



# College of Education

## MA in STEM Education Program & Residency Handbook

2020-2021

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### **Rowan University Mission Statement**

A leading public institution, Rowan University combines liberal education with professional preparation from the baccalaureate through the doctorate. Rowan provides a collaborative, learning-centered environment in which highly qualified and diverse faculty, staff, and students integrate teaching, research, scholarship, creative activity and community service. Through intellectual, social and cultural contributions, the university enriches the lives of those in the campus community and surrounding region.

### **About Rowan University**

Since its founding in 1923, Rowan University has evolved from a teacher preparation college to a bustling regional university that's ranked among the best public universities in the North by *U.S. News and World Report*. Today, Rowan's more than 14,000 students choose from more than 80 bachelor and 60 master's degree programs, five doctoral programs and two professional programs. The university is one of just 56 institutions in the country with accredited programs in business, education, engineering and medicine.

### **Rowan University College of Education Vision Statement**

The College of Education will be a leading force in preparing and supporting reflective practitioners who use education to transform our global society.

### **Rowan University College of Education Mission Statement**

To positively impact and develop local, regional, national and global educational communities by:

- collaborating with partners in the field to promote learning and the mental and physical health of diverse learners in all settings
- integrating teaching, research, and service to advance knowledge in the field
- preparing and supporting professionals through the development of knowledge, skills and dispositions with the ultimate goal of ensuring equitable educational opportunities for all learners.

### **Teacher Preparation at Rowan University**

The College of Education offers programs in teacher education and other human services fields. Rowan University enjoys an outstanding reputation as a teacher preparatory institution. Rowan University was awarded the first Program of Distinction in Teacher Education by the New Jersey State Department of Higher Education. The Rowan University teacher education program is large and comprehensive and has consistently earned national accreditation from the National Council for the Accreditation of Teacher Education (NCATE). In addition to teacher education, the College of Education offers baccalaureate and graduate degree program options and concentrations in other professional and human services fields. Many of these programs are in the fields that serve the changing needs of our educational society and offer broad opportunities for employment or continued study.



**College of Education Administration**

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**COE Policies and Procedures**

<http://www.rowan.edu/colleges/education/ofe/index.html>

### Overview of the MA in STEM Education and Residency

The Master of Arts in STEM Education offers the unique opportunity for students who have undergraduate degrees in mathematics, engineering, or the sciences to pursue an initial New Jersey teaching certificate in mathematics and/or the sciences and a Master’s degree simultaneously. This program is carefully designed such that all coursework has a STEM (Science, Technology, Engineering, Mathematics) focus that provides the ideal pedagogical preparation for prospective Biology, Chemistry, Mathematics or Physics teachers in the K-12 setting, particularly in grades 6-12.

**MA in STEM Education Course Schedule** *(Please note if you are coming in from a CADP track, courses listed for the entry summer session should have already been taken.)*

Rowan University Master of Arts in STEM Education					
2020-2021 Cohort Course Schedule					
	Summer 2020 <i>Doesn't apply to CADP entry candidates</i>	Fall 2020	Spring 2021	Summer 2021	
<b>Length and Mode of Delivery for Each Course</b>	<p><b>STEM 60501: STEM Teaching &amp; Research Methods I (3 SH)</b> [Pre-req: Matriculation in the MA in the STEM Education]</p>	<p><b>STEM 60512: STEM Education Residency I (1 SH)</b> [Pre-req: B- or higher in STEM 60501, READ 30520, STEM 60510] Offered face-to-face across 15 weeks beginning and ending with the standard start and end dates for the term</p>	<p><b>STEM 60503: STEM Teaching &amp; Research Methods III: Math (6 SH)</b></p> <p><b>STEM 60523: STEM Teaching &amp; Research Methods III: Science (6 SH)</b> [Pre-req: B- or higher in STEM 60502 STEM, 60512, STEM 60522, SELN 60576] Offered face-to-face across 15 weeks beginning and ending with the standard start and end dates for the term</p>	<p><b>STEM 60504: Professional Seminar for STEM Educators (3 SH)</b> [Pre-req: B- or higher in STEM 60513 STEM 60503] Offered face-to-face dates TBA – last date June 30th</p>	
	<p><b>READ 30520: Content Area Literacy (3 SH)</b> [No Pre-reqs] Offered as a HYBRID course across 8 weeks.</p>	<p><b>STEM 60502: STEM Teaching &amp; Research Methods II: Math (5 SH)</b></p> <p><b>STEM 60522: STEM Teaching &amp; Research Methods II: Science (5 SH)</b> [Pre-req: B- or higher in STEM 60501, READ 30520, STEM 60510] Offered face-to-face across 15 weeks beginning and ending with the standard start and end dates for the term</p>	<p><b>STEM 60513: STEM Education Residency II (3 SH)</b> [Pre-req: B- or higher in STEM 60502 STEM 60512, SELN 60576] Offered face-to-face across 18 weeks beginning with the standard start date and ending by June 30<sup>h</sup>.</p>	<p>*Note: STEM 60504 is for students in their final semester</p>	
	<p><b>STEM 60510: Teaching STEM in Diverse Settings (3 SH)</b> [Pre-req: Matriculation in the MA in STEM Education program] Offered as a HYBRID course across 8 weeks.</p>	<p><b>SELN 60576: Inclusive Instruction in STEM Classrooms (3 SH)</b> [Pre-req: B- or higher in STEM 60501, READ 30520, STEM 60510] Offered 100% ONLINE across 8 weeks beginning October and ending December.</p>			
	<p><b>SMED 60550 - Schools &amp; Society: Foundations for Secondary Teaching (3 SH)</b> [No Pre-reqs] Offered face-to-face: Meeting dates TBA</p>				

## Program Course Descriptions

### **STEM 60501: STEM: Teaching & Research Methods I**

**3 s.h.**

*Prerequisites: Matriculation in MA in Stem Education (G845)*

*Corequisites: Teaching STEM in Diverse Settings (STEM 60510) and READ 30520: Content Area Literacy*

This is the first course in the 3-course STEM methods sequence for candidates in the Master of Arts in STEM Education program. Through integrated STEM coursework, candidates will focus on learning how to make content explicit; eliciting and interpret students' thinking; engage in strategic relationship-building conversations with students; analyze instruction for the purpose of improving it; and communicate with other professionals.

### **STEM 60510: Teaching STEM in Diverse Settings**

**3 s.h.**

*Prerequisites: Matriculation in the MA in STEM Education*

*Corequisites: STEM 60501, READ 30520*

This course will enable STEM Education candidates to gain a multifaceted understanding of the individual and institutional elements that impact student achievement in STEM. Candidates will investigate the role that gender, SES, race, ethnicity, home language, religion, and other identity-based aspects shape school experiences, learning, and achievement in STEM. Candidates will then learn about specific approaches and instructional practices that they can use in the classroom to promote learning for nonmainstream students, including teaching academic language, differentiating instruction and assessments, and supporting home, community and school partnerships.

### **READ 30520: Content Area Literacy**

**3 s.h.**

This course is designed for reading and non-reading majors interested in increasing knowledge and skills in teaching reading in the content areas. It is a required course for those seeking an M.A. in reading. Instruction is provided in the developmental aspects of reading with little emphasis on corrective or remedial practices. The content of the course may be oriented toward the subject matter areas represented by the students enrolled in the course. Special emphasis is also given to developing vocabulary, comprehension, and study skills as well as to assessing pupil ability to read content material and to select suitable materials for instruction.

### **SMED 60550 - Schools & Society: Foundations for Secondary Teaching**

**3 s.h.**

This introductory course addresses a number of foundational questions in the field of education, including: Who goes to school and for what purposes? What is taught and who decides? How are schools organized and who funds them? How are schools different now than they were 100 years ago? What legal precedents and reform movements have shaped education today? How are schools in the United States similar to and different from those abroad? In addition to reading and discussing works by seminal scholars in the field of education, students will also be required to engage in a field-based service-learning project in order to build a bridge between theory and practice. Students are expected to spend 3 hours/week in the field engaged in their project. Placements will be facilitated by the Office of Field Experiences.

### **STEM 60502: STEM: Teaching & Research Methods II: Math**

**5 s.h.**

*Prerequisites: B- or higher in: STEM 60501, STEM 60510, and READ 30520*

This is the second course in the 3-course STEM methods sequence for candidates in the Master of Arts in STEM Education program. Through integrated STEM coursework, candidates will learn high-leverage instructional and assessment strategies used in STEM classrooms with a focus in Math.

### **STEM 60522: STEM: Teaching & Research Methods II: Science**

**5 s.h.**

*Prerequisites: B- or higher in: STEM 60501, STEM 60510, and READ 30520*

This is the second course in the 3-course STEM methods sequence for candidates in the Master of Arts in STEM Education program. Through integrated STEM coursework, candidates will learn high-leverage instructional and assessment strategies used in STEM classrooms with a focus in Science.

### **STEM 60512: STEM: Education Residency I**

**1 s.h.**

*Prerequisites: B- or higher in: STEM 60501, STEM 60550, STEM 60510; and READ 30520*

This course serves as the first semester of the yearlong teacher residency required for candidates in the MA in STEM Education. Each resident is placed in a middle or high school and attends that placement 4 full days per week during the Fall semester. Using both Rowan and placement school district measures of teaching effectiveness, supervisors will evaluate residents on requires demonstrated mastery of subject area content, lesson planning, and multiple instructional strategies to meet varied student needs and demonstrated ability to assess learner progress and modify instruction accordingly, manage all aspects of classroom activity, and work collaboratively with all instructional, administrative, parental, and community members of the classroom and school community.

**SELN 60576: Inclusive Instruction in STEM Classrooms****3 s.h.***Prerequisites: B- or higher in: STEM 60501, READ 30520, STEM 60510**Corequisites: STEM 60502 and STEM 60512*

With a focus on STEM education for students with special needs, this course is designed to begin developing the knowledge, skills, and dispositions necessary for STEM teachers to understand and education students in inclusive classrooms. Emphasis will be on: (a) understanding the legal foundations for inclusive instruction, (b) recognizing students' diverse strengths and needs, (c) designing, implementing, and assessing effectively differentiated lessons that feature research-based strategies, and (d) organizing and managing a flexible, student-centered classroom.

**STEM 60503: STEM: Teaching & Research Methods III: Math****6 s.h.***Prerequisites: B- or higher in STEM 60502, STEM 60512, SELN 60576*

With a focus on content area Math Assessment, Analysis of Student Learning, and Teacher Research, the objectives for the course will be STEM-focused and based on the High Leverage Practices identified and studied by education faculty at the University of Michigan (<http://teachingworks.org/work-of-teaching/high-leverage-practices>). Upon completion of the course, prospective STEM teachers will demonstrate the ability to:

- Set long and short-term learning goals for students referenced to external benchmarks
- Appraise, choose, and modify tasks and texts for a specific learning goal
- Design a sequence of lessons toward a specific learning goal
- Select and use particular methods to check understanding and monitor student learning
- Compose, select, interpret, and use information from methods of summative assessment
- Analyze instruction for the purpose of improving it
- Communicate with other professionals

**STEM 60523: STEM: Teaching & Research Methods III: Science****6 s.h.***Prerequisites: B- or higher in STEM 60522, STEM 60512, SELN 60576*

With a focus on content area Science Assessment, Analysis of Student Learning, and Teacher Research, the objectives for the course will be STEM-focused and based on the High Leverage Practices identified and studied by education faculty at the University of Michigan (<http://teachingworks.org/work-of-teaching/high-leverage-practices>). Upon completion of the course, prospective STEM teachers will demonstrate the ability to:

- Set long and short-term learning goals for students referenced to external benchmarks
- Appraise, choose, and modify tasks and texts for a specific learning goal
- Design a sequence of lessons toward a specific learning goal
- Select and use particular methods to check understanding and monitor student learning
- Compose, select, interpret, and use information from methods of summative assessment
- Analyze instruction for the purpose of improving it
- Communicate with other professionals

**STEM 60513: STEM: Education Residency II****3 s.h.***Prerequisites: B- or higher in: STEM 60502, STEM 60522, STEM 60512 and SELN 60576*

This is the second of the two field experiences required for candidates in the MA in STEM Education. Continuing in their field placement from STEM Education Residency I, candidates will attend their field placements 4 full days per week during the Spring semester. Using both Rowan and placement school district measures of teaching effectiveness, supervisors will evaluate residents on requires demonstrated mastery of subject area content, lesson planning, and multiple instructional strategies to meet varied student needs and demonstrated ability to assess learner progress and modify instruction accordingly, manage all aspects of classroom activity, and work collaboratively with all instructional, administrative, parental, and community members of the classroom and school community. The course will run from January through June to enable candidates to engage in all end-of-year activities at their residency sites.

**STEM 60504: Professional Seminar for STEM Educators****3 s.h.***Prerequisites: B- or higher in STEM 60513 and STEM 60503 or STEM 60523*

This is the capstone course in the MA in STEM Education and will prepare candidates for their teaching positions by focusing on issues critical to new teachers. The course is designed to support candidates in their final transition from teacher candidate to teacher. Topics include understanding school climate, developing a professional development plan, developing a plan for communicating with families, planning for the first six weeks (or unit) of school, and preparing for a substitute teacher.

## Overview of the Residency

### Residency – 10 months

- One school year (September-June), following district calendar (including pre-planning, holidays, winter break, spring break, professional days, and end-of-year closing)
- Monday-Thursday – TRs intern at school during normal school contract hours and as needed for planning, tutoring and other after-school activities, meetings, parent conferences, and open houses
- Fridays – TRs attend classes during Rowan’s Fall and Spring semesters (Note: During Rowan’s winter-session, TRs report to their field placements on Fridays.)

### *Completed residency will require all of the following:*

- Successful completion of 10-month residency
- Demonstrated competency in the skills, knowledge and dispositions required for teachers (as documented through observations and evaluations)
- Successful final evaluations, culminating in the University’s recommendation for teacher certification (Certificate of Eligibility with Advanced Standing)
- Adherence to attendance and all other policies

### *Teacher Residency Attendance Policy*

The TR has an obligation to be consistent and punctual in attendance for all school-related activities.

- The TR should arrive at the time designated by the CT and Principal. She/he should remain at the school for the time duration as specified by the University Supervisor. Minimally, the program suggests that residents arrive approximately 15 minutes before the first bell and stay 15 minutes after the last bell if no other required school-based activities are scheduled.
- The TR is expected to be present for all assigned days in the schools. Absences related to illness or death in the immediate family will be excused with documentation. If a TR must miss days due to reasons cited, all work must be made up. The CT and University Supervisor will determine how the TR can make up the work. TRs may also be required to attend mandatory professional development training as designated by the University.
- The TR must attend all school-based meetings and professional development sessions.
- If TRs are absent more than 6 times during the yearlong residency, they may be removed from the placement. This includes days for job interviews. Partial absences will count as one absence.



## The Collaborative Teaching Model: Stages of the Residency

The MA in STEM Education is framed around three stages designed to serve as a model of the collaborative relationship between the TR and the CT. While the length and structure of each stage will vary, all are important to the success of the residency. The duration of each stage is dependent upon a satisfactory evaluation by the Supervisor (with continuous input from the CT).

### I. Early Observation [September]

- The TR is introduced to the class as a co-teacher, not a student teacher.\*\*
- The TR establishes relationships with the students, becoming familiar with student needs, interests, and profiles.
- The TR observes and assists the CT in modeling effective lessons, including differentiated instruction.
- The TR observes and assists in classroom management procedures.
- The CT leads pre- and post-lesson conferences with the TR to evaluate, reflect, answer questions and plan for future lessons.
- The TR observes methods in which the CT collects and records student data to implement data-informed decision-making.
- The CT introduces the TR to the school culture and the resources available to support academic achievement of diverse learners.

\*\* The CT begins to establish the TR as the co-teacher from the *beginning* of the residency.

The CT conducts informal and formal (written – using the Classroom Observation Process forms) observations along with the Supervisor, conducts formal observations of the TR and provides feedback, according to the University’s established timelines.

### II. Collaborative Teaching [October-January]

- The TR begins to use relationships with students and understanding of student profiles to facilitate all classroom activities.
- The TR and the CT will work together as a team, co-planning and co-teaching effective lesson, including differentiated instruction. (The TR and the CT may vary the lead teacher role giving both CT and TR opportunities to demonstrate effective teaching practices.)
- The TR begins to implement and practice consistency in classroom management procedures.
- CT and TR co-facilitate pre- and post-lesson conferences to evaluate, reflect, answer questions and plan for future lessons.
- The TR and the CT jointly collect and record student data to implement data-informed decision-making.
- The TR begins to utilize the school culture and the resources available to support academic achievement of diverse learners. The CT, along with the Supervisor, conducts formal observations of the TR and provides feedback, according to the University’s established timelines. It is recommended that near the middle or end of this part of the experience, the TR teach full lessons as a lead teacher in the class if and only if the CT and supervisor deem them ready.

### III. TR as Lead Teacher: Full Responsibility for Teaching ONE Class in the Collaborative Model [Second semester]

- The TR builds on established relationships with the students and understanding of student profiles to facilitate all classroom activities – FOR ONE CLASS. If the Supervisor and CT agree that the TR is ready to take on additional classes, then the TR will assume new duties.
- The TR plans and teaches effective teaching practices, including differentiated instruction.
- The TR maintains consistent classroom management procedures.
- The TR leads post-lesson conferences to evaluate, reflect, answer questions and plan for future lessons.
- The TR collects and records student data to implement data-informed decision-making.
- The TR utilizes the school culture and the resources available to support academic achievement of diverse learners.

\*\* The CT may provide support as needed in all of the above steps.

### Addressing Concerns

- If progress is not satisfactory, the CT should discuss the specifics of the concern with the TR and the Supervisor as soon as the situation becomes apparent; document all discussions.
- The CT and TR should work together to develop strategies to overcome the problem.
- In consultation with the TR and the University Supervisor, decide upon a course of action.
- Invite the assistance of the MA STEM Program Coordinator, if CT or supervisor feels it would be helpful and/or necessary.

## Roles and Responsibilities for Teacher Residents

Teacher residents (TRs) in the MA in STEM Education program are designated placements through the Office of Field Experience. Coursework begins in June (For those on a CADP track coursework begins in Spring i.e. last semester of senior year in undergraduate program, prior to full residency) and continues, along with the residency, in September, concluding in June of the following year. The TRs complete university coursework and a yearlong residency to fulfill requirements for the MA in STEM Education program, and NJ licensure requirements for a teaching certificate in K-12 Biology, Chemistry, Mathematics, Physics, Earth and Space Science or Physical Science.

### Requirements Prior to Beginning Residency

- **Benchmarks including GPA and Passing Praxis Core and Praxis II Exams**
- **Mantoux TB Test**
  - Students who are in a school setting 20 or more hours per month must have a valid Mantoux test. A Mantoux test would be invalid if you have been out of a school setting over six (6) months. A copy of your Mantoux test should be taken with you to any school in which you are placed. A copy of your current Mantoux test must be filed with the student health center.
  - The Wellness Center (Student Health Center) located in Linden Hall (256-4333) offers the Mantoux Test on Monday thru Friday 9 a.m. to 5 p.m. There is a \$10.00 fee. You must return within 48-72 hours to have the results noted by a nurse. If you do not return, your test will not be valid because the time for interpretation cannot be more than 72 hours. You will then have to repeat the test with an additional cost of \$10.00.
  - If you choose not to use the Wellness Center, you may have the Mantoux Test done at your own doctor's office.
  - Students are responsible for keeping their Mantoux test results up to date. Upon the request of the school, students must provide a copy of a valid Mantoux test to the school to which they are assigned for any and all field placements.
- **Criminal History Background**
  - Many school districts are asking for candidates to be fingerprinted and have a criminal background check or hold a substitute teacher certification in order to be placed for any field experience. Any individual applying for a position in a public or private school in New Jersey will be required to undergo a criminal background check.
  - If a student is placed in a district that requires a criminal background check prior to the start of a field experience, the student will be notified of the procedure to follow.
  - Once notified, it becomes the student's responsibility to comply with the requirement within identified timeframes.  
**Failure to do so may result in a denial of placement and removal from the corresponding courses.**
- **Attend and participate in District-Level New Teacher Orientation sessions**
- **Attend and participate in all District Pre-planning sessions**
- **Gather and study school, district, and teacher information (edTPA guidelines can be helpful):**
  - School/District handbooks/policies regarding
    - §| Student discipline policies/procedures with copies of forms, letters, etc. and your guidelines for sending students to the principal and how these responsibilities will be shared, transferred, and returned to the teacher
    - §| Health and safety information and procedures for fire drill, lock down drills, evacuation, security, health emergency, medications, child abuse/neglect, and first aid
    - § Procedures/policies for communication with parents/administration/others and sample forms
    - § Assessment procedures, sample report cards and progress reports
    - § Allowable student contact/communication policies
  - Map of the school and location/room numbers of: restrooms, media center, computer labs, teacher workrooms, classrooms, and specialty instruction areas
  - Textbooks with teacher editions and curriculum guides with NJ Core Curriculum Content Standards
  - School, teaching, lunch and duty schedules
  - Faculty and staff roster listing names, email addresses and position
  - Class lists (including student IEPs, 504s, special needs, health issues, etc.)
  - Extracurricular opportunities
  - Professional development opportunities
  - Secure access to online gradebooks used in the school, if possible

### Requirements throughout Residency

- Enact moves that support the primary goal of the placement: P-12 student achievement.
- Be on time as directed by the expectations of the school, CT, and supervisor.
- Video-record lessons daily once the first lesson has been taught.
- Dress professionally/appropriately for the setting.
- Fulfill written, video-recorded, and meeting obligations for CT, supervisor, and university as assigned.
- Daily, observe the collaborating teacher and/or other teachers using the Observation Process Form (If your supervisor does not assign an area of focus, you are to choose one area of focus for each observation.)
- Meet with collaborating teacher and supervisor for pre/post observation conferences.
- Participate in non-teaching school assignments, meetings, and/or other professional development and involvement.
- Follow the *Collaborative Teaching Model: Stages of the Residency* (p.8 of this document).

### Spring Semester Requirements

- During the school's spring semester, each TR must have one class for the duration of the second half of the year for which he or she takes lead responsibility for planning, teaching, and assessing, with the CT serving primarily as resource and support. This is different from traditional student teaching in which the student teacher "takes over" a whole schedule for of the semester. Fellows are to focus acutely on one class and continue to learn about planning and assessment (and teacher moves) by serving as co-planner/co-assessor/co-teacher with their CT in the other classes.
- For a minimum 2-week span during the Spring Semester, the TR will assume primary responsibility (lead planning, assessment, and instruction) for ALL of the classes in the CT's schedule.
- TRs must ready plan all edTPA requirements and finalize such requirements by the end of the term.

All performance assessments will be submitted electronically by university supervisors and collaborating teachers via Tk20. In addition, teacher residents will complete a capstone project through edTPA.

### Substitute Teaching

- TRs **may not substitute teach in the district in which they are placed during any field placements**. This includes the entire year of the placement.
- TRs may not miss school for any paying jobs, including substituting.

## Roles and Responsibilities for Collaborating Teachers

Each TR works closely with a Collaborating Teacher (CT) based on agreement between school, school district and the Rowan University College of Education Office of Field Experience for the full year of the residency.

### Collaborating Teacher

Designated Collaborating Teachers (CTs) are experienced teachers dedicated to mastering their craft, promoting excellence in the teaching profession, and mentoring novice teachers. CTs receive a yearly stipend for their role as a skilled colleague. CTs support TRs by providing supportive environments in which Teacher Residents develop the habits and skills of excellent teachers. Rowan University Collaborating Teachers provide this support by:

- **Co-teaching** with the TR from September to June of the placement school academic calendar Monday through Thursday and continuing the flow of the classes on Fridays when the TR is completing coursework at Rowan;
- **Mentoring** the TR in school-based culture, policies, and protocols;
- **Opening their classroom** to frequent visits by University professors and TR supervisor;
- Informally and formally **evaluating** the TR in collaboration with his or her supervisor;
- **Including project-developed integrated STEM activities** in his or her classroom;
- **Attending scheduled MA STEM program orientation / conferences** and any forwarded **professional development activities**.

### Collaborating Teacher Qualifications

District faculty assigned to supervise teacher candidates shall (per NJAC 6A:9-10.3):

- Be approved by the principal and district office with input from Rowan;
- Have a minimum of three years of successful teaching experience, including one with the district;
- Possess a standard instructional certificate in the appropriate content area;
- Have appropriate certification that coincides with the area of instruction for which the candidate is being prepared; and
- Be a full-time district faculty member with demonstrated expertise in the field of mentoring/supervision. It is *preferred* but not an obligation that the CT holds a minimum of a Masters Degree.

### Checklist in Preparation for the Initial Meeting with the Teacher Resident [June 2<sup>nd</sup>, 4:00-5:00]

- Develop an agenda for your first meeting
  - Contact information
  - Goals, Expectations, Responsibilities (setting mutually agreed upon norms)
  - Feedback strategies and meeting times
  - District policies regarding allowable contact with students (DOs and DONTs)
- Prepare materials that the teacher resident will need to perform his/her responsibilities
- Plan to assist in setting up observations with other teachers/administrators in your school
- Ask the Teacher Resident to provide a profile of his/her experiences
  - Previous teaching and field experiences (district, school, grade level, subject)
  - Courses taken in a particular area (e.g., child development, reading)
  - Strengths and skills that will help students learn
  - Residents expectations
  - Previous work experience, hobbies and interests
- Organize your classroom so that the teacher resident has a work place similar to yours in location and area
- Share pertinent student information such as IEPs, 504s or other special needs
- Prepare the school community and your students for the arrival of the teacher resident

## Focused Mentoring Themed Questions

The following themed questions are for guiding teacher residents in their approach to best practices in teaching during their full residency year.

### August/September

#### **Theme 1: Beginning-of-the-Year Structures/Effective Classroom Environments**

What routines have I established for starting class? Ending class? Transitioning? Bathroom? Etc.

What record-keeping procedures must be in place?

Is there a way to manage my time more effectively?

#### **Theme 2: School-Based Resources—Personnel and Non-Personnel Resources**

Who is available to support teaching and psychosocial development in the school and the community?

What programs—school-based and community-based—are available to students?

What facilities/materials are available?

#### **Theme 3: Creating a Class Profile**

What instructional data/information do I have for the students in my classroom?

What key assessments can I use to determine instructional baselines?

What instructional groupings will I create to support instruction?

Are there students with IEPs, ELLs, or other special populations?

### October/November

#### **Theme 1: Revisiting Effective Classroom Environments**

Does my classroom reflect and promote student learning?

How am I managing instructional time? Is my pacing effective?

Are students respectful of me and of their classmates?

Do students have the opportunity to take responsibility for themselves and for other students?

Am I reinforcing positive behavior?

#### **Theme 2: Lesson Planning**

What learning objectives have I identified and with which standards have I aligned my lesson?

How have I differentiated my lesson to meet the needs of all my learners?

What will I use as evidence of student learning?

What components and sequencing will my lesson entail?

How will I conclude the lesson?

#### **Theme 3: Working with Families**

What communication will I have with families? Phone, letters, email, texts, blogs, etc.

What communication method will I use to start the school year?

How will I maintain regular communication?

How will I structure instructional conferences with families?

**December/January**

**Theme 1: Understanding and Organizing Subject Matter—Taking the Long View of the Curriculum**

What units will be covered during the next three months?

What key skills must be incorporated into learning experiences?

**Theme 2: Engaging Students in Learning**

What strategies am I using to engage all learners?

Am I cognizant of and accounting for the needs of all of my students?

**February/March/April**

**Theme: Assessing Student Learning**

What assessment strategies are in place for my students? Are these assessment strategies varied?

Do I utilize both formative and summative information to guide my instructional plans?

**May/June**

**Theme: Assessing My Effectiveness as a Teacher**

What standards guide my practice?

Using those standards of practice, how would I characterize my teaching practice? Which are my areas of strength?

Which are areas needing improvement?

What evidence do I have for the assessment I have made?

## Roles and Responsibilities of Supervisors

The University assigns a Supervisor to observe, evaluate, and coach the TRs. The Supervisor works very closely with the collaborating teacher, sharing observations, input, and responsibility for the TR's growth.

### Supervisor Qualifications

- Must have taught for at least three years in a public school setting in the same content area as the teacher resident.
- Must have earned a valid teaching certificate in the same content area as the teacher resident. It is understood that the supervisor might be a retired teacher whose certification was issued from another state or has expired.
- Must be available to visit eight times during a semester and be available to resident, collaborating teacher, and university in case of emergency.
- Must be trained in the Danielson Framework for Teaching.
- Must understand the requirements needed for edTPA

### Meetings, Observations, and Evaluations

During Rowan's Fall semester, the Supervisor:

- checks in *weekly* with the TR and CT
- completes 3-4 informal (written but not posted in Tk20) observations and
- completes 2 formal observations (separate from the 5 formal to be done in Spring)
- completes 1 Clinical Practice/Internship Midterm Evaluation with SPA Addendum (Math or Science). This document will serve as the Benchmark for the TR's work in the Spring. This will be submitted through Tk20.

During Rowan's Winter session:

- The TR works exclusively with the CT in the classroom and creates a Professional Development Plan (if needed) in response to the baseline Clinical Practice/Internship Midterm Evaluation with SPA Addendum.
- The Supervisor does not reassume responsibilities until Rowan's Spring semester begins.

During Rowan's Spring semester, the Supervisor:

- checks in *weekly* with the TR and CT
- completes a minimum of 5 formal observations (including pre- and post- conferences) in Tk20
- completes 1 Clinical Practice/Internship Final Evaluation with SPA Addendum (Math or Science) in Tk20
- By May 20<sup>th</sup>:
  - approves (informally via an email to the TR and Program Coordinator) recommendation for certification OR
  - agrees to complete 1-2 additional observations (up to the placement's last day of school) if the TR has not yet met field requirements for certification

From the end of Rowan's Spring Semester through the placement's last day of school, the Supervisor:

- checks in weekly to ensure that a candidate who has successfully completed certification requirements has continued to fulfill all responsibilities OR
- completes 1-2 additional observations as needed.

*Throughout the residency, Supervisors and CTs will meet on a regular basis to discuss progress and needs of the TR and plan and provide supports and activities to meet those needs.*

**\*Suggestions for Pre-Observation Conference: via Skype, FaceTime, ZOOM , WebEx phone conference, etc.**

- Review plans for the lesson
- Discuss
  - Objectives and how they relate to students
  - Relationship to previous lessons or connection with resident's prior experiences
  - Activities students will complete during the lesson
  - Students' behavioral expectations
  - Assessment of student learning
- Prepare resident to accommodate individual differences
- Determine student follow-up after lesson
- Point out concerns about the lesson
- Establish a particular focus during the observation

**\*Suggestions for Post-Observation Conference – Should include the CT when at all possible**

- What was/were your learning goal(s) for today's lesson?
- Did all of your students meet or exceed the goal? How do you know? (What evidence do you have?)
- What supported the students who met the goal?
- What supported the students who exceeded the goal?
- What got in the way for students who did not meet the goal?
- What will you do tomorrow (or very soon) to help these students meet the goal and others extend their understanding? Why?
- If you were to teach this lesson again, what would you repeat; what would you change? Why?
- What have you learned about teaching from this lesson?
- What have you learned about your students from this lesson?
- What have you learned about yourself from this lesson?
- Is there anything in particular you would like to focus on the next time I observe?

*\*Modified lists from Brerman, S. (1995) Guiding and Assessing Teacher Effectiveness: A Handbook for Kentucky Teacher Internship Program Participants. The University of Kentucky.*



## Classroom Observation Process

This process has been adapted from the Woodrow Wilson Foundation observation process and is based on Danielson framework indicators for best teaching practices. Classroom observations conducted should focus on a small number of key aspects of good teaching. Given the amount of time available for an observation and the need to avoid unnecessary distraction in the K12 classroom, the observation process can be based on five items

### A. Observing Teaching Residents in the Classroom: Core Components of Teaching

#### 1. Student engagement and rigor of tasks students engage in during the lesson

##### **Student engagement: the teacher involved all students in the lesson.**

This item assesses the degree to which the teacher works to ensure that all students are actively involved in the lesson. Evidence includes actions such as encouraging students who are not volunteering to participate, or walking around the room and verbally engaging students as the teacher monitors progress of the class.

##### **Student engagement: majority of students on task throughout the class.**

Assesses the amount of time students in the class are engaged in or working on a specific task or activity. On-task behavior can include asking questions, being engaged in discussion, providing answers, turning in assigned class work in a timely manner, and assisting other students. Off-task behavior involves such things as students engaging in off- topic conversations, writing notes/text messages, putting their head on the table, or doing work for another class.

##### **Rigor of tasks: intellectual rigor and challenging ideas keep students engaged.**

This indicates degree to which the teacher goes beyond simply relaying information to supporting the deeper exploration of the subject matter. This can be seen in the quality of instructional tasks in which students are expected to engage and through individual conversations between the teacher and the students, by student questions to the instructor, or through the teacher's answers to student questions

Observers should note the extent to which the teacher's instructional strategies are effective in encouraging students to explore and be engaged in relevant mathematics or science concepts. Intellectual engagement can be seen through conversations students have with one another or with the teacher in small-group settings, or by the questions, contributions, and responses the students give in whole-class settings.

#### 2. Assessment & Evidence of student learning during the lesson

##### **Evidence of learning: assessing whether students are learning during this lesson.**

This indicator captures evidence that students in the class are learning the content taught during the class. Specifically, students are able to explain/discuss what they are working on and why. *Observers should make judgments about this indicator by focusing on K12 students and not on the teacher.* In addition, observers should be wary if whether or not the teacher resident initiates students' prior concepts through engagement and uses these as a means to develop the lesson.

Evidence of learning includes students expressing their knowledge and understanding of the topic through academic writing and/or explanations that employ academic language; demonstrating how well they understand lesson content and their progress toward learning goals through their work as well as through responses to teacher questions, discussion in small groups, and other participation in the class that includes evidence for learning. Students self-assess whether they have achieved the lesson objective and provide feedback to the teacher, or that they monitor their own progress, identify their own errors and seek additional opportunities for practice.

##### **Informal assessment: formative assessment to monitor the progress of all students.**

These strategies might include formal assessments like quizzes, tests, or papers, as well as informal assessments through discussions with the class, with groups of students, and with individual students as well as teacher observations. Teacher activities might include walking around to look at the work of individual students or groups, or using questions to gauge student understanding.

Classroom observers looking for the effectiveness of these teacher strategies for monitoring student progress *should also focus on how the teacher uses the information* to inform his or her instruction. One consideration is how frequently the teacher used different ways to check for student understanding.

### 3. Differentiated instruction: quality learning opportunities for every student.

This aspect of instruction calls for teachers to respond to a learner's needs in order to maximize student growth and individual success through ongoing assessment and adjustment of instruction. Relevant strategies might include flexible grouping (and regrouping) of students, ensuring that all learners in the class have tasks that are equally interesting and equally engaging, so that each child feels challenged to understand, apply, and move on to the next learning stage. Effective differentiation includes providing authentic learning opportunities in the full range of intelligence or talent areas found in the class.

### 4. Classroom management: teacher strategies to enhance the classroom environment.

This indicator assesses the quality of the teacher's classroom management strategies, *again based on the engagement of students in learning and how they participate in the lesson* so that the teacher's management contributes to the students' learning. This includes setting clear behavioral expectations for students and making sure these expectations are met. Effective classroom management should be gauged by observing the students to see whether all students demonstrate a clear understanding of behavioral expectations and/or directions through their actions, and whether students execute transitions, routines and procedures in an orderly manner. In cases of inappropriate behavior that may occur during the course of the lesson, the observer should record the extent to which the teacher consistently and effectively deals with off-task and inappropriate behavior, adopts successful time management strategies, and utilizes behavioral modification strategies when needed.

### 5. Structures and routines to support learning: promoting understanding of important math or science concepts.

Classroom routines can positively affect students' academic performance as well as their behavior. Through these structures and routines, students have more opportunity to learn and teachers can devote more time to instruction. Routines also help to create smoother transitions between activities and allow fewer opportunities for disruptions or for the unproductive use of instructional time. Administrative routines might be things like storing coats or books, using the restroom, sharpening pencils, or making announcements. Instructional routines include getting every student's attention, involving them in learning tasks, ensuring appropriate behavior during instructional time, and perhaps having a process for handing in or returning student work. Other routines include knowing how to participate in discussions, asking questions, behaving as expected in groups, and following rules for getting the teacher's attention.

### 6. Teacher subject matter knowledge: promoting student learning by knowing the subject and how to teach it.

This item addresses how well the lesson structure allows students to make sense of important concepts, going beyond efforts to "cover" the intended content area, to promote deep conceptual understanding of the key ideas in the content area. Observers can look for evidence through the quality of questioning strategies, including those that demonstrate the teacher's knowledge of how students learn and understand the content area, the teacher's understanding of student mistakes and misconceptions, skillful facilitation of group discussions, and clear explanations of concepts.

## **B. Rowan University Classroom Teaching Observation Items**

The observation items are embedded in an observation form that allows classroom observers to make notes and draw conclusions about the quality of teaching in each area. At Rowan, we will use the ratings from the Danielson 2013 *Framework for Teaching*. A general guide for rating TR performance is included in the table below.

<b>DISTINGUISHED</b>	<b>PROFICIENT</b>	<b>BASIC</b>	<b>UNSATISFACTORY</b>
<p>Teachers performing at the Distinguished level are master teachers and make a contribution to the field, both in and outside their school. Their classrooms operate at a qualitatively different level from those of other teachers. Such classrooms consist of a community of learners, with students highly motivated and engaged and assuming considerable responsibility for their own learning.</p> <p><b>Key Traits</b></p> <ul style="list-style-type: none"> <li>•Performance is consistently of very high quality at levels from a "master" teacher</li> <li>•Classroom seems to run itself... "seamless"</li> <li>•Students work as a community</li> </ul>	<p>Teachers performing at the Proficient level clearly understand the concepts underlying the component and implements it well. Most experienced, capable teachers will regard themselves and be regarded by others as performing at this level. Teachers performing at the Proficient level have mastered the work of teaching while working to improve their practice.</p> <p><b>Key Traits</b></p> <ul style="list-style-type: none"> <li>•Performance is consistently of good quality- as expected of a proficient tenured teacher</li> <li>•Know content, students, and curriculum</li> </ul>	<p>Teachers performing at the Basic Level appear to understand the concepts underlying the component and attempts to implement its elements. But implementation is sporadic, intermittent, or otherwise not entirely successful. Additional reading, discussion, visiting classrooms of other teachers, and experience (particularly supported by a mentor) will enable the teacher to become proficient in this area.</p> <p><b>Key Traits</b></p> <ul style="list-style-type: none"> <li>•Performance is minimally competent for teachers early in their careers - characteristic of those new to the profession</li> <li>•Improvement is likely to occur</li> </ul>	<p>Teachers performing at the Unsatisfactory Level appear to understand the concepts underlying the component. Working on the fundamental practices associated with the elements will enable the teacher to grow and develop in this area.</p> <p><b>Key Traits</b></p> <ul style="list-style-type: none"> <li>•Little to no evidence of understanding of content, students, and resources</li> <li>•Poor recordkeeping and low ethical standards</li> <li>•Rigid adherence to an instructional plan despite signs that revision is needed during instruction</li> <li>•Teacher may display behaviors below minimal licensing</li> </ul>

of learners w/high level of engagement, motivation, and considerable responsibility for their own learning	and activities •Move easily to Plan B when needed •Possess a sophisticated understanding of classroom dynamics	•Implementation of activities may be rough or inconsistent	environment (Component 2a) or treating students with sarcasm or put down (Component 2C) •Intervention is needed and a priority
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An observer should not score an item unless there is specific evidence in the notes to support the judgment. For example, the notes might indicate, “student engagement is strong because all students were on task doing academic work, they participated or volunteered to participate in discussions, and their focused attention continued throughout the period of the lesson”.

Each observation item is scored by circling the appropriate rating at the bottom of the form, under the box for comments. N/A should be used if the rating item was not relevant to the observed lesson. *It does not mean that an item was not present during the class because the teacher overlooked or failed to be effective at it.* For example, if students were not engaged in learning because the teacher was not able to manage the class, the observer would score ‘unsatisfactory for both engagement and classroom management.

**Overall rating for the observation:** Rowan TRs are developing their skills as classroom teachers. No matter how they score on the classroom visit, all of them are expected to grow over time to become effective classroom teachers. Helpful observation ratings are those giving an honest assessment of what has been observed; that in turn, gives the TR a chance to get better where improvement is needed.

§ To be **adequate** as an overall assessment, all eight items must be scored as *Basic* or *Proficient*.

§ Scoring a teaching observation as **strong** is likely to be a rare event for a teacher resident; at least six of the eight items must be *Proficient* or *Distinguished* for the overall teaching event to receive a **strong**.

Teacher Subject Matter Knowledge			
The lesson structure allows students to make sense of important concepts, going beyond efforts to “cover” the intended content area, to promote deep conceptual understanding of the key ideas in the content area.			
Observers will look for evidence that:			
<ul style="list-style-type: none"> <li>❗ the resident’s teaching demonstrates a depth of content knowledge with regard to important science or mathematics topics,</li> <li>❗ s/he presents science or math ideas and topics in a knowledgeable and effective manner, and</li> <li>❗ the lesson integrates this content knowledge with appropriate pedagogical strategies for promoting student learning.</li> </ul>			
Evidence can include:			
<ul style="list-style-type: none"> <li>❗ content-material accuracy,</li> <li>❗ questioning strategies that demonstrate the teacher’s knowledge of:                             <ul style="list-style-type: none"> <li>○ how students learn</li> <li>○ how students understand the content area,</li> <li>○ student misconceptions and mistakes,</li> </ul> </li> <li>❗ skillful facilitation of group discussions, and</li> <li>❗ clear explanation of concepts, knowledge, and skills.</li> </ul>			
Observer evidence and scores			
Distinguished	Proficient	Basic	Unsatisfactory

Student Engagement & Rigor of Tasks students engage in during the lesson			
<p><b><u>Rigor and clarity of tasks: intellectual rigor and challenging ideas keep students engaged.</u></b>                      The teacher resident goes beyond simply relaying information to supporting the deeper exploration of the subject matter. Students are clear about the purpose and objectives of given tasks.</p> <p><b>Evidence might include:</b></p> <ul style="list-style-type: none"> <li>! The quality of instructional tasks in which students are expected to engage,                             <ul style="list-style-type: none"> <li>! The intellectual rigor and challenge of the tasks has the potential to keep students engaged in exploring and investigating concepts in a manner that leads them to deeper understanding of the material.</li> <li>! Directions for the task are clear.</li> <li>! Students have opportunities to clarify the task.</li> <li>! Lesson objectives are clearly defined and communicated. (Note that for problem solving, inquiry, discovery, and lab activities, the objectives/results should not be stated in advance of the activity. A whole-class debriefing/summarizing discussion should bring this out.)</li> <li>! During the lesson, it is made explicit to students why the content is important to learn.</li> </ul> </li> <li>! Teacher-to-student questions, contributions, and responses                             <ul style="list-style-type: none"> <li>! <input type="checkbox"/> one-on-one                      <input type="checkbox"/> in small-group settings, and                      <input type="checkbox"/> in whole-class settings.</li> </ul> </li> <li>! Student-to-student questions, contributions, and responses                             <ul style="list-style-type: none"> <li>! <input type="checkbox"/> one-on-one                      <input type="checkbox"/> in small-group settings, and                      <input type="checkbox"/> in whole-class settings.</li> </ul> </li> <li>! Student-to-teacher questions, contributions, and responses                             <ul style="list-style-type: none"> <li>! <input type="checkbox"/> one-on-one                      <input type="checkbox"/> in small-group settings, and                      <input type="checkbox"/> in whole-class settings.</li> </ul> </li> </ul> <p><b><u>Student engagement: the majority of students are on task throughout the class because the teacher involves all students in the lesson.</u></b>                      The teacher's instructional strategies are effective in encouraging students to explore and be engaged in relevant mathematics or science concepts.</p> <p><b>Evidence includes actions such as:</b></p> <ul style="list-style-type: none"> <li>! encouraging non-volunteers to participate,</li> <li>! encouraging students who dominate to give others the opportunity to participate,</li> <li>! facilitating student-student interaction,</li> <li>! checking in with hesitant learners</li> <li>! walking around the room to monitor and assessing student progress and understanding, and</li> <li>! verbally engaging students.</li> </ul> <p><b><u>Student engagement:</u></b>                      The teacher maximizes the amount of time students in the class are engaged in specific, meaningful, content-rich tasks and activities. Students are on task throughout the class.</p> <p>On-task behavior might include:</p> <ul style="list-style-type: none"> <li>! working on assigned tasks,</li> <li>! asking questions about the subject-matter</li> <li>! being engaged in discussions about the subject-matter,</li> <li>! providing answers,</li> <li>! following established routines and procedures for transition points, grouping, and</li> <li>! assisting other students</li> </ul>			
<b>Observer evidence and scores</b>			
<b>Distinguished</b>	<b>Proficient</b>	<b>Basic</b>	<b>Unsatisfactory</b>

Assessment & Evidence of student learning during the lesson			
<p>Students in the class are learning the content taught during the class. Specifically, students are able to explain/discuss what they are working on and why. <i>Observers should make judgments about this indicator by focusing on K12 students and not on the teacher resident.</i></p> <p>Evidence of learning includes</p> <ul style="list-style-type: none"> <li>! students expressing their knowledge and understanding of the topic through academic writing and/or explanations that employ <i>academic language</i>;</li> <li>! students demonstrating how well they understand lesson content and their progress toward learning goals through                             <ul style="list-style-type: none"> <li>! their work,</li> <li>! responses to teacher questions,</li> <li>! discussion in small groups, and</li> <li>! other participation in the class that includes evidence for learning.</li> </ul> </li> <li>! students self-assess whether they have achieved the lesson objective and provide feedback to the teacher,</li> <li>! students monitor their own progress, identify their own errors and seek additional opportunities for practice.</li> </ul> <p>An effective teacher resident uses knowledge gained from questioning and formative assessments to gauge what students know, the accuracy of their knowledge, and where they have made mistakes, and s/he makes adjustments during the lesson when formative assessment demonstrates that students did not understand. Observers should look for the effectiveness of teacher strategies for monitoring student progress <i>should also focus on how the teacher uses the information</i> to inform his or her instruction.</p> <p>Evidence might include:</p> <ul style="list-style-type: none"> <li>! How frequently the teacher uses different ways to check for student understanding, including:                             <ul style="list-style-type: none"> <li>! walking around to look at the work of individual students or groups, and</li> <li>! using questions to gauge student understanding.</li> </ul> </li> <li>! How the teacher uses formative assessment effectively to monitor the progress of all students, through individual, small group, or whole class actions.</li> <li>! Tests or quizzes</li> </ul> <p><b>Informal assessment: formative assessment to monitor the progress of all students.</b></p> <p>These strategies might include formal assessments like quizzes, tests, or papers, as well as informal assessments through discussions with the class, with groups of students, and with individual students as well as teacher observations. Teacher resident activities might include for example pre lesson questions that engage students in an observation at the beginning of the lesson.</p>			
<b>Observer evidence and scores</b>			
<b>Distinguished</b>	<b>Proficient</b>	<b>Basic</b>	<b>Unsatisfactory</b>

Differentiated instruction			
<p>Effective teacher residents respond to each learner’s needs in order to maximize student growth and individual success through ongoing assessment and adjustment of instruction.</p> <p><b>Evidence might include</b></p> <ul style="list-style-type: none"> <li>! providing authentic learning opportunities and tasks for all students are equally interesting and equally engaging, so that each child feels challenged to understand, apply, and move on to the next learning stage;</li> <li>! observing the teacher resident working with the whole class, individuals, and small groups;</li> <li>! using lesson materials that are academically challenging for all students;</li> <li>! pacing of the lesson overall and for individual students in ways responsive to observable academic, emotional, social, and physical student needs;</li> <li>! monitoring the progress of individuals and small groups, allowing for extra time, or giving additional tasks to students who complete the general assignment more quickly than others;</li> <li>! flexible grouping and (re)grouping students for different tasks; and</li> <li>! ensuring that students who complete work ahead of others move to another task and are not left to themselves.</li> </ul>			
<b>Observer evidence and scores</b>			
<b>Distinguished</b>	<b>Proficient</b>	<b>Basic</b>	<b>Unsatisfactory</b>

Classroom Management & Structures and Routines			
<p>The teacher resident plans for and facilitates a safe environment that enables all students to participate actively and appropriately in discussions and activities.</p> <p>The teacher resident’s classroom management strategies create a classroom environment that:</p> <ul style="list-style-type: none"> <li>❗ is safe;</li> <li>❗ is relatively free of behavioral disruptions;</li> <li>❗ maximizes instructional time; and</li> <li>❗ communicates high expectations for behavior.</li> </ul> <p>Evidence can include</p> <ul style="list-style-type: none"> <li>❗ Lessons and activities are designed and implemented in an organized and structured manner that supports student learning.</li> <li>❗ The amount of time available for instruction is maximized through time-saving routines for transitions and administrative tasks.</li> <li>❗ Students understand the routines and quickly and easily participate in learning activities and transition between activities.</li> <li>❗ Students are given opportunities to learning, practicing, and reinforcing routines;</li> <li>❗ Students are given opportunities to learn, practice, and follow rules; and</li> <li>❗ Students are given opportunities to learn and understand established consequences.</li> </ul>			
<b>Observer evidence and scores</b>			
<b>Distinguished</b>	<b>Proficient</b>	<b>Basic</b>	<b>Unsatisfactory</b>

## Introduction and Overview of edTPA (Education Teacher Performance Assessment) for Secondary Education

### Purpose

The purpose of edTPA Secondary Education, a nationally available performance-based assessment, is to measure novice teachers' readiness to teach science and/ or mathematics in the secondary grades. The assessment is designed with a focus on student learning and principles from research and theory. It is based on findings that successful teachers:

- develop knowledge of subject matter, content standards, and subject-specific pedagogy
- develop and apply knowledge of varied students'
- consider research and theory about how students
- reflect on and analyze evidence of the effects of instruction on student

As a performance-based assessment, edTPA is designed to engage candidates in demonstrating their understanding of teaching and student learning in authentic ways.

### Overview of the Assessment

The edTPA Secondary Education assessment varied for each subject area. In effect there are separate handbooks for Secondary Education in Math and Science. In either case there are three tasks required to be addressed:

1. **Planning for Instruction and Assessment**
2. **Instructing and Engaging Students in Learning**
3. **Assessing Student Learning**

The edTPA Secondary Education assessment is designed for teacher education programs that plan to implement the full edTPA Secondary Education (Tasks 1–3), which requires candidates to demonstrate their readiness to teach by completing the tasks.

### edTPA Secondary Education Handbook

Please be sure to go to edTPA.com and download the *edTPA Secondary Math Handbook* (if you are a prospective math educator) OR the *edTPA Secondary Science Handbook* (if you are a prospective science educator) You will need this for each and every step of the process as you complete Tasks 1, 2, & 3

### edTPA Submission and TK20

There is a whole process involved in submitting your edTPA once it is completed. During the year you will receive a TK20 account that will contain your portfolio for residency, the classes you are taking and template tasks for edTPA. When the time comes in Spring you will begin uploading your edTPA work to TK20 and Pearson. Information on this process is found on the College of Education website at: <https://education.rowan.edu/ESP/edTPA/index.html>

## Full Residency Secondary edTPA Math/ Science Timeline

NOTE: Be wary of your school setting, grade level, days off of school, and testing that may impact the exact weeks/dates. Please reference edTPA directions and accompanying rubrics in your respective *edTPA Secondary Education Handbook* and this handbook, to assist your responses at all times!

- Deadlines for TK20 submission: April 15, 2021
- Deadline for Pearson submission: April 22, 2021 (May 13 scores are reported)

Week	edTPA Residency Timeline Checklist
Prior to Week 1	<input type="checkbox"/> Visit edTPA.com and download the <i>edTPA Handbook for Secondary Education</i> . <input type="checkbox"/> Read the following sections in the Handbook: Introduction and Task 1 Planning <input type="checkbox"/> Create a folder on your laptop for edTPA files <input type="checkbox"/> Created a password protected backup folder for edTPA files on a flashdrive <input type="checkbox"/> Look up the <i>School Report Card</i> for your placement <input type="checkbox"/> Contact your collaborating teacher and introduce yourself <input type="checkbox"/> Exchange contact information between you and your collaborating teacher
1	<input type="checkbox"/> I have discussed the students in my class with my Collaborating Teacher <input type="checkbox"/> I have reviewed all IEPs ~or~ <input type="checkbox"/> There are no IEPs for students in my class <input type="checkbox"/> I have reviewed all 504 plans ~or~ <input type="checkbox"/> There are no 504s for students in my class <input type="checkbox"/> I have begun to take notes on the learning needs of my students
2	<input type="checkbox"/> I have identified at least 2 classroom examples for at least 3 learning theories <input type="checkbox"/> I have completed the <i>Context for Learning</i> Segment <input type="checkbox"/> I have personalized the video permission letter/form <input type="checkbox"/> I have discussed video permission letter/form with my cooperating teacher <input type="checkbox"/> I have obtained permission from my principal to send home the letter/form <ul style="list-style-type: none"> <li><input type="checkbox"/> I have to send home the letter/form</li> <li><input type="checkbox"/> I have already sent home the letter/form</li> </ul> <input type="checkbox"/> I have asked all of the adults who work in my classroom to sign the video permission form <input type="checkbox"/> I have talked with my university supervisor about video-recording the learning segment
3	<input type="checkbox"/> I have chosen the 3-5 lesson segment that I will teach <input type="checkbox"/> TOPIC _____ <input type="checkbox"/> Central Focus _____ <input type="checkbox"/> I have backed up my files <input type="checkbox"/> I have made a practice video (in seminar) <input type="checkbox"/> I am collecting the permission letters/forms from students in focus class
4	<input type="checkbox"/> I have a list of all of the students who can and cannot be video-ed <input type="checkbox"/> I have a list of adults who can and cannot be video-ed <input type="checkbox"/> I have discussed the materials and strategies for the lessons in my learning segment with my cooperating teacher and university supervisor
5	<input type="checkbox"/> I have written my first draft of all 3-5 lessonplans <input type="checkbox"/> I have identified the language function for the learning segment <input type="checkbox"/> I have included supports I will provide <i>focusing on using the academic language</i> in the plan <input type="checkbox"/> I have included specific assessments in each plan <input type="checkbox"/> I have defined the evaluation criteria <input type="checkbox"/> I have at least one written, formal assessment that will yield data <input type="checkbox"/> I have written specific differentiations/adaptations in each plan for <b>all students</b> with IEPs/504s ~or~ <input type="checkbox"/> I have written specific differentiations/adaptations in each plan for at least one student with special learning needs <input type="checkbox"/> I have begun writing the planning commentary (Task 1) <input type="checkbox"/> I have written citations for the textbooks I will be using



Week	edTPA Residency Timeline Checklist
5 (cont'd)	<input type="checkbox"/> I have decided on what I will use to video <input type="checkbox"/> I know who will take the video (who? _____) <input type="checkbox"/> <b>I have backed up my files</b>
6	<input type="checkbox"/> I have organized all files <input type="checkbox"/> I have been revising my learning segment and planning commentary <input type="checkbox"/> I have <b>projected a date</b> for video-recording <input type="checkbox"/> I have backed up my files
7	<input type="checkbox"/> I have been proofreading Task 1 <input type="checkbox"/> I have made sure all files are named correctly (see the Evidence Chart in the Handbook) <input type="checkbox"/> I have <b>confirmed a date</b> for video-recording <input type="checkbox"/> <b>I have backed up my files</b>
8	<input type="checkbox"/> I have been proofreading Task 1 <input type="checkbox"/> I have made sure all files are named correctly (see the Evidence Chart in the Handbook) <input type="checkbox"/> I have <b>planned or conducted</b> video-recording <input type="checkbox"/> <b>I have backed up my files</b>
9	<input type="checkbox"/> <b><u>I have completed and posted all parts of Task 1 on Tk20</u></b> <input type="checkbox"/> I have made sure all files are named correctly (see the Evidence Chart in the Handbook) <input type="checkbox"/> I have planned or conducted video-recording <input type="checkbox"/> <b>I have backed up my files</b>
10	<input type="checkbox"/> <b>I have completed videotaping, reviewed video, &amp; uploaded them to Tk20 in James 2108</b> <input type="checkbox"/> <b><u>I have completed and posted both parts of Task 2 on Tk20</u></b> <input type="checkbox"/> <b>I have backed up my files, including the video and pictures</b> <input type="checkbox"/> I have begun to analyze the assessment for the whole class and the 3 focus students <input type="checkbox"/> I continue proofreading <input type="checkbox"/> I have made sure all files are named correctly (see the Evidence Chart in the Handbook)
11	<input checked="" type="checkbox"/> <b>Transfer to Pearson</b> <input type="checkbox"/> <b><u>Submit a complete copy including video – all files electronically</u></b> <input type="checkbox"/> <b>Give Rowan University permission to use my edTPA and video for instructional purposes with other RU students.</b>
12	<input checked="" type="checkbox"/> <b>I have reviewed all files at edTPA.com and received an email from Pearson stating “Your Secondary Science (or Math) assessment has been submitted...” before the deadline</b>

**(For Teacher Resident)****Assignments and Responsibilities To Think About and Discuss with Supervisors**

(Add others as appropriate for placement)

- **Decide upon due dates for each as appropriate for your placement:** *(Suggested dates included in parentheses)*
  - Review College of Education MA STEM Residency Handbook *(Week 1)* Review edTPA Secondary Handbook *(Week 1)*
  - Review Charlotte Danielson Teacher Performance Evaluation Rubric --to be used for Midterm and Final *(Week 1 and throughout the semester!)*
- **Decide upon what you will be using to show for your planning and teaching:**
  - Necessary tools:
    - Lesson Plans *(you can use the lesson plan format used by your collaborative teacher unless otherwise noted by your supervisor or methods instructor. For edTPA make sure you use lesson plan formats that are extensive and represent well what your teaching demonstrates.)*
  - Suggested helpful tools:
    - Notebook *(Organize first week; maintain throughout the semester)*
    - Observation Write-ups *(maintain throughout the semester- optional)*
- **Complete and submit on TK20 edTPA Tasks 1, 2, and 3 Complete the internal OR external submission process, as required**
- **Be sure to work on the following to enhance your Residency experience and to assist with specific indicators on your Midterm and Final Evaluations. Discuss with your collaborating teacher and Supervisor as appropriate.**
  - Context: Gather information on district, school, and students (begin completing the Context form in your edTPA handbook)
  - Assessments and Grading
    - Grade Book/Electronic Grade Book?/Grading System
    - Method for sharing assessments with students and parents
    - Role with Parents
    -
  - Involvement with and Contribution to School Events Involvement with Community IEPs, ELLs, ...
  - Personal Professional Development Plan (for Midterm Evaluation)

Note that the start and end of your residency follows your placement school academic calendar.

**MA in STEM Education  
Professional Improvement Plan (PIP) Conference Form  
Rowan University**

The Professional Improvement Plan Conference is designed to improve a resident’s performance in the program as a result of reported concerns. During the conference, concerns will be discussed and a plan for improvement will be created on this form. This is different from the College of Education 10- day Plan as the due date for expected performance is flexible and assigned by parties involved. It is up to the supervisor and collaborative teacher’s discretion to decide which plan to pursue based on the level of the concern.

<b>Name of Teacher Resident:</b>	<b>Date Meeting held:</b>
<b>Name of Initiator of Conference:</b>	<b>Name of PIP Monitor:</b>

Areas of Concern and Evidence	
Danielson Framework indicator that needs to be addressed	Description of Concern

Plan for Improvement and Evidence	
Professional plan that needs to be addressed (indicate specific performance while identifying the objectives and/or goals resident needs to reach	Due date (identify the date by which resident needs to accomplish basic /proficient performance for the professional plan

**NOTE: Failure to meet any aspect of this plan by the given due date(s) will result in:**

This plan has been reviewed and agreed to by the following:

Teacher Resident:	_____	Date: _____
	(Signature)	
Supervisor :	_____	Date: _____
	(Signature)	
Improvement Plan Monitor:	_____	Date: _____
	(Signature)	
Witness (must be affiliated professionally with the resident):	_____	Date: _____
	(Printed Name)	
	_____	Date: _____
	(Signature)	

**NOTE: Once completed and signed, the original document must be provided to the program coordinator/ advisor for filing.**

### Remediation and Ten-Day Improvement Plans

In case of lack of performance during a residency term, candidates can be issued a Remediation plan or Ten Day Improvement plan. The former is issued during clinical field 1 (i.e. first part of the full residency/ in fall term) and the latter during the second residency term(spring term) . Both are more thoroughly discussed in the College Clinical Handbook (pp. 21-25). The following are sample of old templates so please check updated ones with both the Office of Educational Support and Partnerships and the Office of Clinical Experiences in the College of Education

Prior to the initiation and implementation of a Ten-Day Plan the supervisor must discuss this with the Clinical Resident and Collaborating Teacher.

Start Date: \_\_\_\_\_ End Date: \_\_\_\_\_

Resident: \_\_\_\_\_ Cooperating Teacher: \_\_\_\_\_  
 (Print) (Print)

Supervisor: \_\_\_\_\_ School: \_\_\_\_\_  
 (Print) (Print)

This Ten-Day Plan is designed in collaboration by the university supervisor, collaborating teacher, and the teacher resident named above to improve his/her performance in the residency experience. The plan is intended to assist said resident in meeting standard(s)/ indicator(s) of the *Clinical Residency Teacher Resident Performance Evaluation Rubric*. All residents must meet expectations of all indicators prior to the end of the semester. The collaborating teacher will maintain a daily feedback log on the teacher resident's progress with each performance indicator of concern, review it with the teacher resident, and send that log via e-mail to the supervisor and teacher resident. An infraction of any aspect of this plan will require an eligibility meeting on campus with the resident, supervisor, and department chair.

The process complies with COE Policy IV.E Discontinuance of Clinical Residency Assignment paragraphs 1-3, found in the *COE Clinical Residency Handbook: A Guide for Teacher Residents, Cooperating Teachers and University Supervisors*.

Ref. #	Performance Indicator(s) of Concern	Evidence of Improvement	Due Date

Comments:

This plan has been reviewed and agreed to by the following:

Teacher Resident: \_\_\_\_\_ Date: \_\_\_\_\_  
 (Signature)

Collaborate Teacher: \_\_\_\_\_ Date: \_\_\_\_\_  
 (Signature)

University Supervisor: \_\_\_\_\_ Date: \_\_\_\_\_  
 (Signature)

This plan has been reviewed by:

The Student Progress Committee Chair \_\_\_\_\_ Date: \_\_\_\_\_  
 (Signature)

The Department of STEAM Education Chair \_\_\_\_\_ Date: \_\_\_\_\_  
 (Signature)

**Sample of Performance and Evidence  
for Ten-Day Improvement  
Plan**

The process complies with COE Policy IV.E Discontinuance of Clinical Residency Assignment paragraphs 1-3, found in the COE *Clinical Residency Handbook: A Guide for Teacher Residents, Cooperating Teachers and University Supervisors*.

<b>Ref. #</b>	<b>Performance Indicator(s) of Concern</b>	<b>Evidence of Improvement</b>	<b>Due Date</b>
5.1	Does not consistently provide expectations of behavior and does not follow through with appropriate consequences.	Students know exactly what behavior is expected. Teacher posted behavioral expectations on bulletin board. Teacher has appropriate set of consequences for misbehavior.	Daily as observed by collaborating teacher or University supervisor.
4.1 5.1	Classroom instruction lacks understanding of developmental differences in students' learning needs.	Uses appropriate instructional strategies to meet the needs of individual learners.	Daily as observed by collaborating teacher or University supervisor.
6.5	Pace and flow of class instruction is too slow and permits too much nonproductive time.	Instruction shows smooth pacing and makes best use of teaching time.	Daily as demonstrated through instruction. Anecdotal records to be kept by collaborating teacher and University
8	Spoken and written English contains pronunciation and grammatical errors.	Models accurate spoken and written English.	Collaborating teacher and University supervisor.
8	Oral directions are given without the full attention of all students.	Develops effective listening strategies with students when listening for oral directions.	Daily as demonstrated through instruction. Anecdotal records to be kept by supervisor.
12.1	Does not address the needs of all students.	Demonstrates successful practices and techniques to address learners' needs.	Daily as demonstrated through instruction. Anecdotal records to be kept by collaborating teacher and University supervisor.
12.3	Does not consistently fulfill professional or other school responsibilities.	Meets all required school responsibilities including appropriate deadlines, written responsibilities, and assigned duties.	Daily as demonstrated through instruction. Anecdotal records to be kept by collaborating teacher and University supervisor.

## Discontinuance of Teacher Residency Assignment

The Teacher Residency may be discontinued upon request of the teacher resident, the school district or the College of Education at Rowan University. In the event that this should happen, the following procedures will be followed.

(Please visit the COE Policies and Procedures website:

<https://education.rowan.edu/about-the-college/policiesandprocedures2/index.html>

1. As soon as the university supervisor becomes aware of a problem he/she will initiate an on-site conference with the resident and collaborating teacher. The building administrator and/or program coordinator may be included.
2. The problem will be defined and a Ten Day written remedial plan with a timeline will be developed in consultation with the resident, collaborating teacher, and supervisor. The university supervisor will keep anecdotal records of progress or thereof.
3. If the problem cannot be remediated within 10 working days, a meeting will be held at the University with the supervisor, teacher resident, and the department chair. The Office of Field Experiences Director or designee might also attend. The supervisor will bring the following documents to the meeting:
  - a) the previous remediation plan with an explanation of why it was not successful
  - b) all supervisor's observations, evaluations, and records
  - c) all collaborating teacher and district input
4. After reviewing all pertinent data and following a discussion of this data as well as other pertinent information with attendees, this group, in item 3 above, will make a recommendation for discontinuance of the placement for the balance of the semester. Replacement can occur when requirements for successful placement have been met. The department will assume responsibility for monitoring resident progress toward completion of the requirements for successful replacement
5. The department chair or co-chair, in consultation with the supervisor, will complete the Discontinuance of Clinical Residency form, make copies for the resident, supervisor and department, and forward the original to the Office of Field Experiences (OFE). If replacement of the resident is to occur, the department will arrange for a consultation with the Office of Field Experiences Director to ensure that OFE plans collaboratively with the department and the student to effect a successful replacement.
6. Discontinuance by Partner School/District At any time before or during clinical practice, the school district can direct the University to remove a resident from his/her assignment. For example, in an interview or meeting prior to the assignment, the district may determine that the teacher resident would not make a positive contribution to the educational system in the district; or during the assignment, school authorities may feel that the teacher resident is not living up to the responsibilities they expect. In either case, or for instances not specified, the University will comply with the district's request to remove a teacher resident from a particular assignment. In several situations, the New Jersey Commissioner of Education has ruled that pre-service teaching is a privilege extended by local school districts to colleges and their students. Emphasis is placed on the fact that it is a privilege rather than a right for Rowan University students to be accommodated by a school for their clinical practice assignments. This privilege can be terminated at any time by the school district.
7. Discontinuance by Rowan University The authority of the University may also terminate clinical practice assignments. The College of Education, through the approved program of teacher certification, is entrusted with the responsibility to recommend for certification only those individuals who can show that they possess the competencies necessary for becoming a successful teacher. Pursuant to this obligation, university supervisors must make assessments concerning a teacher resident's competence in the field through evaluative visits. If, during the clinical practice period, in the professional judgment of the University supervisor, and in consultation with the collaborating teacher, it is concluded that the teacher resident does not demonstrate the appropriate knowledge, skills, and dispositions for becoming a successful teacher, the resident may be removed from the assignment. In addition, failure to comply with any College of Education regulations concerning clinical practice as stated in this handbook may be cause for termination of the assignment.
8. Procedures to be Followed Regarding Discontinuance of Clinical Residency In the event that immediate discontinuance is requested by the school district or if the University has determined that continuation of clinical practice for even a short period would be harmful to the students, school district or University, the teacher resident will immediately be removed from the assignment with a follow-up meeting at the University within three (3) working days. It is required that the same procedure be followed should a resident decide to discontinue.
9. Discontinuance up to Mid-Semester If discontinuance is to occur and reassignment for the current semester is not recommended, the teacher resident will initiate and sign a "Withdrawal from Course Request" form, available from the Registrar's Office. Upon receipt of this form, the Registrar will enter a "W" on the student's transcript. The withdraw notation of "W" is not a grade.
10. Discontinuance after Mid-Semester Residents' requests for withdrawals after mid-semester are considered exceptional and are only granted for sufficient reasons beyond the residents' control. The withdrawal process will follow the policies and

procedures of the University as outlined in the Student Handbook. A withdrawal after mid-semester will result in the notation of "WP" (withdrawal with passing academic standards) or "WF" (withdrawal with academic failure). The notation of "WP" or "WF", although not considered a grade, will be entered on the resident's transcript.

11. Reapplication for Clinical Residency The resident may reapply for clinical practice within three semesters after all suggestions for remediation have been met. The application must be presented to the STEAM<sup>2</sup> Education Department by the third semester after withdrawal. With permission from his/her department, the resident will reenroll in clinical practice and pay all tuition and fees as listed.
12. Discontinuance by Teacher Resident Residents may discontinue clinical practice for reasons of serious illness or other extenuating circumstance. Residents must follow the same procedure as if the University were discontinuing clinical practice. Discontinuances will affect student loan status. Residents are urged to consult with financial aid.

### MA in STEM Education Discontinuance Report<sup>1</sup>

Student's Name \_\_\_\_\_ ID # \_\_\_\_\_ Today's date \_\_\_\_\_ Content  
 Area \_\_\_\_\_ Quarter/Semester: Fall \_\_\_\_\_ Spring \_\_\_\_\_ University  
 Supervisor \_\_\_\_\_ TOSD Resident Yes \_\_\_\_\_ No \_\_\_\_\_ District  
 School \_\_\_\_\_  
 Cooperating Teacher(s) \_\_\_\_\_ Contact Administrator (if applicable) \_\_\_\_\_

Date of Discontinuance \_\_\_\_\_ Education Advisor \_\_\_\_\_

Reason for Discontinuance (additional pages if needed):  
 \_\_\_\_\_

Cooperating Teacher(s) is/are in agreement with the decision: YES \_\_\_\_\_ NO \_\_\_\_\_ Supporting  
 documentation attached? YES \_\_\_\_\_ NO \_\_\_\_\_

Graduation Plans (for spring semester residents): Walking \_\_\_\_\_ Not Walking \_\_\_\_\_ Other Graduation Plans: \_\_\_\_\_

#### ACTION PLAN<sup>2</sup>

\_\_\_\_\_ Clinical Residency is recommended to be repeated at: \_\_\_\_\_ current placement \_\_\_\_\_ new placement.

\_\_\_\_\_ Clinical Residency is NOT recommended to be repeated.

\_\_\_\_\_ Clinical Residency is recommended to be repeated after remediation. Recommendations for remediation and successful placement include the following:

Task/s to be completed by resident: \_\_\_\_\_ Documentation  
 to be provided of task completion: \_\_\_\_\_ (All documentation must  
 be submitted to the Department Secretary, Department of STEAM Education)

By (date): \_\_\_\_\_

Teacher Resident \_\_\_\_\_ Date \_\_\_\_\_

Supervisor's Signature \_\_\_\_\_ Date \_\_\_\_\_

Department Chair's Signature \_\_\_\_\_ Date \_\_\_\_\_ Director

of Field Experiences \_\_\_\_\_ Date \_\_\_\_\_ **ATTACHMENTS**

#### (For Office of Field Experiences Copy Only)

- \_\_\_ \_ Copies of all completed observation reports from university supervisor
- \_\_\_ \_ Copies of all completed observation reports from cooperating teacher
- \_\_\_ \_ Remediation plan for the student

<sup>1</sup> Discontinuances are removals from current clinical residency placement. Residents may, if recommended, repeat clinical residency once, as long as remediation

<sup>2</sup> Withdrawal from Clinical Residency for any reason may affect student financial aid.



**Residency Observation Form**  
(Formal observations must be submitted via TK20)

Resident: \_\_\_\_\_

School/District: \_\_\_\_\_

Collaborating Teacher: \_\_\_\_\_

Lesson Date: \_\_\_\_\_

Pre-Observation Date &amp; Time: \_\_\_\_\_

Supervisor: \_\_\_\_\_

Content Area &amp; Grade Level: \_\_\_\_\_

Lesson Duration: \_\_\_\_\_

Observation #: 1 2 3 4 5 \_\_\_\_ Long or Short Observation  
(circle one)

Post-Observation Date &amp; Time: \_\_\_\_\_

**Instructions:** Provide formative ratings for the resident on each of the indicators using the Performance Definitions in the *Framework for Teaching* rubric (The Danielson Group). For ratings of *Distinguished (D)*, *Unsatisfactory (U)* or *Not Observed (NO)*, a rationale must be included. For ratings of *Unsatisfactory (U)*, clear recommendations for growth must be in the SUGGESTIONS section on page 2. Write a description of the lesson context including any extenuating circumstances. In the SUGGESTIONS section, indicate any specific suggestions that should be addressed prior to or during the next observation, which should include those related to ratings of NO.

Domain	Indicators and Ratings (U, B, P, D or NO)	Rationale (Required for D, U or NO)
<i>Pre-Observation</i> <b>PLANNING/ PREPARATION</b>	1a. Knowledge of Content and Pedagogy	
	1b. Knowledge of Students	
	1c. Instructional Outcomes	
	1d. Knowledge of Resources	
	1e. Designing Coherent Instruction	
	1f. Designing Student Assessment	
	Program-specific (SPA) Planning/Prep Indicators	
<i>Classroom Observation</i> <b>CLASSROOM ENVIRONMENT / INSTRUCTION</b>	2a. Creating an environment of respect/rapport	
	2b. Establishing a culture for learning	
	2c. Managing classroom procedures	
	2d. Managing student behavior	
	2e. Organizing physical space	
	3a. Communicating with students	
	3b. Questioning and discussion techniques	
	3c. Engaging students in learning	
	3d. Using assessment in instruction	
	3e. Demonstrating flexibility/responsiveness	
	Program-specific Environment/Instruction Indicators	
<i>Post-Observation</i> <b>PROFESSIONAL</b>	4a. Reflecting on teaching	
	4b. Maintaining accurate records	
	4c. Communicating with families	
	4d. Participating in a professional community	
	4e. Growing and developing professionally	
	4f. Showing professionalism	
	Program-specific Professional Indicators	

**Residency/Internship Midterm and Final Evaluation**  
(submitted via TK20)

Resident: \_\_\_\_\_

Supervisor: \_\_\_\_\_

Program: \_\_\_\_\_

Collaborating Teacher: \_\_\_\_\_

District: \_\_\_\_\_

Subject/Grade: \_\_\_\_\_

School: \_\_\_\_\_

Date: \_\_\_\_\_

Midterm/Final (circle one)

**Instructions:** Rate the resident on each of the components using the Performance Definitions in the *Framework for Teaching* rubric (The Danielson Group). For ratings of *Distinguished* or *Proficient*, a description of evidence to support the rating must be included in the growth comments section. For ratings of *Basic* or *Unsatisfactory*, clear recommendations for growth must be included in the comments section.

**In order to be recommended for certification, the resident must receive at least a *Basic* rating for all indicators.**

Domain 1: Planning and Preparation	Rating
1a. Demonstrating knowledge of content and pedagogy.	
1b. Demonstrating knowledge of students	
1c. Setting instructional outcomes.	
1d. Demonstrating knowledge of resources.	
1e. Designing coherent instruction.	
1f. Designing student assessments.	
<i>Recommendations for U or B ratings/Evidence for D or P Ratings/Additional Comments:</i>	

Domain 2: Classroom Environment	Rating
2a. Creating an environment of respect and rapport	
2b. Establishing a culture for learning	
2c. Managing classroom procedures	
2d. Managing student behavior	
2e. Organizing physical space	
<i>Recommendations for U or B ratings/Evidence for D or P Ratings/Additional Comments:</i>	

Domain 3: Instruction	Rating
3a. Communicating with students.	
3b. Questioning and discussion techniques	
3c. Engaging students in learning	
3d. Using assessment in instruction	
3e. Demonstrating flexibility and responsiveness	
<i>Recommendations for U or B ratings/Evidence for D or P Ratings/Additional Comments:</i>	

Domain 4: Professional Responsibilities	Rating
4a. Reflecting on teaching	
4b. Maintaining accurate records	
4c. Communicating with families	
4d. Participating in a professional community	
4e. Growing and developing professionally	
4f. Showing professionalism	
<i>Recommendations for U or B ratings/Evidence for D or P Ratings/Additional Comments:</i>	

Please also use the program's SPA-specific rubric to evaluate the resident for midterm and final evaluations.

**Additional Comments**

**Recommendation for Certification (TO BE FILLED OUT FOR FINAL EVALUATION ONLY)**

The resident (circle one) **IS** / **IS NOT** recommended for certification in \_\_\_\_\_  
(Certification area as per the NJDOE).

\_\_\_\_\_  
**Supervisor's Signature**

\_\_\_\_\_  
**Date**

\_\_\_\_\_  
**Collaborating Teacher's Signature**

\_\_\_\_\_  
**Date**

\_\_\_\_\_  
**Resident's Signature**

\_\_\_\_\_  
**Date**

## Frequently Asked Questions Concerning Residency

**Q: *Which calendar do I follow?***

A: Follow the collaborating teacher's calendar for the entire placement.

**Q: *What happens if a resident is sick or has a transportation emergency?***

A: Resident should contact the supervisor and collaborating teacher the night before, if possible, or as early as possible the day that resident is calling out.

**Q: *Who gives the final grade to the resident?***

A: The Rowan supervisor assigns the final grade with input from the collaborating teacher.

**Q: *Where might we collect evidence of meeting BASIC expectations?***

A: Evidence could come from:

- Lesson and unit plans
- Classroom observations
- Resident-made materials and notebook
- Samples of technology created/used for instruction or communication with parents
- Assessment data
- Samples of student work
- edTPA submission
- Notes from observations, conversations, interviews, and research
- Reflective journals

**Q: *What might evidence of collaboration, community and partnerships look like?***

A: Working with collaborating teachers, residents might:

- Write letters to families (e.g., introductions, new units, explanations of instruction, suggestions for family activities to support instruction)
- Send home weekly newsletters
- Make phone calls (Keep a detailed log!)
- Establish and maintain a website for families
- Implement dialogue journals with families
- Attend after-school functions
- Participate in family (Math, Literacy, Science, etc.) nights
- Invite guest speakers
- Hold family visitation days
- Bring families into classes as resources
- Integrate community resources into lessons

## APPENDIX

### NCTM NCATE/CAEP ADDENDUM Indicators Specific to the Mathematics Education Program

ROWAN UNIVERSITY COLLEGE OF EDUCATION

Candidate:

Date:

Supervisor:

Date:

**Instructions:** Rate the candidate on each of the components using the given rubric. For ratings of *Distinguished*, a description of evidence to support the rating must be included in the comments section. For ratings of *Basic* or *Unsatisfactory*, clear recommendations for growth must be included in the comments section. **In order to be recommended for certification, the candidate must receive at least a *Basic* rating for all indicators.**

<b>1.</b>	Apply knowledge of curriculum standards for secondary mathematics and their relationship to student learning within and across mathematical domains. (NCTM NCATE/CAEP 3a)
<b>D</b>	Plans reflect the goals of the NCTM Standards and <u>integrate</u> the Mathematics CCSS for Content and Practices in meaningful ways. Appropriate Cumulative Progress Indicators are included. Rationale identifies “big idea” aligned with standards and objectives. <u>All</u> written unit/lesson outcomes are performance-based and aligned to the appropriate CCSS. Plans consistently connect knowledge, understandings, and skills to big idea.
<b>B</b>	Plans reflect the goals of the NCTM Standards and <i>list</i> the CCSS including appropriate Cumulative Progress Indicators. Rationale identifies “big idea” aligned with standards and objectives. Plans inconsistently connect knowledge, understandings, and skills to big idea. <u>Most</u> written unit/lesson outcomes are performance-based.
<b>U</b>	Plans do not adequately reflect the goals of the NCTM Standards and/or the CCSS OR plans do not include appropriate Cumulative Progress Indicators. A “big idea” is not identified or is misidentified. Written unit/lesson outcomes are not performance-based.
<b>2.</b>	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. (NCTM NCATE/CAEP 3c)
<b>D</b>	Candidate consistently creates, selects, uses, and determines suitability of the wide variety of available resources (print, online, and human), mathematics curricula and teaching materials (including technology) for all students including those with special needs such as the gifted, challenged and speakers of other languages. Candidate consistently selects, uses, and determines the suitability of a wide variety of print and on-line resources from professional mathematics and education organizations to enhance textbook-based lesson and unit plans. Candidate consistently uses these multiple resources to plan units that incorporate <u>all</u> of the following in building all students’ conceptual understanding and procedural proficiency: <ul style="list-style-type: none"> <li>• a variety of strategies</li> <li>• differentiated instruction for diverse populations, and</li> <li>• mathematics-specific and instructional technologies.</li> </ul>
<b>B</b>	Candidate selects, use, and determine the suitability of the wide variety of available resources (print, online, and human), mathematics curricula and teaching materials (including technology) for all students including those with special needs such as the gifted, challenged and speakers of other languages. For each unit planned, the candidate uses these resources to plan units that incorporate one or two of the following in building all students’ conceptual understanding and procedural proficiency: <ul style="list-style-type: none"> <li>• a variety of strategies</li> <li>• differentiated instruction for diverse populations, and</li> <li>• mathematics-specific and instructional technologies.</li> </ul>

<b>U</b>	<p>Candidate does not select, use, and/or determine the suitability of the wide variety of available resources (print, online, and human), mathematics curricula and teaching materials (including technology) for all students including those with special needs such as the gifted, challenged and speakers of other languages.</p> <p>For each unit planned, the candidate does not use these resources to plan units that incorporate at least one of the following in building all students' conceptual understanding and procedural proficiency:</p> <ul style="list-style-type: none"> <li>• a variety of strategies</li> <li>• differentiated instruction for diverse populations, or</li> <li>• mathematics-specific and instructional technologies.</li> </ul>
<b>3. Provide students with opportunities to communicate about mathematics. (NCTM NCATE/CAEP 3d)</b>	
<b>D</b>	<p>Candidate plans for and facilitates a variety of meaningful, original communicative activities in the classroom.</p> <p>Candidate knows the difference between mechanical and meaningful communicative exercises and uses them appropriately.</p> <p>Candidate <u>designs and implements</u> activities that promote cooperation and interaction and maximizes the time students have to communicate mathematically.</p>
<b>B</b>	<p>Candidate plans for and facilitates meaningful communicative activities in the classroom. Candidate knows the difference between mechanical and meaningful communicative exercises and usually uses them appropriately. Candidate facilitates pair/group activities and maximizes the time students have to use the target language. Candidate <u>implements</u> activities that promote cooperation and interaction and maximizes the time students have to communicate mathematically. Candidate provides clear directions and models for all activities. Candidate <u>groups students appropriately</u> and <u>monitors group activities</u>. Candidate <u>conducts appropriate follow-up tasks (8.7)</u>.</p>
<b>U</b>	<p>Candidate does not plan or has difficulty facilitating meaningful communication. Candidate relies primarily on mechanical exercises. Candidate uses pair/group communicative activities minimally in class. Candidate rarely implements activities that promote cooperation and interaction. Directions given are unclear or inappropriate. Students are groups inappropriately for the planned activity. Group activities are not monitored appropriately causing students to be off-task. Candidate does not conduct follow-up tasks or chooses tasks that are inappropriate.</p>
<b>4. Provide students with opportunities to make connections among mathematics, other content areas, everyday life, and the workplace. (NCTM NCATE/CAEP 3d)</b>	
<b>D</b>	<p>Candidates consistently demonstrate how mathematical ideas interconnect and build on one another to produce a coherent whole.</p> <p>Candidate consistently uses connections among mathematical ideas to scaffold students' understanding of mathematics.</p> <p>Candidate consistently applies mathematics in contexts outside of mathematics.</p> <p>Candidate consistently uses stimulating curricula and connects the mathematics being studied to students' lives.</p> <p>Candidate integrates the history of mathematics without promoting stereotypes and biases and encourages students to think critically about cultural connections.</p>
<b>B</b>	<p>Candidate demonstrates how mathematical ideas interconnect and build on one another to produce a coherent whole.</p> <p>Candidate sometimes uses connections among mathematical ideas to scaffold students' understanding of mathematics.</p> <p>Candidate sometimes applies mathematics in contexts outside of mathematics.</p> <p>Candidate sometimes uses stimulating curricula and makes efforts to connect the mathematics being studied to students' lives.</p>
<b>U</b>	<p>Candidate does not demonstrate how mathematical ideas interconnect and build on one another to produce a coherent whole.</p> <p>Candidate makes few connections among mathematical ideas.</p> <p>Candidate infrequently applies mathematics in contexts outside of mathematics.</p> <p>Candidate does not use stimulating curricula and/or does not make efforts to connect mathematics being studied to students' lives.</p> <p>Candidate includes the history of mathematics but presents stereotypical and/or biased views of the cultures presented.</p>
<b>5. Plan, select, implement, interpret, and use formative and summative assessments to inform instruction by reflecting on mathematical proficiencies essential for all students. (NCTM NCATE/CAEP 3f)</b>	
<b>D</b>	<p>Candidate's assessment plans and procedures consistently are aligned to <i>all</i> instructional outcomes and the CCSS mathematical content standards and practices identified in lesson and unit planning documents.</p> <p>Candidate's assessment plans consistently include multiple strategies, including listening to and understanding the ways students think about mathematics, to assess students' mathematical knowledge, understanding, and skill.</p> <p>Candidate's assessment plans consistently include clear criteria for assessing student work.</p> <p>Candidate assesses student progress through creative, performance-based, nontraditional assessments in addition to traditional testing formats.</p> <p>Candidate adapts assessment strategies for individual students as needs arise.</p>
<b>B</b>	<p>Candidate's assessment plans and procedures consistently are aligned to <u>most</u> of the instructional outcomes and the CCSS mathematical content standards and practices identified in lesson and unit planning documents.</p> <p>Candidate's assessment plans include multiple strategies to assess students' mathematical knowledge, including listening to and understanding the ways students think about mathematics in addition to traditional testing formats.</p> <p>The candidate's approach to using formative assessment is rudimentary, including only some of the instructional outcomes.</p> <p>Candidate's assessment plans include criteria for assessing student work that are not always clear.</p>

<b>U</b>	<p>Candidate's assessment plans and procedures are not aligned to most of the instructional outcomes and the CCSS mathematical content standards and practices identified in lesson and unit planning documents.</p> <p>Candidate's assessment plans include only traditional testing formats to assess student learning and no formative assessments.</p> <p>Candidate's assessment plans do not include criteria for assessing student work.</p> <p>The teacher has no plan to incorporate formative assessment in the lesson or unit.</p>
<b>6.</b>	Monitor students' progress, make instructional decisions, and measure students' mathematical understanding and ability using formative and summative assessments. (NCTM NCATE/CAEP 3g)
<b>D</b>	<p>Candidate enacts a coherent and systematic plan for using formative and summative assessments to monitor students' progress, make instructional decisions, and measure students' mathematical understanding and skill.</p> <p><u>Candidate's plan includes frequent and timely assessment of and feedback to students, including reengaging students with the mathematics.</u></p>
	<p>Candidate provides opportunities for students to monitor and reflect on their progress.</p> <p>Candidate consistently modifies instruction in response to assessment results in ways that maximize student learning of mathematics.</p> <p>Candidate's approach to using assessments is well-designed and includes student self-monitoring in addition to the teacher use of the assessment information.</p>
<b>B</b>	<p>Candidate monitors students' progress regularly but has not developed a coherent system for measuring students' mathematical understanding and skill and making instructional decisions based on student progress.</p> <p>Formative and/or summative assessments are not always used systematically, regularly, or appropriately.</p> <p>Feedback to students is timely.</p> <p>Candidate modifies instruction in response to assessment results.</p>
<b>U</b>	<p>Candidate rarely conducts formative and summative assessments to measure students' mathematical understanding and monitor students' progress.</p> <p>Candidate does not use assessment information to inform planning and instruction.</p>
<b>7.</b>	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. (NCTM NCATE/CAEP 4b)
<b>D</b>	<p>Candidate consistently plans and creates developmentally appropriate, sequential, and challenging learning opportunities grounded in mathematics education research.</p> <p>Students are actively engaged in building new knowledge from prior knowledge and experiences.</p> <p>Candidate consistently leads classes in mathematical problem solving and in developing in-depth conceptual understanding and to help students develop and test generalizations.</p> <p>Candidate consistently provides opportunities for students to build new mathematical knowledge through problem solving.</p> <p>Candidate integrates reasoning and proof as fundamental aspects of mathematics.</p> <p>Candidate consistently provides opportunities for students to make and investigate mathematical conjectures.</p> <p>Candidate consistently provides opportunities for students to select and use various types of reasoning and methods of proof.</p>
<b>B</b>	<p>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.</p> <p>Candidate provides some opportunities for students to apply and adapt a variety of appropriate strategies to solve problems.</p> <p>Candidate provides some opportunities for students to build new mathematical knowledge through problem solving.</p> <p>Candidate includes reasoning and proof as aspects of mathematics.</p> <p>Candidate provides some opportunities for students to make and investigate mathematical conjectures.</p> <p>Candidate provides some opportunities for students to select and use various types of reasoning and methods of proof.</p>
<b>U</b>	<p>Candidate does not plan 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.</p> <p>Candidate provides few or no opportunities for students to apply and adapt a variety of appropriate strategies to solve problems.</p> <p>Candidate provides few or no opportunities for students to solve problems that arise in mathematics and those involving mathematics in other contexts.</p> <p>Candidate provides few or no opportunities for students to build new mathematical knowledge through problem solving.</p> <p>Candidate does not include reasoning and proof as fundamental aspects of mathematics.</p> <p>Candidate provides few or no opportunities for students to make and investigate mathematical conjectures.</p> <p>Candidate provides few or no opportunities for students to select and use various types of reasoning and methods of proof.</p>
<b>8.</b>	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. (NCTM NCATE/CAEP 4e)

<b>D</b>	<p>Candidate seamlessly integrates various teaching tools including technology.</p> <p>Candidate uses knowledge of mathematics and pedagogy to select and seamlessly integrate appropriate technological tools, such as but not limited to, spreadsheets, dynamic graphing tools, computer algebra systems, dynamic statistical packages, graphing calculators, data-collection devices and presentation software.</p> <p>Candidate develops lessons that seamlessly integrate technology's potential for building understanding of mathematical concepts and developing important mathematical ideas.</p> <p>Candidate selects and integrates seamlessly appropriate concrete materials for learning mathematics.</p> <p>Candidate articulates advantages and disadvantages of using particular instructional tools.</p>
<b>B</b>	<p>Candidate uses various teaching tools including technology.</p> <p>Candidate uses knowledge of mathematics and pedagogy to select and use appropriate technological tools, such as, but not limited to, spreadsheets, dynamic graphing tools, computer algebra systems, dynamic statistical packages, graphing calculators, data-collection devices and presentation software.</p> <p>Candidate develops lessons that use technology's potential for building understanding of mathematical concepts and developing important mathematical ideas.</p> <p>Candidate selects and uses appropriate concrete materials for learning mathematics.</p> <p>Candidate articulates advantages and disadvantages of using particular instructional tools.</p>
<b>U</b>	<p>Candidate does not use various teaching tools including technology.</p> <p>Candidate does not use knowledge of mathematics and pedagogy to select and use appropriate technological tools.</p> <p>Candidate does not develop lessons that use technology's potential for building understanding of mathematical concepts and developing important mathematical ideas.</p> <p>Candidate does not use appropriate concrete materials for learning mathematics.</p>
<p>9. 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. ((NCTM NCATE/CAEP 5a)</p>	
<b>D</b>	<p>Candidate consistently verifies that that secondary students demonstrate:</p> <ul style="list-style-type: none"> <li>• conceptual understanding;</li> <li>• procedural fluency;</li> <li>• the ability to formulate, represent, and solve problems;</li> <li>• logical reasoning and continuous reflection on that reasoning;</li> <li>• productive disposition toward mathematics; and</li> <li>• the application of mathematics in a variety of contexts within major mathematical domains.</li> </ul>
<b>B</b>	<p>Candidate demonstrates the ability to verify that that secondary students demonstrate at least 5 of the following:</p> <ul style="list-style-type: none"> <li>• conceptual understanding;</li> <li>• procedural fluency;</li> <li>• the ability to formulate, represent, and solve problems;</li> <li>• logical reasoning and continuous reflection on that reasoning;</li> <li>• productive disposition toward mathematics; and</li> <li>• the application of mathematics in a variety of contexts within major mathematical domains.</li> </ul>
<b>U</b>	<p>Candidate demonstrates the ability to verify that that secondary students demonstrate fewer than 5 of the following:</p> <ul style="list-style-type: none"> <li>• conceptual understanding;</li> <li>• procedural fluency;</li> <li>• the ability to formulate, represent, and solve problems;</li> <li>• logical reasoning and continuous reflection on that reasoning;</li> <li>• productive disposition toward mathematics; and</li> <li>• the application of mathematics in a variety of contexts within major mathematical domains.</li> </ul>
<p>10. 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. (NCTM NCATE/CAEP 5c)</p>	
<b>D</b>	<p>Candidate consistently enacts a coherent system for collecting, organizing, analyzing, and reflecting on diagnostic, formative, and summative assessment evidence and determining the extent to which students' mathematical proficiencies have increased as a result of their instruction.</p>
<b>B</b>	<p>For at least one unit of study, the candidate demonstrates the ability to 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.</p>
<b>U</b>	<p>The candidate is unable to demonstrate the ability to 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 for at least one unit of study.</p>



11. Take an active role in their professional growth by participating in professional development experiences that directly relate to the learning and teaching of mathematics. (6a)	
<b>D</b>	Candidate regularly seeks out, attends, participates in, and reports out on multiple professional development experiences directly related to the learning and teaching of mathematics. Candidate consistently integrates what s/he learned into planning, instruction, and assessment in ways that enhance learning for all students.
<b>B</b>	Candidate attends and participates in several professional development experiences directly related to the learning and teaching of mathematics. Candidate integrates what s/he learned into planning, instruction, and assessment in ways that enhance student learning.
<b>U</b>	Candidate either does not attend or does not participate in several professional development experiences directly related to the learning and teaching of mathematics. Candidate seldom integrates what s/he learned into planning, instruction, and assessment in ways that enhance student learning.
12. Engage 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. (NCTM NCATE/CAEP 6b)	
<b>D</b>	Candidate takes a <i>lead</i> role in continuous and collaborative learning that draws upon research in mathematics education to inform practice and enhances learning opportunities for all students' mathematical knowledge development.
	Candidate regularly seeks out and involves <i>multiple different</i> stakeholders in enhancing learning opportunities for <i>all</i> students' mathematical development and shows evidence of a positive effect on student learning due to this involvement. Candidate advances own development as a reflective practitioner through engagement in reflective writing and professional discussions around their own teaching <i>beyond reflections for and feedback from field supervisor</i> .
<b>B</b>	Candidate participates in continuous and collaborative learning that draws upon research in mathematics education to inform practice and enhances learning opportunities for all students' mathematical knowledge development. Candidate involves <i>at least two different</i> stakeholders in enhancing learning opportunities for students' mathematical development and shows evidence of a positive effect on student learning due to this involvement. Candidate advances own development as a reflective practitioner through engagement in reflective writing and professional discussions around their own teaching.
<b>U</b>	Candidate does not participate in <u>continuous</u> and <u>collaborative</u> learning that draws upon research in mathematics education to inform practice and enhances learning opportunities for all students' mathematical knowledge development. Candidate does not involve stakeholders to enhance learning opportunities for students' mathematical development. Candidate does not advance own development as a reflective practitioner.
13. 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. (NCTM NCATE/CAEP 7c)	
<b>D</b>	Candidate seeks and engages systematically in purposeful observations of others' teaching that enable her/him to examine the nature of mathematics, how mathematics should be taught, and how students learn mathematics, with particular attentions to tasks, discourse, environment, <i>and</i> assessment. Candidate engages in careful, sophisticated analysis of observations, articulates findings, and applies what s/he learns to improve student learning of mathematics.
<b>B</b>	Candidate engages in observations of others' teaching that enable her/him to examine the nature of mathematics, how mathematics should be taught, and how students learn mathematics, with particular attention on tasks, discourse, environment, <i>and</i> assessment. Candidate demonstrates the ability to analyze observations and apply what s/he learns to improve student learning of mathematics, with attention to tasks, discourse, environment, <i>and</i> assessment.
<b>U</b>	Candidate does not engage in observations of others' teaching that enable her/him to examine the nature of mathematics, how mathematics should be taught, and how students learn mathematics, with particular attention to tasks, discourse, environment, <i>and</i> assessment. Candidate engages in observations but does not analyze observations and/or apply what s/he learns to improve student learning of mathematics.

**NSTA/ CAEP SCIENCE ADDENDUM**  
**INDICATORS SPECIFIC TO THE SCIENCE EDUCATION PROGRAM**  
**ROWAN UNIVERSITY COLLEGE OF EDUCATION SUBJECT-MATTER EDUCATION**

Candidate: \_\_\_\_\_

Signature: \_\_\_\_\_

Supervisor: \_\_\_\_\_

Signature: \_\_\_\_\_

Date \_\_\_\_\_

Date: \_\_\_\_\_

**Instructions:** Rate the candidate on each of the components using the given rubric. For ratings of *Distinguished*, a description of evidence to support the rating must be included in the "Rationale for Rating" section. For ratings of *Basic* or *Unsatisfactory*, clear recommendations for growth must be included in the comments section. **In order to be recommended for certification, the candidate must receive at least a *Basic* rating for all indicators.**

<b>1. Content Area (NSTA 1a) (INTASC 4); K.K.1g;</b> Candidate's understanding of major concepts, principles, theories, laws, and interrelationships in their content area.		<b>Rating</b>
<b>U</b>	Candidate's teaching shows an inaccurate understanding	
<b>B</b>	Candidate's teaching shows an accurate general understanding but conveys occasional misconceptions	
<b>P</b>	Candidate's teaching shows an accurate in-depth understanding	
<b>D</b>	Candidate's teaching shows an accurate in-depth understanding, which is demonstrated with relevant real-life examples to students.	
<b>Rationale for Rating</b>		
<b>2. Integrated Content Area (NSTA 1b) (INTASC 5); K.S.4.g</b> Candidate's understanding of central concepts of supporting disciplines (ex: math, biology etc.)		<b>Rating</b>
<b>U</b>	Candidate's teaching shows an inaccurate understanding	
<b>B</b>	Candidate's teaching shows an accurate general understanding but conveys occasional misconceptions	
<b>P</b>	Candidate's teaching shows an accurate in-depth understanding	
<b>D</b>	Candidate's teaching shows an accurate in-depth understanding and demonstrates this with relevant real life examples to students.	
<b>Rationale for Rating</b>		
<b>3. NGSS Standard Based Teaching (NSTA 1c) (INTASC 7)</b> Candidate's teaching alignment with NGSS		<b>Rating</b>
<b>U</b>	Candidate's teaching does not demonstrate alignment with NGSS standards	
<b>B</b>	Candidate's teaching demonstrates some alignment with NGSS standards	
<b>P</b>	Candidate's teaching demonstrates complete alignment with NGSS standards, and this is shared with students (ex: listing standard based outcomes on board)	
<b>D</b>	Candidate's teaching <i>and</i> assessment demonstrate complete alignment with NGSS standards, and this is shared with students (ex: identified in feedback given to students and listed outcomes)	
<b>Rationale for Rating</b>		

<b>4. Content Pedagogy - Philosophical Foundations (INTASC 5) D.K.4.g</b> Candidate's teaching is grounded in a philosophical framework		<b>Rating</b>
<b>U</b>	Candidate's teaching is not grounded in any form of constructivism	
<b>B</b>	Candidate's teaching is generally grounded in constructivism, although some aspects of teaching do not demonstrate this philosophy	
<b>P</b>	Candidate's teaching and questioning during class engagement are grounded in constructivism	
<b>D</b>	Candidate's teaching, questioning, and self-assessment of their instruction are grounded in constructivism	
<b>Rationale for Rating</b>		
<b>5. Content Pedagogy - Inquiry Approaches (NSTA 2a) (INTASC 4); K.D.2g; K.S.3.g</b> Candidates use of inquiry approaches in their teaching		<b>Rating</b>
<b>U</b>	Candidate's teaching where contextually relevant is not inquiry based	
<b>B</b>	Candidate's teaching where contextually relevant is generally inquiry based	
<b>P</b>	Candidate's teaching where contextually relevant demonstrates specific inquiry based approaches (ex: guided, structured, full), and can articulate rationale for approach	
<b>D</b>	Candidate's teaching where contextually relevant follows specific inquiry based models (ex: Learning Cycle, POGIL etc...)	
<b>Rationale for Rating</b>		
<b>6. Content Pedagogy - Empirical Science and Engineering Practices (NSTA 2b) (INTASC 5); K.K.2g</b> Candidate engages students in empirical experiences and science and engineering practices (ex: data collection, interpretation, analysis, conclusion and argumentation)		<b>Rating</b>
<b>U</b>	Candidate's teaching, where contextually relevant, does not engage students in empirical experiences	
<b>B</b>	Candidate's teaching, where contextually relevant, generally engages students in empirical experiences, although missing some aspect of interpretation, analysis, conclusion, or argumentation	
<b>P</b>	Candidate's teaching, where contextually relevant, specifically engages students in empirical experiences by targeting general NGSS based science and engineering practices	
<b>D</b>	Candidate's teaching, where contextually relevant, specifically engages students in empirical experiences by identifying AND assessing specific NGSS based science and engineering practices	
<b>Rationale for Rating</b>		
<b>7. Content Pedagogy-HOS/NOS/SSI/Culture/Technology (NSTA 2a and 2c) (INTASC 4 and 5); T.S.8.g; D.K.3.g;</b> Candidate engages students in History of Science, Nature of Science, Socio-scientific Issues, Cultural and Technological connections		<b>Rating</b>
<b>U</b>	Candidate's teaching where contextually relevant does not engage students in any of the noted 5 themes throughout their residency experience.	
<b>B</b>	Candidate's teaching where contextually relevant generally engages students in at least two of the 5 noted themes throughout their residency experience	
<b>P</b>	Candidate's teaching where contextually relevant engages students in at least three of the 5 noted themes throughout their residency experience	
<b>D</b>	Candidate's teaching where contextually relevant engages students in all 5 of the noted themes throughout their residency experience	
<b>Rationale for Rating</b>		

<b>8. Safety Practices for Student Welfare (NSTA 3d) (INTASC 9); T.S.6.g</b> Candidate addresses student's welfare		<b>Rating</b>
<b>U</b>	Candidate does not present, display and practice safety rules with students where contextually relevant	
<b>B</b>	Candidate presents, displays and practices safety rules with students where contextually relevant.	
<b>P</b>	Candidate presents, displays and practices safety rules with students AND discusses reasons for such rules with students where contextually relevant	
<b>D</b>	Candidate presents, displays and practices safety rules with students AND discusses reasons for such rules with students where contextually relevant AND promotes consistency in science department safety protocol within the school.	
<b>Rationale for Rating</b>		
<b>9. Professional Knowledge and Skills in Content Field (NSTA 6a) (INTASC 9)</b> Candidate engages in professional development specific to their content field for the betterment of their teaching (ex: talks, symposiums, research opportunities or projects within the community)		<b>Rating</b>
<b>U</b>	Candidate does not engage in specific professional development in their content discipline	
<b>B</b>	Only <b>once</b> does the candidate engage in specific professional development in their content discipline	
<b>P</b>	Candidate engages <b>more than once</b> in specific professional development in their content discipline AND provides evidence of such engagement	
<b>D</b>	Candidate engages <b>more than once</b> in specific professional development in their content discipline AND provides evidence of such engagement AND transitions such knowledge and skills in their teaching practice.	
<b>Rationale for Rating</b>		
<b>10. Professional Knowledge and Skills in Community (NSTA 6b) (INTASC 10)</b> Candidate engages in professional development in education for the betterment of their teaching (ex: talks, symposiums, research opportunities or projects within the community)		<b>Rating</b>
<b>U</b>	Candidate does not engage in specific professional development for science teachers	
<b>B</b>	Only <b>once</b> does the candidate engage in specific professional development for science teachers	
<b>P</b>	Candidate engages <b>more than once</b> in specific professional development for science teachers AND provide evidence of such engagement	
<b>D</b>	Candidate engages <b>more than once</b> in specific professional development for science teachers AND provides evidence of such engagement AND transitions such knowledge and skills in their teaching practice.	
<b>Rationale for Rating</b>		