OLD DOMINION UNIVERSITY

Darden College of Education and Professional Studies

Candidate Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Candidate UIN \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Date \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Please attach to final evaluation and return with end of semester paperwork.**

Summary of Teacher Candidate Performance:

Developing Professional Educators

Science Content Observation Assessment of Teacher Candidate Interns

***Science 6-12 Licensure***

Darden College of Education and Professional Studies Telephone: 757-683-3348

Office of Clinical Experiences Fax: 757-683-4872

4301 Hampton Blvd.

Norfolk, VA 23529

**SCIENCE 6-12**

The purpose of this student teaching observation “**science content assessment**” is to provide more specific information to the Darden College of Education and Professional Studies faculty regarding teacher candidate skill levels on national performance standards.

Therefore, in addition to the general teaching observation form used to evaluate best practices in teaching for all teacher candidates in the Darden College of Education and Professional Studies, please evaluate the teacher candidate on the following professional content items according to the **2012 National Science Standards.** Place a check in the box next to the item that best represents the teacher candidates routine performance on the item below based on the criteria provided.

|  |  |
| --- | --- |
| 1. **Content Knowledge– Standard 1a** | |
|  | MEETS STANDARD (2 pts)- The teacher candidate consistently demonstrated he or she understands and conveys to students the major concepts, principles, theories, laws, and interrelationships of science and supporting fields as recommended by the National Science Teachers Association. |
|  | NEEDS IMPROVEMENT (1 pt)- The teacher candidate sometimes demonstrated he or she understands and conveys to students the major concepts, principles, theories, laws, and interrelationships of science and supporting fields as recommended by the National Science Teachers Association. |
|  | UNACCEPTABLE (0 pts)- The teacher candidate never demonstrated he or she understands and conveys to students the major concepts, principles, theories, laws, and interrelationships of science and supporting fields as recommended by the National Science Teachers Association. |
|  | Not Observed (No) – Did not have the opportunity to demonstrate skills. |
| 1. **Content Knowledge– Standard 1b** | |
|  | MEETS STANDARD (2 pts)- The teacher candidate consistently demonstrated he or she understands the central concepts of the supporting disciplines and the supporting role of science specific technology. |
|  | NEEDS IMPROVEMENT (1 pt)- The teacher candidate sometimes demonstrated he or she understands the central concepts of the supporting disciplines and the supporting role of science specific technology. |
|  | UNACCEPTABLE (0 pts)- The teacher candidate never demonstrated he or she understands the central concepts of the supporting disciplines and the supporting role of science specific technology. |
|  | Not Observed (No) – Did not have the opportunity to demonstrate skills. |
| **3. Content Knowledge – Standard 1c** | |
|  | MEETS STANDARDS (2 pts) – The teacher candidate consistently demonstrated an understanding of state and national curriculum standards and their impact on the content knowledge necessary for teaching science to 6-12 students. |
|  | NEEDS IMPROVEMENT (1 pt) - The teacher candidate sometimes demonstrated an understanding of state and national curriculum standards and their impact on the content knowledge necessary for teaching science to 6-12 students. |
|  | UNACCEPTABLE (0 pts) - The teacher candidate did not demonstrate an understanding of state and national curriculum standards and their impact on the content knowledge necessary for teaching science to 6-12 students. |
|  | Not Observed (No) |
| **4. Content Pedagogy – Standard 2a** | |
|  | MEETS STANDARD (2 pts)- The teacher candidate always used a variety of inquiry approaches that demonstrated their knowledge and understanding of how all students learn science. |
|  | NEEDS IMPROVEMENT (1 pt)- The teacher candidate sometimes used a variety of inquiry approaches that demonstrated their knowledge and understanding of how all students learn science. |
|  | UNACCEPTABLE (0 pts) - The teacher candidate never used a variety of inquiry approaches that demonstrated their knowledge and understanding of how all students learn science. |
|  | Not Observed (No) – Did not have the opportunity to demonstrate skills. |
| **5. Content Pedagogy – Standard 2b** | |
|  | MEETS STANDARD (2 pts)- The teacher candidate always included active inquiry lessons where students collect and interpret data to develop and communicate concepts and understand scientific processes, relationships and natural patterns  from empirical experiences. Applications of science-specific technology are included in the lessons when appropriate. |
|  | NEEDS IMPROVEMENT (1 pt) - The teacher candidate sometimes included active inquiry lessons where students collect and interpret data to develop and communicate concepts and understand scientific processes, relationships and natural patterns  from empirical experiences. Applications of science-specific technology are sometimes included in the lessons when appropriate. |
|  | UNACCEPTABLE (0 pts) - The teacher candidate never included active inquiry lessons where students collect and interpret data to develop and communicate concepts and understand scientific processes, relationships and natural patterns  from empirical experiences. Applications of science-specific technology are never included in the lessons when appropriate. |
|  | Not Observed (No) – Did not have the opportunity to demonstrate skills. |
| **6. Content Pedagogy – Standard 2c** | |
|  | MEETS STANDARD (2 pts) - The teacher candidate always designed instruction and assessment strategies that confronted and addressed naïve concepts/preconceptions. |
|  | NEEDS IMPROVEMENT (1 pt) - The teacher candidate sometimes designed instruction and assessment strategies that confronted and addressed naïve concepts/preconceptions. |
|  | UNACCEPTABLE (0 pts) - The teacher candidate never designed instruction and assessment strategies that confronted and addressed naïve concepts/preconceptions. |
|  | Not Observed (No) – Did not have the opportunity to demonstrate skills. |
|  |  |
|  |  |
| 1. **Learning Environments - Standard 3a** | |
|  | MEETS STANDARD (2 pts)- The teacher candidate always used 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 were inclusive and motivating for all students. |
|  | NEEDS IMPROVEMENT (1 pt)- The teacher candidate sometimes used 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 were sometimes inclusive and motivating for all students. |
|  | UNACCEPTABLE (0 pts)- The teacher candidate never used 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 were sometimes inclusive and motivating for all students. |
|  | Not Observed (No) – Did not have the opportunity to demonstrate skills. |
| **8. Learning Environments– Standard 3b** | |
|  | MEETS STANDARD (2 pts)- The teacher candidate always developed lesson plans that included 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 provided for equitable achievement of science literacy for all students. |
|  | NEEDS IMPROVEMENT (1 pts)- The teacher candidate sometimes developed lesson plans that included 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 sometimes provided for equitable achievement of science literacy for all students. |
|  | UNACCEPTABLE (0 pts)- The teacher candidate never developed lesson plans that included 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 never provided for equitable achievement of science literacy for all students. |
|  | Not Observed (No) – Did not have the opportunity to demonstrate skills. |
| **9. Learning Environments– Standard 3c** | |
|  | MEETS STANDARD (2 pts)- The teacher candidate always planned fair and equitable assessment strategies to analyze student learning and to evaluate if the  learning goals were met. Assessment strategies were designed to continuously evaluate  preconceptions and ideas that students hold and the understandings that students have  formulated. |
|  | NEEDS IMPROVEMENT (1 pt)- The teacher candidate sometimes planned fair and equitable assessment strategies to analyze student learning and to evaluate if the  learning goals were met. Assessment strategies were sometimes designed to continuously evaluate preconceptions and ideas that students hold and the understandings that students have formulated. |
|  | UNACCEPTABLE (0 pts)- The teacher candidate never planned fair and equitable assessment strategies to analyze student learning and to evaluate if the  learning goals were met. Assessment strategies were never designed to continuously evaluate preconceptions and ideas that students hold and the understandings that students have formulated. |
|  | Not Observed (No) – Did not have the opportunity to demonstrate skills. |
| **10. Learning Environments – Standard 3d** | |
|  | MEETS STANDARD (2 pts)- The teacher candidate always planned for a learning environment and learning experiences for all students that demonstrated chemical  safety, safety procedures, and the ethical treatment of living organisms within their licensure area. |
|  | NEEDS IMPROVEMENT (1 pt)- The teacher candidate sometimes planned for a learning environment and learning experiences for all students that demonstrated chemical safety, safety procedures, and the ethical treatment of living organisms within their licensure area. |
|  | UNACCEPTABLE (0 pts)- The teacher candidate never planned for a learning environment and learning experiences for all students that demonstrated chemical  safety, safety procedures, and the ethical treatment of living organisms within their licensure area. |
|  | Not Observed (No) – Did not have the opportunity to demonstrate skills. |
| **11. Safety - Standard 4a** | |
|  | MEETS STANDARD (2 pts)- When appropriate, the teacher candidate always designed activities in a P-12 classroom that demonstrated the safe and proper techniques for the preparation, storage, dispensing, supervision, and disposal of all materials used within their subject area science instruction. |
|  | NEEDS IMPROVEMENT (1 pt)- When appropriate, the teacher candidate sometimes designed activities in a P-12 classroom that demonstrated the safe and proper techniques for the preparation, storage, dispensing, supervision, and disposal of all materials used within their subject area science instruction. |
|  | UNACCEPTABLE (0 pts)- The teacher candidate never designed activities in a P-12 classroom that demonstrated the safe and proper techniques for the preparation, storage, dispensing, supervision, and disposal of all materials used within their subject area science instruction. |
|  | Not Observed (No) – Did not have the opportunity to demonstrate skills. |
| **12. Safety – Standard 4b** | |
|  | MEETS STANDARD (2 pts)- The teacher candidate always designed and demonstrated activities in a P-12 classroom that demonstrated 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. |
|  | NEEDS IMPROVEMENT (1pt)- The teacher candidate sometimes designed and demonstrated activities in a P-12 classroom that demonstrated 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 sometimes ensured safe science activities appropriate for the abilities of all students. |
|  | UNACCEPTABLE (0 pts)- The teacher candidate never designed and demonstrated activities in a P-12 classroom that demonstrated 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 never ensured safe science activities appropriate for the abilities of all students. |
|  | Not Observed (No) – Did not have the opportunity to demonstrate skills. |
| **13. Safety – Standard 4c** | |
|  | MEETS STANDARD (2 pts)- The teacher candidate always designed and demonstrated 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. The teacher candidate emphasized safe, humane, and ethical treatment of animals and complies with the legal restrictions on the collection, keeping, and use of living organisms. |
|  | NEEDS IMPROVEMENT (1 pt)- The teacher candidate sometimes designed and demonstrated 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. The teacher candidate sometimes emphasized safe, humane, and ethical treatment of animals and complies with the legal restrictions on the collection, keeping, and use of living organisms. |
|  | UNACCEPTABLE (0 pts)- The teacher candidate never designed and demonstrated 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. The teacher candidate never emphasized safe, humane, and ethical treatment of animals and complies with the legal restrictions on the collection, keeping, and use of living organisms. |
|  | Not Observed (No) – Did not have the opportunity to demonstrate skills. |
| **Standard 5 is measured using the Impact of Student Learning Assessment** | |
| **14. Professional Knowledge and Skills – Standard 6a** | |
|  | MEETS STANDARD (2 pts)- The teacher candidate always engaged in professional development opportunities in their content field such as talks, symposiums, research opportunities, or projects within their school or larger community served by the school. |
|  | NEEDS IMPROVEMENT (1pt)- The teacher candidate sometimes engaged in professional development opportunities in their content field such as talks, symposiums, research opportunities, or projects within their school or larger community served by the school. |
|  | UNACCEPTABLE (0 pts)- The teacher candidate never engaged in professional development opportunities in their content field such as talks, symposiums, research opportunities, or projects within their school or larger community served by the school. |
|  | Not Observed (No) – Did not have the opportunity to demonstrate skills. |
| **15. Professional Knowledge and Skills – Standard 6b** | |
|  | MEETS STANDARD (2 pts)- The teacher candidate always engaged in professional development opportunities to address science pedagogy such as conferences, research opportunities, or projects within their community. |
|  | NEEDS IMPROVEMENT (1pt)- The teacher candidate sometimes engaged in professional development opportunities to address science pedagogy such as conferences, research opportunities, or projects within their community. |
|  | UNACCEPTABLE (0 pts)- The teacher candidate never engaged in professional development opportunities to address science pedagogy such as conferences, research opportunities, or projects within their community. |
|  | Not Observed (No) – Did not have the opportunity to demonstrate skills. |
| **16. Professional Knowledge and Skills – Standard 6b** | |
|  | MEETS STANDARD (2 pts)- When appropriate, the teacher candidate always involved students successfully in projects that relate science to resources and stakeholders in the community or to the resolution of issues important to the science education community. |
|  | NEEDS IMPROVEMENT (1 pt)- When appropriate, the teacher candidate sometimes involved students successfully in projects that relate science to resources and stakeholders in the community or to the resolution of issues important to the science education community. |
|  | UNACCEPTABLE (0 pts)- The teacher candidate never involved students successfully in projects that relate science to resources and stakeholders in the community or to the resolution of issues important to the science education community. |
|  | Not Observed (No) – Did not have the opportunity to demonstrate skills. |
| **Comments:** | |
|  | |

k:/educ/educ teacher education services/professional attributes and instructional scales/2012-2013 professional attributes and instructional scales/sciences 6-12\_updated 2-23\_2017 (JU)