Element 3a.

#### Element 3b: MET

Assessment 3 (Plan for Instruction) provides partial evidence for Element 3b (leading students in rich mathematical learning experiences is not addressed).

Assessment 4 (STEF) provides evidence for Element 3b.

Assessment 5 (Impact on Student Learning) provides evidence for Element 3b.

Assessment 6 (Problem Solving Episodes) provides evidence for Element 3b.

Assessment 8 (Portfolio) provides insufficient evidence for Element 3b. This

assignment is not focused on planning episodes of instruction.

**\*Element 3c: MET**

Assessment 3 (Plan for Instruction) provides evidence for Element 3c.

Assessment 4 (STEF) provides insufficient evidence for Element 3c. Rubric descriptions (particularly those using words like consistently, regularly, mostly, rarely, most, some, few) do not sufficiently convey specific and discernible candidate behaviors that would characterize performance at each level and assure interrater reliability.

Assessment 5 (Impact on Student Learning) provides evidence for Element 3c.

Assessment 6 (Problem Solving Episodes) provides evidence for Element 3c.

**Element 3d: MET**

Assessment 4 (STEF) provides evidence for Element 3d.

Assessment 6 (Problem Solving Episodes) provides evidence for Element 3d.

**Element 3e: MET**

Assessment 4 (STEF) provides partial evidence for Element 3e (does not address active engagement and high quality tasks).

Assessment 5 (Impact on Student Learning) provides insufficient evidence for Element 3e (engaging students in learning and doing mathematics, providing instruction that incorporates high quality tasks and a range of questioning strategies, guide productive mathematical discussions, and engage students in communicating about mathematics are not addressed).

Assessment 6 (Problem Solving Episodes) provides evidence for Element 3e.

**\*Element 3f: MET**

Assessment 3 (Plan for Instruction) provides evidence for Element 3f.

Assessment 4 (STEF) provides evidence for Element 3f.

Assessment 5 (Impact on Student Learning) provides evidence for Element 3f.

Assessment 6 (Problem Solving Episodes) provides insufficient evidence for Element 3f. This assignment does not provide evidence of formative assessment; only summative assessment is indicated. The rubric components contain multiple behaviors that render making decisions on candidate performance an impossibility.

**Element 3g: MET**

Assessment 4 (STEF) provides evidence for Element 3g.

Assessment 5 (Impact on Student Learning) provides evidence for Element 3g.

Assessment 6 (Problem Solving Episodes) provides insufficient evidence for Element 3g. This assignment does not provide evidence of formative assessment; only summative assessment is indicated.

**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.**

Preservice teacher candidates:

- 4a) Exhibit knowledge of adolescent learning, development, and behavior and demonstrate a positive disposition toward mathematical processes and learning.
- 4b) 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.
- 4c) Incorporate knowledge of individual differences and the cultural and language diversity that exists within classrooms and include culturally relevant perspectives as a means to motivate and engage students.
- 4d) Demonstrate equitable and ethical treatment of and high expectations for all students.
- 4e) 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.

Met

Met with Conditions

Not Met

**Standard 4 Comments:**

In order to satisfy the preponderance of evidence for Standard 4, Elements 4b\*, 4d\*, and 4e\* must be met at the acceptable or target level; at least two assessments must provide collective evidence for the overall Standard.

\*: Indicates essential (required) elements

Section III of the program report indicates Assessments 3, 4, 5, and 8 address this standard.

Element 4a: NOT MET

Assessment 4 (STEF) provides partial evidence for Element 4a; does not address positive disposition.

Assessment 5 (Impact on Student Learning) provides insufficient evidence for Element 4a (demonstration of a positive disposition toward mathematical processes and learning is not addressed).

Assessment 8 (Portfolio) provides insufficient evidence for Element 4a. The rubric components contain multiple behaviors that render making decisions on candidate performance an impossibility. Demonstrating a positive disposition toward mathematical processes and learning is not addressed.

\*Element 4b: MET

Assessment 3 (Plan for Instruction) provides evidence for Element 4b.

Assessment 4 (STEF) provides evidence for Element 4b.

Element 4c: MET

Assessment 3 (Plan for Instruction) provides insufficient evidence for Element 4c.

Rubric descriptions (particularly those using words like consistently, regularly, mostly, rarely, most, some, few) do not sufficiently convey specific and discernible candidate behaviors that would characterize performance at each level and assure interrater reliability. Part of the rubric does not differentiate between acceptable and target.

Assessment 4 (STEF) provides evidence for Element 4c.

Assessment 5 (Impact on Student Learning) does not provide evidence for Element 4c (culturally relevant perspectives as a means to motivate and engage students is not addressed).

\*Element 4d: MET

Assessment 4 (STEF) provides evidence for Element 4d.

Assessment 5 (Impact on Student Learning) provides evidence for Element 4d.

Assessment 8 (Portfolio) provides insufficient evidence for Element 4d. This assessment does not provide candidates an opportunity to demonstrate equitable and ethical treatment of and high expectations for all students.

\*Element 4e: MET

Assessment 4 (STEF) provides evidence for Element 4e.

**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.**

Preservice teacher candidates:

5a) Verify 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.

5b) Engage students in developmentally appropriate mathematical activities and investigations that require active engagement and include mathematics-specific technology in building new knowledge.

5c) 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.

Met

Met with Conditions

Not Met



**Standard 5 Comments:**

In order to satisfy the preponderance of evidence for Standard 5, Element 5c\* and at least 1 additional element must be met at the acceptable or target level; at least two assessments must provide collective evidence for the overall Standard.

\*: Indicates essential (required) elements

Section III of the program report indicates Assessments 3, 4, and 5 address this standard.

Element 5a: MET

Assessment 4 (STEF) provides evidence for Element 5a.

Assessment 5 (Impact on Student Learning) provides evidence for Element 5a.

Element 5b: MET

Assessment 3 (Plan for Instruction) provides evidence for Element 5b.

Assessment 4 (STEF) provides evidence for Element 5b.

Assessment 5 (Impact on Student Learning) provides evidence for Element 5b.

\*Element 5c: MET

Assessment 3 (Plan for Instruction) provides insufficient evidence for Element 5c.

There is no indication that the unit is implemented, so, it is unclear where data from student mathematical proficiencies are derived.

Assessment 4 (STEF) provides insufficient evidence for meeting Element 5c. It is unclear if candidates collect, organize, analyze, and reflect on diagnostic, formative, and summative assessment evidence.

Assessment 5 (Impact on Student Learning) provides evidence for Element 5c.

**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.**

Preservice teacher candidates:

6a) Take an active role in their professional growth by participating in professional development experiences that directly relate to the learning and teaching of mathematics.

6b) 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.

6c) Utilize resources from professional mathematics education organizations such as print, digital, and virtual resources/collections.

Met

Met with Conditions

Not Met



**Standard 6 Comments:**

In order to satisfy the preponderance of evidence for Standard 6, Element 6b\* and at least 1 additional element must be met at the acceptable or target level; at least two assessments must provide collective evidence for the overall Standard.

\*: Indicates essential (required) elements

Section III of the program report indicates Assessments 3, 4, 5, and 8 address this standard.

Although Section III of the program report indicates Assessment 6 provides evidence to support this standard, no alignment to elements of this standard is found.

Element 6a: MET

Assessment 4 (STEF) provides evidence for Element 6a.

Assessment 8 (Portfolio) provides insufficient evidence for Element 6a. Rubric descriptions (particularly those using words like consistently, regularly, mostly, rarely, most, some, few) do not sufficiently convey specific and discernible candidate behaviors that would characterize performance at each level and assure interrater reliability.

\*Element 6b: MET

Assessment 4 (STEF) provides partial evidence for Element 6b. Only distinguished and proficient levels address use of research to inform practice; does not address enhancing all students' knowledge of mathematics or involving stakeholders. For this element, Assessment 4 employs a generic rubric that does not address specific NCTM elements or sub-elements.

Assessment 5 (Impact on Student Learning) provides evidence for Element 6b.

Assessment 8 (Portfolio) provides partial evidence for meeting Element 6b (only addresses use of mathematics research and being a reflective practitioner).

Element 6c: MET

Assessment 4 (STEF) provides evidence for Element 6c.

Assessment 8 (Portfolio) provides evidence for Element 5c.

**Standard 7: Secondary Mathematics Field Experiences and Clinical Practice**

**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.**

Preservice teacher candidates:

7a) Engage in a sequence of planned field experiences and clinical practice prior to a full-time student teaching/internship experience that include 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.

7b) Experience full-time student teaching/internship in secondary mathematics that is supervised by a highly qualified mathematics teacher and a university or college supervisor with secondary mathematics teaching experience or equivalent knowledge base.

7c) Develop knowledge, skills, and professional behaviors across both middle and high school settings; examine the nature of mathematics, how mathematics should be taught, and how students learn mathematics; and observe and analyze a range of approaches to mathematics teaching and learning, focusing on tasks, discourse, environment, and assessment.

Met



Met with Conditions



Not Met



**Standard 7 Comments:**

Information included in Section I - Context #2 of the program report for Element 7a\* and in Section I - Context #2 and #6 for Element 7b\* and at least one assessment for Element 7c\* providing evidence that Elements 7a\*, 7b\*, and 7c\* are met at the acceptable or target level are required in order to satisfy the preponderance of evidence for Standard 7.

\*: Indicates essential (required) elements

\*Element 7a: MET

Candidates participate in early field experiences in middle and high school settings, supervised by experienced and highly qualified mathematics teachers, in a variety of settings and with as diverse range of students.

\*Element 7b: MET

Candidates experience full-time student teaching in secondary mathematics, supervised by experienced and highly qualified mathematics teachers by a college supervisor with secondary teaching experience.

Section III of the program report indicates Assessments 4, 5, and 8 address Element 7c\*.

\*Element 7c: MET

Assessment 4 (STEF) provides evidence for Element 7c.

Assessment 5 (Impact on Student Learning) provides insufficient evidence for Element 7c (does not address the element).

Assessment 8 (Portfolio) provides evidence for Element 7c.

## PART C - EVALUATION OF PROGRAM REPORT EVIDENCE

### C.1. Candidates' knowledge of content

Assessments 1 (NY CST 004) and 2 (Course Grades) provide sufficient evidence of candidates' content knowledge.

Assessments 3 (Curriculum Unit) and 6 (Problem Solving Episode) collectively provide evidence for the candidate mathematical practices (Standard 2).

### C.2. Candidates' ability to understand and apply pedagogical and professional content knowledge, skills, and dispositions

Assessment 3 (Plan for Instruction), 4 (STEF), 6 (Problem Solving Episode), and new Assessment 8 (Portfolio) provide sufficient evidence for candidates' ability to understand and apply pedagogical and professional content knowledge, and skills and

dispositions.

### C.3. Candidate effects on P-12 student learning

Assessments 3 (Plan for Instruction), 4 (Student Teacher Observation Evaluation), and 5 (Impact on Student Learning) provide evidence of candidate effects on P-12 student learning.

## PART D - EVALUATION OF THE USE OF ASSESSMENT RESULTS

**Evidence that assessment results are evaluated and applied to the improvement of candidate performance and strengthening of the program (as discussed in Section V of the program report)**

The program has examined the candidates' content knowledge and works closely with the Mathematics Department to improve content courses. The faculty closely monitor the students' performances on the exams and are implementing new entrance requirements. They also provide a detailed reflection on candidates' professional and pedagogical skills and impact on student learning. They are planning to implement new courses on classroom management and assessment.

## PART E - AREAS FOR CONSIDERATION

**Areas for consideration**

NCTM 2020 Standards for Secondary and Middle Level Mathematics were released in Summer 2020. Documentation can be found at [www.nctm.org/caep](http://www.nctm.org/caep). Programs should begin transitioning assessments to align with the new standards.

## PART F - ADDITIONAL COMMENTS

**F.1. Comments on Section I (Context) and other topics not covered in Parts B-E:**

**F.2. Concerns for possible follow-up by the CAEP site visitors:**

## PART G - DECISIONS

**Please select final decision:**

- National Recognition.** The program is recognized through the semester and year of the provider's next CAEP accreditation decision in 5-7 years. The Recognition Report will serve as program level evidence for the accreditation cycle it has been initiated. **To retain recognition and to gather new evidence for the next accreditation cycle, another program report must be submitted mid-cycle 3 years in advance of the next scheduled accreditation visit.** The program will be listed as Nationally Recognized through the semester of the next CAEP accreditation decision on websites and/or other publications of the SPA and CAEP. The institution may designate its program as Nationally Recognized by the SPA, through the semester of the next CAEP accreditation decision, in its published materials. *Please note that once a program has been Nationally Recognized, it may not submit another report addressing any unmet standards or other concerns cited in the recognition report.*

**Please click "Next"**

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This is the end of the report. Please click "Next" to proceed.