

**TEACHER CERTIFICATION PROGRAM FOR COLLEGE GRADUATES (TCPCG)
SCIENCE EDUCATION – FINAL EVALUATION RESULTS
FALL 2016**

Context

This instrument may be used for formative purposes involving a regular observation/feedback cycle. The development of this form was based on standards promoted by the National Science Teachers Association (NSTA), InTASC Standards adopted by the Council for the Accreditation of Educator Preparation (CAEP), and the Connecticut Common Core of Teaching (CCCT). This survey was administered to the cooperating teacher supervisors of the 15 student teaching candidates within the fall science education cohort.

Methodology

The survey was administered using Qualtrics, an online survey tool. An email invitation was distributed to the placement supervisors of all of the students (N=15) participating in teaching placements.

Key Findings

- ✓ Student's average score improved across all domain areas, relative to the midterm assessment.
- ✓ Overall students continued to be rated as most successful in regards to *Reflecting critically on his/her own practices and actively seeks input about how to grow and improve instruction.*
- ✓ The domain area where students struggled most overall changed from the *Planning of fair and equitable assessment strategies to analyze student learning and to evaluate if the learning goals are met. Assessment strategies are designed to continuously evaluate preconceptions and ideas that students hold and the understandings that students have formulated. NSTA 3c to Providing data to show that P-12 students are able to distinguish science from nonscience, understand the evolution and practice of science as a human endeavor, and critically analyze assertions made in the name of science. NSTA 5b*
- ✓ In general, a vast majority of students still were reported to be making *Outstanding* or *Satisfactory Progress* across domain areas.

Please indicate the program component in which the student is enrolled:

Program Campus	Count
TCPCG Hartford	5 (31.25%)
TCPCG Avery Point	9 (56.25%)
TCPCG Waterbury	2 (12.50%)

District of Student Teaching

District	Count
Waterford	2
New London	1
Farmington	1
Windsor	2
Enfield	1
Berlin	1
Norwich	3
Hartford	2
Westport	1
Region 7	1
Manchester	1

Grade Level Placement (Check all that apply)

Grade	Count
6	1 (6.25%)
8	3 (18.75%)
9	7 (43.75%)
10	11 (68.75%)
11	9 (56.25%)
12	7 (43.75%)

Performance Areas

For each of the students, the following scale will be used to evaluate the teaching candidate:

- 3: Student is making outstanding progress by effectively planning/implementing instruction to address this standard.
 2: Student is making satisfactory progress by making deliberate attempts to address this standard.
 1: Student is not making satisfactory progress and still remains weak in addressing this standard.
 N/A = For use only in the midterm: means "not applicable" because this standard is yet to be covered.

CT COMMON CORE OF TEACHING: Planning, instructing, assessing, and adjusting

Item	3	2	1	N/A	Average Score
1. Plan multiple lessons using a variety of inquiry approaches that demonstrate their knowledge and understanding of how all students learn science. NSTA 2a	60.00%	40.00%	0.00%	0.00%	2.60
2. Include active inquiry lessons where students collect and interpret data in order to develop and communicate concepts and understand scientific processes, relationships and natural patterns from empirical experiences. NSTA 2b	80.00%	20.00%	0.00%	0.00%	2.80
3. Applications of science-specific technology are included in the lessons when appropriate. NSTA 2b	53.33%	46.67%	0.00%	0.00%	2.53
4. Design instruction and assessment strategies that confront and address naïve concepts/preconceptions. NSTA 2c	53.33%	40.00%	6.67%	0.00%	2.47
5. Use a variety of strategies that demonstrate the candidates knowledge and understanding of how to select the appropriate teaching and learning activities including laboratory or field settings and applicable instruments and/or technology- to allow access so that all students learn. These strategies are inclusive and motivating for all students. NSTA 3a	73.33%	20.00%	6.67%	0.00%	2.67
6. Develop lesson plans that include active inquiry lessons where students collect and interpret data using applicable science-specific technology in order to develop concepts, understand scientific processes, relationships and natural patterns from empirical experiences. These plans provide for equitable	66.67%	33.33%	0.00%	0.00%	2.67

achievement of science literacy for all students. NSTA 3b					
7. Plan fair and equitable assessment strategies to analyze student learning and to evaluate if the learning goals are met. Assessment strategies are designed to continuously evaluate preconceptions and ideas that students hold and the understandings that students have formulated. NSTA 3c	46.67%	46.67%	6.67%	0.00%	2.40
8. Plan a learning environment and learning experiences for all students that demonstrate chemical safety, safety procedures, and the ethical treatment of living organisms within their licensure area. NSTA 3d	80.00%	20.00%	0.00%	0.00%	2.80
9. Design activities in a P-12 classroom that demonstrate the safe and proper techniques for the preparation, storage, dispensing, supervision, and disposal of all materials used within their subject area science instruction. NSTS 4a	80.00%	20.00%	0.00%	0.00%	2.80
10. Design and demonstrate activities in a P-12 classroom that demonstrate an ability to implement emergency procedures and the maintenance of safety equipment, policies and procedures that comply with established state and/or national guidelines. Candidates ensure safe science activities appropriate for the abilities of all students. NSTA 4b	73.33%	26.67%	0.00%	0.00%	2.73
11. Design and demonstrate activities in a P-12 classroom that demonstrate ethical decision-making with respect to the treatment of all living organisms in and out of the classroom. They emphasize safe, humane, and ethical treatment of animals and comply with the legal restrictions on the collection, keeping, and use of living organisms. NSTA 4c	53.33%	40.00%	0.00%	6.67%	2.57
12. Collect, organize, analyze, and reflect on diagnostic, formative and summative evidence of a change in mental functioning demonstrating that scientific knowledge is gained and/or corrected. NSTA 5a	53.33%	46.67%	0.00%	0.00%	2.53
13. Provide data to show that P-12 students are able to distinguish science from nonscience, understand the evolution and practice of science as a human endeavor, and critically analyze assertions made in the name of science. NSTA 5b	13.33%	80.00%	0.00%	6.67%	2.14

14. Engage students in developmentally appropriate inquiries that require them to develop concepts and relationships from their observations, data, and inferences in a scientific manner. NSTA 5c	73.33%	26.67%	0.00%	0.00%	2.73
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CT COMMON CORE OF TEACHING: Professional and Ethical Practice, Reflection and Continuous Learning, Leadership and Collaboration:

Item	3	2	1	N/A	Average Score
1. Creates opportunities to communicate with families in supportive and empowering ways, establishes respectful and collaborative relationships with families, and involves families in students science learning.	33.33%	60.00%	0.00%	6.67%	2.36
2. Uses information from students, supervisors, school and university faculty members to support students science learning and well-being.	86.67%	13.33%	0.00%	0.00%	2.87
3. Reflects critically on his/her own practices and actively seeks input about how to grow and improve instruction.	93.33%	6.67%	0.00%	0.00%	2.93
4. Engage in professional development opportunities in their content field such as talks, symposiums, research opportunities, or projects within their community. NSTA 6a	60.00%	40.00%	0.00%	0.00%	2.60
5. Engage in professional development opportunities such as conferences, research opportunities, or projects within their community. NSTA 6b	53.33%	46.67%	0.00%	0.00%	2.53

Final Comments

I. Teacher candidate has knowledge of student's content and pedagogy regarding the planning, instructing, assessing and adjusting.

What 2-4 strengths did the student teacher candidate possess?

Answer

Statements contained personal information and were redacted

What are 2-4 areas of improvement for the student teacher candidate?

Answer

Statements contained personal information and were redacted

II. Teachers have knowledge of students, content, and pedagogy regarding the professional and ethical practice, reflection and continuous learning, leadership, and collaboration.

What 2-4 strengths did the student teacher candidate possess?

Answer

Statements contained personal information and were redacted

What are 2-4 areas of improvement for the student teacher candidate?

Answer

Statements contained personal information and were redacted

Additional Comments:

Answer

Statements contained personal information and were redacted

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