

## TEACHER CERTIFICATION PROGRAM FOR COLLEGE GRADUATES (TCPCG) Science Education – Midterm Evaluation Results Fall 2015

## Context

The main purpose of this evaluation form, completed by the university supervisor, is to be used as a summative evaluation of a student's performance in order to facilitate the student's professional growth as a teaching candidate. This instrument may be used for formative purposes involving a regular observation/feedback cycle. This survey was administered to the cooperating teacher supervisors of the 20 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=20) participating in teaching placements.

# **Key Findings**

- ✓ Students were most successful (received a rating of "outstanding progress" at a rate of 45.00% or above) in the following domain areas:
  - Plans and implements instruction based on science national and state curriculum frameworks and local curricular goals in an effort to address student needs and abilities.
  - Activates students' prior science knowledge and experience to support and advance their science learning.
  - Seeks out and uses resources from a variety of sources, including technology, to create meaningful and interesting activities to support students' learning in science.
  - Creates positive and supportive interactions with students through respectful, appropriate, and effective verbal and nonverbal communication techniques.
  - Uses information from students, supervisors, school and university faculty members to support students' science learning and well-being.
  - Reflects critically on his/her own practices and actively seeks input about how to grow and improve instruction
  - Seeks out and participates in opportunities to grow professionally.
- ✓ Students could use improvement (received a rating of "not making satisfactory progress" at a rate of 10.00% or above) in the following domain areas:
  - Asks questions and implements methods that encourage students to think critically.
  - Uses informal and formal assessment data to inform and modify science instruction, to plan appropriate lessons, including purposeful choices regarding group formations, and to engage students in reflective self-analysis.
  - 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.
- ✓ Students could use more exposure (received a rating of "Not Applicable" at a rate of 10.00% or above) in the following domain areas:

- Applies an understanding of the historical and cultural development of science and the evolution of knowledge in their discipline to the planning and implementation of science instruction.
- Engages students in the studies of the nature of science, including the critical analysis of false or doubtful assertions made in the name of science.
- Introduces students to socially important issues related to science and technology in their field of licensure and exposes them to processes used to analyze and make decisions on such issues.
- 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.

For more information, please contact Jamison Judd, Interim Director of Assessment (jamison.judd@uconn.edu). This report is available online - <u>http://assessment.education.uconn.edu/</u>

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

Program Campus	Count
TCPCG Hartford	10 (50.00%)
TCPCG Avery Point	5 (25.00%)
TCPCG Waterbury	5 (25.00%)

### Student's year of entrance into the Teacher/Education Program:

Year of Entrance	Count
2015-2016	20 (100.00%)

### **District of Student Teaching**

District	Count
Hartford	5 (25.00%)
Wolcott	2 (10.00%)
Shelton	2 (10.00%)
Ellington	1 (5.00%)

1 (5.00%)
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1 (5.00%)
1 (5.00%)

### Grade Level Placement (Check all that apply)

Grade	Count
7	1 (2.22%)
8	2 (4.44%)
9	8 (17.78%)
10	15 (33.33%)
11	10 (22.22%)
12	9 (20.00%)

### **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 II Teachers Apply This Knowledge by Planning, Instructing, Assessing, and Adjusting

Item	3	2	1	N/A
1. Plans and implements instruction based on knowledge of the academic principles, essential concepts, theories, laws, learning strategies, and interrelationships of fields of licensure and supporting fields as recommended by the National Science Teachers Association (NSTA/NCATE 1.a, 1.d, 1.e)	6 (30.00%)	14 (70.00%)	0 (0.00%)	0 (0.00%)
2. Responds to the group or individual student's levels of science understanding by adjusting teaching strategies (NSTA/NCATE 5.e)	6 (30.00%)	13 (65.00%)	1 (5.00%)	0 (0.00%)
3. Plans and implements science instruction based on knowledge of the community context and by using the community as an instructional resource (NSTA/NCATE 7.a, 7.b)	3 (15.00%)	15 (75.00%)	1 (5.00%)	1 (5.00%)
4. Constructs science lessons adapted to student needs based on different developmental levels, approaches to learning, abilities, background experiences and personal interests (NSTA/NCATE 5.b)	6 (30.00%)	13 (65.00%)	0 (0.00%)	1 (5.00%)
5. Applies concepts, procedures, and applications to build understanding and to help students connect science knowledge and skills to real world problems (NSTA/NCATE 4.b)	8 (40.00%)	12 (60.00%)	0 (0.00%)	0 (0.00%)

CT Common Core of Teaching II: Teachers Apply This Knowledge by Planning, Instructing, Assessing, Adjusting

Item	3	2	1	N/A
6. Plans and implements instruction based on science national and state curriculum frameworks and local curricular goals in an effort to address student needs and abilities (NSTA/NCATE 1.b, 6.a, 6.b)	12 (60.00%)	8 (40.00%)	0 (0.00%)	0 (0.00%)
7. Activates students' prior science knowledge and experience to support and advance their science learning (NSTA/NCATE 5.e)	9 (45.00%)	10 (50.00%)	1 (5.00%)	0 (0.00%)
8. Asks questions and implements methods that encourage students to think critically. (NSTA/NCATE 3.a, 3.b)	3 (15.00%)	14 (70.00%)	3 (15.00%)	0 (0.00%)

9. Provides opportunities for students to solve problems, explain their thinking, and evaluate their own performance (NSTA/NCATE 5.a)	5 (25.00%)	15 (75.00%)	0 (0.00%)	0 (0.00%)
10. Seeks out and uses resources from a variety of sources, including technology, to create meaningful and interesting activities to support students' learning in science (NSTA/NCATE 5.d)	13 (65.00%)	7 (35.00%)	0 (0.00%)	0 (0.00%)

CT Common Core of Teaching II: Teachers Apply This Knowledge by Planning, Instructing, Assessing, Adjusting

Item	3	2	1	N/A
11. Creates a respectful, safe, and challenging environment that supports students' development, construction of science knowledge, and motivation to learn; in doing so demonstrates considerable knowledge of child and/or adolescent development and understanding of the multiple interacting influences on science (NSTA/NCATE 5.f)	7 (35.00%)	12 (60.00%)	1 (5.00%)	0 (0.00%)
12. Uses informal and formal assessment data to inform and modify science instruction, to plan appropriate lessons, including purposeful choices regarding group formations, and to engage students in reflective self-analysis. (NSTA/NCATE 8.a, 8.b, 8.c)	4 (20.00%)	12 (60.00%)	3 (15.00%)	1 (5.00%)
13. Sequences learning tasks into coherent units of instruction derived from the science curriculum in an effort to effectively scaffold student learning (NSTA/NCATE 5.a)	8 (40.00%)	12 (60.00%)	0 (0.00%)	0 (0.00%)
14. Creates positive and supportive interactions with students through respectful, appropriate, and effective verbal and nonverbal communication techniques (NSTA/NCATE 5.f)	11 (55.00%)	8 (40.00%)	1 (5.00%)	0 (0.00%)
15. Conveys to students the importance of personal and technological applications of science in their fields of licensure (NSTA/NCATE 1.c)	2 (10.00%)	17 (85.00%)	0 (0.00%)	1 (5.00%)

CT Common Core of Teaching II: Teachers Apply This Knowledge by Planning, Instructing, Assessing, Adjusting

Item	3	2	1	N/A
16. Applies an understanding of the historical and cultural development of science and the evolution of knowledge in their discipline to the planning and implementation of science instruction (NSTA/NCATE 2.a)	5 (25.00%)	13 (65.00%)	0 (0.00%)	2 (10.00%)
17. Demonstrates an understanding of philosophical tenets, assumptions, goals, and values that distinguish science from technology and from other ways if knowing the world (NSTA/NCATE 2.b)	4 (20.00%)	14 (70.00%)	0 (0.00%)	1 (5.00%)
18. Engages students in the studies of the nature of science, including the critical analysis of false or doubtful assertions made in the name of science (NSTA/NCATE 2.c)	4 (20.00%)	11 (55.00%)	0 (0.00%)	4 (20.00%)
19. Introduces students to socially important issues related to science and technology in their field of licensure and exposes them to processes used to analyze and make decisions on such issues (NSTA/NCATE 4.a)	3 (15.00%)	13 (65.00%)	0 (0.00%)	4 (20.00%)
20. Demonstrates and promotes knowledge about legal and ethical safety issues, safety procedures and materials use, and respect for living things in the classroom (NSTA/NCATE 9.a, 9.b, 9.c, 9.d)	8 (40.00%)	12 (60.00%)	0 (0.00%)	0 (0.00%)

CT Common Core of Teaching III: Teachers Demonstrate Professional Responsibility through Professional and Ethical Practice, Reflection and Continuous Learning, Leadership, and Collaboration

Item	3	2	1	N/A
21. Creates opportunities to communicate				
empowering ways, establishes respectful	1	14	2	3
and collaborative relationships with	(5.00%)	(70.00%)	(10.00%)	(15.00%)
families, and involves families in students'				
science learning (NSTA/NCATE 10.d)				
22. Uses information from students,	9	11	0	0
supervisors, school and university faculty	(45.00%)	(55.00%)	(0.00%)	(0.00%)

members to support students' science learning and well-being (NSTA/NCATE 10.c)				
23. Reflects critically on his/her own practices and actively seeks input about how to grow and improve instruction (NSTA/NCATE 10.b)	14 (70.00%)	5 (25.00%)	1 (5.00%)	0 (0.00%)
24. Seeks out and participates in opportunities to grow professionally (NSTA/NCATE 10.a)	10 (50.00%)	10 (50.00%)	0 (0.00%)	0 (0.00%)

#### **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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