This course supports the assessments for BXT2. The course represents 3 competency units.

Introduction

The capstone is the culminating assessment of your WGU master's degree program. This capstone project presents you with an opportunity to demonstrate mastery in all four of the primary areas of this degree program: design, evaluation, problem-solving, and leadership. You will be required to identify a problem in the area of elementary school (K-6) mathematics and conduct an action research project that will help shed light on a possible solution to this problem. A fundamental component of this action research project will be a unit of instruction that is designed to address the identified problem. This unit of instruction will act as the "intervention" that is used to address the problem. You will be required to "test" this intervention on a student population, gather the appropriate data, analyze those data and draw conclusions about the intervention based on those data.

Getting Started

Welcome to the MA, Mathematics Education (K-6) Capstone! In this course, you will demonstrate competency by completing a capstone research study that includes a prospectus, attainment of IRB approval, a written report, and a multimedia presentation. Begin by familiarizing yourself with the resources, task instructions, and templates within this Course of Study. You will not be able to access the tasks in Taskstream until you have completed your Academic Action Verification (AAV) call with your mentor who will lock the Capstone Project assessments into your term. Once you are enrolled in your capstone course, you will be assigned a Course Instructor who will guide you through the process of completing each task.

Capstone Requirements

- The instructional unit must be 8–10 hours long and will include the presentation of information, practice, feedback, and assessment components.
- The instructional unit must be 80% of your own original work – materials from other sources cannot be the primary source of content and exercises.
- Technology may be incorporated as a tool for learning.
- The instructional unit must incorporate recent elementary school mathematics strategies to support student learning in mathematics.

The capstone requires that you write academically at the graduate level, adhering to APA and Articulation standards. Please bear in mind that your capstone is the culminating project of your degree program. Thus, it should represent your best writing. To meet these standards WGU has prepared a Guide to Academic Writing. Use the 6th editions of the APA Publication Manual for formatting guidance.

Upon completion of the written capstone project, you are required to prepare a multimedia presentation (e.g., PowerPoint, PDF) that outlines your project. In the presentation, you will detail the problems you investigated, state and answer your research questions, describe the
methodology you used, present the data you collected, describe the results of your data analysis, summarize your conclusions, and describe strengths and weaknesses of your project.

Placement Information

In extremely rare cases, when students find it impossible to undertake the capstone work as directed in their course, and in consultation with their Course Instructor and Program Mentor, they may make an appeal for the Capstone Exception to meet the Capstone requirement. It should be noted that an end of term or end of a k-12 school year would not qualify for the Capstone Exception.

Preparing for Success

Your capstone experience will be more successful if you plan well. This requires an understanding of all capstone requirements. Below “Your Capstone Journey” are the requirements and things to keep in mind as you work through the capstone process. The number of Competency Units (CUs) assigned to the capstone assessments means that it constitutes the work of about three quarters of a graduate term. For this reason, the capstone process is equivalent to a period of 16 weeks. However, capstone work does not always allow for such continuous linear progression. In fact, completing a capstone project within this timeframe would require ideal conditions. For example, one thing that may affect such a schedule is evaluation of each task. If revisions are required after each evaluation, this will add more time to the process. Capstone work cannot be, and should not be, rushed.

Prospectus (Task 1)

In this task you will use the Capstone Prospectus Template to outline the problem that you intend to investigate, describe the proposed solution to the problem (your instructional unit/intervention), describe the participants in your study, and state your research questions. You will then describe the data you intend to collect, and the data analysis you propose to conduct once you have gathered the data.

Please be aware that this task must be evaluated and passed before you move forward with the remaining tasks found in the capstone project assessment.

IRB Approval Process (Task 2)

After your prospectus has been approved, you will address the issue of human subjects in research. If you have any human subjects participating in your project, these subjects will need to sign the Informed Consent Form. This form explains how your research will deal with issues concerning human subjects. Data may be collected only after the forms have been signed by the school or district administrator and the study participants. Those that are not K–12 educators completing their capstone research in a business or industrial setting must obtain their supervisor’s signature authorizing data collection at their site. Informed consent forms must also be collected from study participants.

The entire process for obtaining approval from the IRB is outlined in Task 2. The process includes reviewing basic information regarding conducting research with human subjects, taking
a quiz to demonstrate understanding, completing an IRB review application, and obtaining Informed Consent. Please confer with your Course Instructor regarding the required procedures for obtaining IRB approval.

**First 3 Chapters: Introduction, Literature Review, and Methodology (Task 3)**

Once you have obtained your subjects' consent to participate in your study, you will then need to submit Chapters 1–3 of your research study using the required Capstone Template. In this task, you will provide an introduction to the problem that you intend to research during your capstone project. You will state and provide the context for your research questions, via a review of relevant literature. You will also describe the data collection and analysis methods you will use in the project.

If you have not already purchased the APA Style Manual, you may wish to do so. Additionally, here are two useful APA format websites you may wish to consult: WGU's APA Formatting Guide and Purdue OWL.

**Chapters 4 & 5: Data Analysis, Results, and Conclusion (Task 4)**

Once chapters 1–3 have passed, you may proceed to implement your study and gather your data. Once you have finished doing so, you will need to summarize your data, analyze it, and present your results. How does the data you collected allow you to answer your research questions? What additional issues or questions does it raise? You will then reflect on the project, and make recommendations as to what you might do differently if you were to implement it again in the future.

You will also include, in the Appendices, all of the materials you used in the completion of your project. This includes any curricular materials you developed and data collection instruments used.

**Final, Complete Written Report (Task 5)**

In this task you will create a single document that contains your entire written capstone report, including a table of contents, abstract, and appendices. Compile the final written report using the required Capstone Template. You will also create a multimedia presentation that summarizes the key elements of the capstone project.