

FACULTY	: Education
DEPARTMENT	: Science and Technology Education
<u>CAMPUS</u>	: APK
MODULE	: RESEARCH PROJECT: LEARNING TECHNOLOGIES
	(HRRITOY)
<u>SEMESTER</u>	: Second
EXAM	: November 2020
ASSESSOR(S)	: Mr M Moodley
MODERATOR	: Dr J Hardman (UCT)
DURATION	: SUBMISSION MARKS : 100

## NUMBER OF PAGES: 4 PAGES

### **INSTRUCTIONS:**

- 1. Write a research report on one of the following areas/topics:
  - The challenges faced by first-year students in using ICT for learning during the Covid-19 university lockdown.
  - An investigation of the challenge's teachers face in the management and use of ICT devices and its influence on their teaching and assessment practices.
  - The use of Social Media platforms as an online instructional tool.

The research project should include the following:

- Assessment rubric
- Cover page
- Table of contents
- Abstract
- List of abbreviations
- Acknowledgement
- Text
- List of references (An internationally recognised referencing method should be used)
- Appendices (clearly labelled)

The report's language and style should be clear and should be edited before submission. The text should be 30 - 50 pages ( $9\ 000 - 15\ 000$  words) and should comply with the following criteria:

SECTION 1: TOPIC, RESEARCH QUESTION AND AIM
The issue that is investigated is clearly stated
The issue is narrowed down and focussed
The reason (rationale/motivation) for investigating the issue is argued clearly
The research question is stated explicitly
The research question links to the research issue
The main purpose (aim) of inquiry is clear
The stated aim links with the research issue and question
SECTION 2: LITERATURE REVIEW
The literature review relates to the research issue/question in Mathematics
The literature review is written in such a way that the relevance of the literature to the research
question is made clear
The literature is argued in a logical/coherent manner
Relevant sources are used
SECTION 3: THE RESEARCH DESIGN
The following aspects are addressed and explained:
What make this a qualitative/quantitative study?
What type of data collection method is used and why?
How is the sample selected?
SECTION 4: RESEACH METHODOLOGY
The process of gathering data is described clearly
The data analysis process is described clearly with examples of raw data
The findings (categories/main themes) are (briefly) presented
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Measures to ensure ethical conduct

## SECTION 5: FINDINGS AND CONCLUSIONS

The findings of the inquiry are discussed with evidence from the data

The findings flow logically from the field study

Conclusions about the findings are drawn

# The following rubric will be used to assess the research project:

#### FINAL RESEARCH REPORT ASSESSMENT RUBRIC

#### Name of student: \_\_\_\_\_

# Student number: \_\_\_\_\_

<ul> <li>1. Abstract <ul> <li>A concise abstract of the proposed research</li> <li>The background issue/problem of the study</li> <li>The purpose/aim of the study</li> <li>The name of the design or a short description</li> <li>A brief description of the data collection instruments</li> <li>The sample and/or population</li> <li>The major results/findings</li> <li>the value/contribution of the study</li> </ul> </li> </ul>	Clear and well developed 7-8 The abstract is 250 words or less and presents a concise picture of the proposed research. The major elements of an abstract are included.	Needs clarification / or some development 3-6 The abstract provides a summary of the proposed research. Most of the major elements of an abstract are included.	Needs substantial clarification or substantial development 0-2 The abstract is not a summary of the proposed research. Few, if any, of the elements of an abstract are included.	Student mark
<ul> <li>2. Introduction, problem statement, rationale and research question</li> <li>The background issue/problem that motivates your study</li> <li>The rationale and background of the problem</li> <li>Purpose and focus of your study</li> <li>Research questions have been included</li> <li>Objectives are stated</li> <li>Subtopics (way forward) provided</li> </ul>	Clear and well developed 11-15 The problem statement clearly identifies the problem, is relevant, specific and focused, and ties up with the title. The research questions are relevant to the project and are well articulated. The major terms are clearly defined. The purpose/aim is aligned with the research question and title and is clear. The objectives are stated and clear. Subtopics (way forward) are in proper order.	Needs clarification / or some development 6-10 The problem statement incompletely identifies the purpose of the project and research questions; the proposal's topic is not clearly related to the project. The research questions need additional attention. Major terms and/or assumptions need clarification. Objectives are not clearly stated. Subtopics (way forward) need ordering.	Needs substantial clarification or substantial development 0-5 Problem statement is incomplete and fails to identify a relevant educational issue that is being addressed, research questions have not been included or are poorly articulated. Terms need substantial clarification. Objectives are not stated or poorly articulated. Subtopics (way forward) are not included.	

3. Review of research literature	Clear and well developed	Needs clarification /	Needs substantial clarification or substantial	
<ul> <li>The review provides a good cross</li> </ul>		or some development	development	
section of studies that are relevant	11-15	6-10	0-5	
<ul> <li>to the area of your investigation.</li> <li>Literature review summary includes the statements that reiterate the major findings from the review of literature.</li> <li>Sources are recent and sufficient. The study builds on seminal work.</li> </ul>	Research literature review provides excellent overview of the educational issue that is being addressed and provides a convincing support for the purpose of the proposed study. Most sources are not older than 5 years and at least 10 sources are utilised. Logical and consistent connections are made with literature. The study builds on theories of seminal works and/or have a conceptual framework. Good 'big picture' holistic view – clear and logical development of subtopics/ideas/logic arguments.	Research literature review provides partial or incomplete overview of the educational issue that is being addressed. The relevance of the reviewed literature to the proposed study is not clear. Many sources are not recent or sufficient. Connections are made with literature, but are not always consistent or logic. The study utilises theories of seminal works or a conceptual framework, but these are inappropriate to the study. The development of subtopics/ideas/arguments are not always clear or logical.	Research literature review inadequately identifies the educational issue that is being addressed and does not provide support for the purpose of the study. None or outdated and insufficient sources are utilised. Connections with literature are not logical and ambiguous. The study does not build on theories of seminal works and/or does not have a conceptual framework. Poor development of subtopics/ideas/arguments.	
4. Research design and methodology	Clear and well developed	Needs clarification /	Needs substantial clarification or substantial	
<ul> <li>Philosophic framework</li> </ul>	cieur unu wen developed	or some development	development	
<ul> <li>Type and rationale for research</li> </ul>	11-15	6-10	0-5	
<ul> <li>Research approach, strategy and methods</li> <li>Sampling and participants' characteristics</li> <li>Data collection instruments used</li> <li>Procedures by which data will be collected</li> <li>Procedures by which data will be analysed and interpreted</li> <li>Quality measures</li> </ul>	The epistemology, ontology and axiology are outlined and the philosophical framework is clearly discussed. The research design is well developed, and the rationale for the chosen method is clearly identified. The research approach, the research strategy and research methods are clearly explained. Sampling is done satisfactorily and motivated by literature review (research context, population, sample, method). The procedures for data collection are clearly explained (What?) (Who?) (When?) (Wher?). Procedures of data analyses are clearly explained and are appropriate for the	The epistemology, ontology and axiology are not outlined or articulated and the philosophical framework are not clearly discussed. The research design is incompletely developed, and/or the rationale for the chosen method is not clear. The research approach, the research strategy and research methods are incompletely explained. Sampling is done and motivated by literature review, but not sufficiently. The procedures for data collection are incompletely explained. Procedures of data analyses are explained, but are not fully appropriate for the study. Not all the quality	The epistemology, ontology and axiology are not addressed and the philosophical framework is poorly or not discussed. Research design and its rationale are poorly (or not at all) developed. Some or none aspects of the research approach, the research strategy and research methods are not explained. Sampling is done unsatisfactory and not motivated by literature review. The procedures for data collection are incompletely or not explained. Procedures of data analyses are not appropriate for the study or not addressed.	

	study. For quantitative research reliability,	measures are taken into account for the	Quality measures are insufficiently or not	
	validity and generalization are addressed. For qualitative research trustworthiness (credibility, transferability, dependability, conformability) are addressed. Ethical	study.	taken into account for the study.	
	measures are taken into consideration.			
5. Data presentation and analysis <ul> <li>Data analysis</li> <li>Data presentation</li> <li>Data explanation</li> </ul>	Clear and well developed 7-10 Data are analysed using appropriate methods	Needs clarification / or some development 4-6 Data are analysed using inappropriate	Needs substantial clarification or substantial development 0-3 Data are not presented; not analysed or	
– Data evidence	and presented well using appropriate formats, e.g. patterns are identified (codes, categories, themes) for qualitative data and data are presented in graphs and/or tables for quantitative data. Data are explained appropriately. All necessary evidence of data is included in appendices.	methods; and presented well using inappropriate formats. Data are explained inappropriately. Some necessary evidence of data is included in appendices.	presented appropriately. Data are not explained. Insufficient or no evidence of data is included in appendices.	
6. Discussion of findings/results	Clear and well developed	Needs clarification /	Needs substantial clarification or substantial	
<ul> <li>Trends/findings</li> <li>Data support</li> </ul>		or some development	development	
<ul> <li>– Literature control</li> </ul>	11-15	6-10	0-5	
<ul> <li>Interpretation</li> </ul>	Trends or findings are clearly provided. Findings are supported with data. The findings are discussed against literature. An appropriate interpretation of the findings are	Trends or findings are provided, but are not always clear. Some findings are supported with data. The findings are discussed against literature inadequately. Findings are	Unclear or no findings are provided. Findings are insufficiently or not supported by data. The findings are not discussed against literature. The findings are wrongly or not	
	provided.	interpreted, but not appropriately.	interpreted	
7. Conclusion – Summary of research study	Clear and well developed	Needs clarification / or some development	Needs substantial clarification or substantial development	
<ul> <li>Reflection on research question and</li> </ul>	7-8	4-6	0-3	
aims – Implications, recommendations and limitations	A good/excellent summary of the research study is given. Research questions and aims are addressed adequately by provision of	An adequate summary of the research study is given. Research questions and aims are partially addressed by provision of answer(s)	A poor or no summary of the research study is given. Research questions and aims are not addressed adequately by provision of	
<ul> <li>Contribution of study</li> </ul>	relevant and appropriate answer(s) to the	to the research question(s). Some	inappropriate or no answer(s) to the research	

9. Technical aspects       Acceptable       Need editing         -       Academic writing skills, grammar and coherence       4       2-3         -       Editing       Writing is appropriate—clear, concise, and focused, with the use of logical transitions, conventional grammar and punctuation.       Grammar is acceptance, yet not conventional grammar and punctuation.         -       Relevance       Paragraphs are well planned. Well-edited, neat report without any spelling or grammar mistakes. Well-presented (e.g. ring-bind). All       other information in the research projection	In-text to the requirements. In-text referencing is incorrect. Less than 15 references are used. e list is in The reference list is either not in alphabetical ct. A small order or incorrect. Much plagiarism is iarism is evident.
sections, sub-sections and other information adequate quality and some finding in correct order. The information in the relevant to needs in South Africa. research project is of exceptional quality and the findings are relevant to needs in South Africa.	bly. Typos many grammar errors. Poorly presented (e.g. ring-bind). Sections, sub-sections and other tions and information in incorrect order. The information in the research project is of poor ect is of quality and the findings are not relevant to