

| FACULTY | : Education | | |
|-----------------|---|--|--|
| DEPARTMENT | : Science and Technology Education | | |
| <u>CAMPUS</u> | : APK | | |
| MODULE | : RESEARCH METHODOLOGY FOR STEM EDUCATION | | |
| | (HRMSSOY) | | |
| <u>SEMESTER</u> | : First | | |
| EXAM | : June 2021 | | |
| | | | |

| ASSESSOR(S) | : Prof GV Lautenbach | | |
|------------------|------------------------|-------|-------|
| MODERATOR | : Prof J Hardman (UCT) | | |
| DURATION | : REMOTE SUBMISSION | MARKS | : 100 |

NUMBER OF PAGES: 5 PAGES

INSTRUCTIONS:

- 1. Answer ALL QUESTIONS.
- 2. This examination will be submitted in BlackBoard on or before the due date.
- 3. Name all of your files appropriately.
- 4. Complete Question 2 on a separate MSWord Document.
- 5. Due date for submission: 15 June 2021 by 18:30.

QUESTION 1

When you have addressed a number of issues this semester including *ethical issues*, *academic writing*, the *literature review*, *theoretical frameworks*, *data collection*, and *data analysis*, you will be ready to complete the **proposal template**. This template (named "**Proposal Template adapted for HRMSSOY May 2021**") is the adapted template we will use.

This question has also been conceptualised as an **authentic and meaningful task** so that you are well prepared if you decide to actually complete the proposed research during your research project, or continue with your MEd in the coming years. In fact, you may even decide to continue with this exact study (the one you propose here) and use this work as the basis for your actual MEd proposal.

For this question you must **download and save** the template *"Proposal Template adapted for HRMSSOY May 2021."* You are then expected to *conceptualise a small but relevant research inquiry within your field of expertise.* You must then *complete the template* by following the word length guidelines on the form. Please check the maximum word count for each section of the template. The same applies to the section on research design and methods. The rest of the document involves the selection of check boxes to tell us more about your study. Many sections have links on them that will guide you through the process with more detail.

Here are some more tips for completing the template:

- Fill in all text fields in the various sections as if you are making an actual submission. Ignore things that are not applicable to you. Marks will be allocated for completeness of form fields.
- Insert your digital signature in the space provided.
- Concentrate on *academic writing*. One concept/idea per paragraph. Link sentences. Look for logic and flow throughout paragraphs and between paragraphs. Link paragraphs.
- Use the embedded links to learn about each section in Section B of the template. The first part of Section B counts 31 marks.

- In the last part of Section B, provide your six best resources with appropriate excerpts to strengthen your argument for doing this research (12 marks).
- In Section C (Design = 10 marks), select the appropriate check boxes and add supporting text where appropriate e.g. to support your choice of design.
- How will data be collected? (5 marks). In this section select only the appropriate strategies that support your design. Do not select and complete all... Marks are further allocated for data collection (5 marks), Sampling (2 marks), Data analysis (5 marks), and validity, reliability, trustworthiness (3 marks).
- Section D: Complete the ethics section on the template. Provide detail on the Risks section (5 marks) as well as the ethical measures you will follow to ensure ethical research (5 marks). Ignore ethics number/decisions etc...
- Section E: Make sure your list of sources generated is complete, accurate, and in the correct APA style (10 marks).

Save your work and keep a backup. Only submit your final question when you are sure that you have addressed all issues and when you feel that your proposal is ready for submission. Remember - we will be working on this proposal throughout the semester and all of your assessment tasks will contribute to this final product. Enjoy.

Please consult the **rubric** to see if you are addressing the correct aspects. **SUBMISSION**: Save your work electronically and submit in Blackboard under Examination - **Question 1**.

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QUESTION 2

Provide at least **one** of the following tools that you will use in your research project:

- An example of your interview protocol for this research project with your main question and a list of all other possible questions you plan to ask the participants (You may include your main guiding question and supporting questions to get the participants back on topic). You may also include helpful words or phrases that you plan to use to help you structure your interview. Include any other important information that you will use when interviewing.
- A sample observation protocol for your study (showing exactly what you plan to observe during the observation). Also mention if you plan to be a participant or non-participant observer.
- A draft questionnaire for your quantitative component. In this case we will be looking at good question design and suitability of your questions for exploring a specific topic. For this reason please remember to add your research hypothesis or research question to this section. (10)

[10]

TOTAL: 100