Evidence Descriptors and Evaluation Tool

Highlighted yellow text below describes how the evidence specifically addresses each of the descriptors. The rubric will be used for the instructor's evaluation of the project as it related to the course grade as well as for gateway assessment for the unit's comprehensive assessment plan for NCATE.

Alignment with the NC Professional Teaching Standards			
This Depth and Application (DnA) Project is designed to provide evidence of candidate's performance relative to the following standards and elements: This electronic evidence supports the descriptor 3b.1 and Teacher Education Specialty Area Standards (2009) for elementary math and science. The science standard states that the candidate must "identify 'real world' questions and facilitate scientific investigations of these questions…" (p.13) and the mathematics standards direct the candidate to "help students make connections regarding how mathematics ideas interconnect and build on one another to produce a coherent whole and recognizing and applying mathematics in context outside of mathematics."(p. 11)			
Standard 3: Teachers know the content they teach. Candidates will demonstrate appropriate level of content for the Teacher Brief by choosing a topic or problem in science or mathematics that goes beyond what is expected for elementary school science in the NC Standard Course of Study and produce an in depth paper with an informative, interactive and engaging presentation of the paper.			
3.b.1 Teachers know the content appropriate to their teaching specialty.	**Emerging/Developing** **1** **(Below 80%)**	**Proficient** **2** **(80-89%)**	**Accomplished** **3** **(90-100%)**
The candidate will demonstrate appropriate level of content for the Teacher Brief by choosing a topic [STEM] or problem in science or mathematics that goes beyond what is expected for elementary school science or math in the NC Common Core and Essential Standards.	The Teacher Brief demonstrates the candidate's basic knowledge of the math or science topic [STEM] is at a level commensurate with the K-5 Common Core and Essential Standards for either of these content areas. Candidate scores less than 12 points on the ***Content Instructor Evaluation*** (see below)	The Teacher Brief demonstrates the candidate's knowledge of the science and/or math topic [STEM] is at a level beyond the elementary Common Core and Essential Standards. The brief includes evidence of content knowledge and understanding that is commensurate with the more advanced curriculum objectives for grades 6-9. Candidate scores 12-13 points on the ***Content Instructor Evaluation*** (see below)	The Teacher Brief demonstrates the candidate's extensive knowledge of the science and/or math topic [STEM] at a level well beyond the elementary Common Core and Essential Standards. The brief includes evidence of content knowledge and understanding that is commensurate with advanced curriculum objectives for the Secondary 9-12 Essential Standards in science and/or math. Candidate scores 14-15 points on the ***Content Instructor Evaluation*** (see below)

3.b.1 Teachers know the content appropriate to their teaching specialty.	Emerging/Developing 1 (Below 80%)	Proficient 2 (80-89%)	Accomplished 3 (90-100%)
The candidate will demonstrate the ability of elementary teachers to have broad knowledge across disciplines by connecting the content topic of science or math [STEM] to a real world situation/ problem and applying it to the other content area.	The Teacher Brief demonstrates the candidate's ability to identify a real world situation or problem related to the topic [STEM] but not the connectedness of one discipline to the other **or** The connectedness between science and math is apparent in the Teacher Brief but an application to a real world situation is lacking or poorly defined.	The Teacher Brief demonstrates the ability of the candidate to identify and connect the math content to the science or the science content to the math in a real world situation or problem that is adequately defined and appropriate for the topic of the brief. [STEM]	The Teacher brief demonstrates the ability of the candidate to identify and connect the math content to the science or the science content to the math in a real world situation or problem **and** the candidate is able to propose an appropriate research question of study for investigation based on this real world connection. [STEM]
The candidate will demonstrate depth of content knowledge through using primary and secondary sources of literature common to the science or math discipline. [STEM]	Less than 80% of the literature citations in the Teacher Brief are from primary and secondary sources in the content literature **or** The citations chosen by the candidate are outdated (older than ten years).	The Teacher Brief has at least 80% of the literature citations from primary and secondary sources of the content literature and these are related to the topic and current (within the last ten years).	The Teacher Brief has more than 80% of the literature citations from primary and secondary sources. Citations reflect the latest research and provide novel and innovative information pertaining to an investigation relevant to a real world application in science and math. [STEM]
Comments:			

Score:			

3.b.1 Teachers know the content appropriate to their teaching specialty.	**Emerging/Developing** **0.5** **(Below 80%)**	**Proficient** **1.0** **(80-89%)**	**Accomplished** **1.5** **(90-100%)**
PRESENTATION PART I Expert Evaluation Candidates will demonstrate an understanding of the content through an interactive, informative and engaging presentation evaluated by peers in the professional learning community.	The candidate's presentation of the Teacher Brief is unclear, poorly organized, and reflects a general lack of knowledge within the selected content area beyond what is required of elementary teachers to teach the K-5 Common Core and Essential Standards in science and/or mathematics.	The candidate's presentation of the Teacher Brief is clear, organized, interactive and reflects a depth of knowledge within the selected content area that is beyond what is required to teach the K-5 Common Core and Essential Standards in science and/or mathematics **.**	The candidate's presentation of the Teacher Brief is engaging, excellent and reflects an advanced level of knowledge in the selected content area that is well beyond what is required to teach the K-5 Common Core and Essential Standards in science and/or mathematics.
PRESENTATION PART II Peer Evaluation	The candidate is unable to respond to questions posed by the audience in a manner that demonstrates clear content knowledge **and:** Peer Evaluation of the candidate's presentation is below the proficiency level (see Peer Evaluation Form)	The candidate is able to respond to questions posed by the audience clearly and the presentation is interactive **and:** Peer Evaluation of the candidate's presentation is at the proficiency level (see Peer Evaluation Form)	The candidate is able to respond to questions posed by the audience with and elaborates on the questions by providing additional information, examples and the presentation is engaging and interactive, **and:** Peer Evaluation of the candidate's presentation is at the accomplished level (see Peer Evaluation Form)
Comments:			

Score:			

Total Standard 3: Teachers Know the Content They Teach		Score:

Total Score from All Standards	_____ Total Score Emerging	_____ Total Score Proficient	_____ Total Score Accomplished

Emerging: Total Score of 4 or below (C or below on Project)
Proficient: Total Score of 5-8 (B- to B+ on Project)
Accomplished: Total Score of 9 – 12 (A- to A+ on Project)

Grader(s): _____   _____

Date: _____

Follow-Up Needed (Comment if Necessary):

	Depth and Application Project (DnA) Content Instructor Evaluation
Score 1 or 0	**NCPTS 3b.1** **Product: In-depth content investigation included in the product as appropriate for the specific licensure prompt and an Interactive presentation to a Professional Learning Community, peers, and content faculty.**
	The candidate identifies and clearly states a topic or problem that is significant in his or her field [major understanding, concept, controversy or question/problem] as appropriate to the licensure specific prompt.
	The candidate identifies and explains the significance and relevance of the topic/problem for the discipline.
	Literature of the discipline (scholarly and theoretical work) is cited and is used to support the ideas that are presented in the product.
	The literature is current, accurate, relevant and authoritative.
	The use of the literature demonstrates an understanding of how knowledge in the discipline is generated, how information is created and tested, what qualifies as data and how data is used.
	Sufficient literature is cited to develop a convincing argument or understanding of the topic. It includes multiple perspectives about the topic.
	The candidate collects, interprets and uses the information and/or data appropriate to the topic/problem and discipline
	The product reflects accuracy and clarity of the content using standard English
	The product reflects an understanding of the complexity of the topic/problem and provides multiple explanations.
	The candidate draws conclusions that demonstrate appropriate and logical integration of data and ideas as well as independent, critical thinking.
	The format and organization of the product is appropriate to the discipline, is clearly presented and demonstrates appropriate language conventions.
	The product presented in the interactive presentation reflects a correct understanding of the topic and its application.
	The candidate's presentation reflects an appropriate ability to articulate the topic in a logical and coherent manner to others.
	The candidate is able to make real world connections when discussing the topic as it relates to current discussions and issues
	The candidate is able to answer questions from an audience when asked to elaborate on their understanding of the topic in depth
	Total (Maximum=15 points)