Evidence 2: Elementary Education Description

Evidence #2: Content Knowledge Depth and Application (DnA) Project

All candidates in the teacher education program will be required to complete the Depth and Application (or DnA) project during their Junior year. This electronic evidence is designed to act similarly to a capstone project in the field of study. It must demonstrate that the candidate can, through analysis and synthesis, explore and understand in depth **a content topic/problem and relate its application in a real world context.** The Depth and Application (DnA) Project will be used as a gateway assessment for the School of Education's overall comprehensive assessment plan. Candidates who show deficiencies in content depth may be required to participate in an intervention plan prior to beginning the senior methods block. Evidence that every candidate demonstrates ***depth of content knowledge*** is a critical prerequisite to the ***application*** of this knowledge when developing lesson plans during methodology courses and actually teaching this content during Internships I and II.

Directions and Candidate Requirements

The purpose of this assignment is to provide evidence that you can demonstrate depth of understanding and application of content knowledge in the areas of science or math (STEM). The Depth and Application Project (DnA) will be a Teacher Brief Guide suitable for sharing with a professional learning community in which you demonstrates analysis, synthesis, and application of a topic or problem. The prompt is as follows:

Prompt:

"You are a curriculum specialist who is developing the background information for upcoming math and science revisions. You will be given a list of science and math topics to explore. You may also suggest a topic/problem with subsequent approval by the instructors of EDU 3231. In order for elementary education teachers to understand the content of the revisions, you must produce an in-depth Teacher Brief designed to provide background knowledge and application of that content in the real world. The Teacher Brief will begin with a clearly stated topic or problem significant in either mathematics or science. The significance of the topic or problem will be explained. The literature of the discipline will be cited to support ideas presented in the Teacher Brief and address the application of the problem in a real world context. The Teacher Brief will be in the form of a foldable teacher guide, which describes, analyzes, and synthesizes information about the topic and connects the topic to real world applications. The Teacher Brief

must have at the minimum 8 pages including a reference page containing a minimum of ten references from the discipline. The format is to be the most recent APA style. The Teacher Brief will be a graded assignment for the EDU 3231 course: Integration of Math and Science in the Elementary School. You will then make an interactive presentation in an informative and engaging way of the DnA project to one of the professional learning communities' seminars established by the School of Education.