HEAD TEACHERS' CANDIDATE PREPARATION STRATEGIES AND STUDENTS' PERFORMANCE IN THE PRIMARY CERTIFICATE OF EDUCATION IN CHIMOIO DISTRICT, MOZAMBIQUE

Victoria Tito[1i]**,**
Kinikonda Okemasisi[2]**,**
Rose Wambui[3]
[1]Master's Student,
Tangaza University,
Kenya
[2]Lecturer,
School of Education,
Tangaza University,
Kenya
[3]Lecturer,
School of Education,
Tangaza University,
Kenya

Abstract:

The purpose of this study was to investigate the influence of head teachers' candidate preparation strategies on students' performance in the Primary Certificate of Education in Chimoio District, Mozambique. The objectives of this study were: to examine the influence of examination anxiety management on students' academic performance and to evaluate the influence of motivation strategy on students' academic performance in the Primary Certificate of Education in Chimoio District, Mozambique. A convergent parallel mixed method design was used. The study adopted a cross-sectional survey research design for quantitative data and a phenomenological design for qualitative data. The focus was on public primary schools, head teachers, teachers and Mozambique's Ministry of Education officer. Simple random sampling was used to select 18 out of 23 primary schools and 125 out of 312 teachers; criterion purposive sampling was used to select 18 head teachers and 1 Ministry of Education officer. Proportionate sampling, simple random sampling, was used to select 316 out of 1500 students. Questionnaires were used to collect data from students and teachers. An interview guide was used to collect data from head teachers and the Ministry of Education officer. Instrument reliability was tested using the test-retest technique, where a score of 0.82 was realized. Quantitative data was analyzed using SPSS version 25, and findings were reported in percentages, frequency tables, and graphs. The qualitative data were analyzed into

[i] Correspondence: email millicenttito@gmail.com

themes according to the research questions and reported in narratives and direct quotations. The study revealed that head teachers' candidate preparation strategies, including, exam anxiety management and student motivation, have an influence on students' academic performance in the Primary Certificate of Education in Chimoio District, Mozambique. The study recommended that in preparing candidates for examinations, head teachers should prioritize and promote intrinsic motivation strategies. These include fostering a supportive learning environment, encouraging student autonomy, and emphasizing the value of learning itself. Such strategies are expected to have a more sustainable and positive impact on student engagement and academic performance.

Keywords: head teachers, candidate preparation, strategies, students' performance

1. Introduction

The academic performance of students holds significant importance and is acknowledged worldwide (Whittle, 2018; Humphrey & Nartey, 2023). This recognition exerts a profound influence on individuals, societies, and even global advancement. Ojere (2016) argues that academic performance is pivotal in molding an individual's cognitive capacities, critical thinking proficiencies, and knowledge reservoirs. It provides students with the essential groundwork to pursue further educational avenues and career prospects. A commendable academic performance can unlock access to a wide range of life paths. However, it is imperative to acknowledge that in order for students to excel in examinations, school administrators must implement effective strategies to adequately prepare them.

Zerdani (2021) defined exam preparation strategies as a set of systematic and effective approaches that individuals employ to enhance their readiness for upcoming exams or assessments. These strategies are designed to optimize learning, comprehension, retention, and recall of the material being tested. By adopting appropriate exam preparation strategies, students can manage their time efficiently, reduce anxiety, and increase their chances of achieving better results. These strategies typically encompass various techniques, habits, and actions that help learners thoroughly grasp the subject matter and perform in the examinations. Whittle (2018) contended that exam preparation strategies refer to the methods, techniques, procedures, and processes that a school head encourages teachers to use during instruction in preparing learners for examinations.

The strategies employed by a school head play a crucial role in preparing students for national examinations and can greatly influence their success or failure. Muwagga and Ssempala (2019) argued that taking and passing national examinations can be considered a pointer to effective preparation strategies. National examinations are typically designed to assess a student's knowledge, understanding, and application of the subjects they have been studying. If a student performs well on these examinations,

it generally indicates that they have successfully prepared themselves for the content and challenges presented in the exams.

Hambleton (2018) and Walters *et al.* (2018) showed that a good candidate preparation strategy should include effective time management, surveying all questions before responding, dealing with difficult questions, dealing with multiple-choice questions, and underlying keyword questions. Directly, these strategies help students increase their scores on tests through the effective use of their time, effort, and test conditions (Okogu & Umodjere, 2016).

Kibogo (2016) asserted that the strategy used in preparing candidates for an examination can vary depending on a range of factors, including the subject matter, the examination's level, and the specific needs of the candidates. However, the author further emphasizes that effective preparation strategies are formulated to enhance the candidates' comprehension of the subject matter, their proficiency in problem-solving, and their overall performance in the examination. When preparing candidates for examinations, teachers may prioritize ensuring that candidates possess a solid grasp of the fundamental concepts and content encompassed by the examination.

When preparing candidates for examinations, a range of strategies can be employed. These may encompass the utilization of innovative educational technology, such as audio clips and videos, alongside other engaging elements, all designed to enhance students' focus and comprehension. Additionally, teachers can deliberately select strategies to stimulate students' curiosity, prompting them to ask questions and engage in investigative or classroom experimental activities. Skillfully executed, these approaches have the potential to cultivate a constructive learning atmosphere and significantly enhance students' performance in examinations. The research conducted by Amzalag and Shapira (2021) demonstrated that when preparing students for national examinations, a school principal must consider the students' metacognitive attributes. Furthermore, Amzalag *et al.* (2021) revealed that insufficient preparation, a lack of exam strategies, and elevated anxiety levels have adverse impacts on test performance.

Harris and Orth (2019) studied the relationship between candidate confidence and exam scores and found that where school principals employed clear strategies in preparing candidates, performance was better. Hamal and Mohamed (2018) argued that the most important aspect of a candidate preparation strategy is to enable students to transfer classroom learning to testing, and this can especially be helpful for students with low achievement levels. These studies, however, did not elaborate on the strategies used by the head teachers to improve the performance of candidates in primary schools. Abe (2014) investigated the effectiveness of teacher-guided revision among candidates and concluded that it was useful in shaping a candidate's attitude towards a subject perceived as difficult. This study suggests that any strategy for preparing candidates for national examinations should focus on subject material, enable a candidate to select questions to answer, and reduce exam anxiety.

In China, educational performance on national examinations determines educational and training opportunities for students in the future (Silverman, 2018). Ojera

(2016) studied the effect of intensive tutoring among candidates in mainland China and Taiwan and reported that tutoring in small groups led to an increase of up to 20% in mathematics scores. In both China and Taiwan, candidates receive pressure from school head teachers, teachers, and parents in an effort to improve test scores. Teachers assign a large amount of homework to their candidates to help them perform well on examinations. In South Korea, candidates study up to 18 hours a day to score high grades in their examinations. Mayes (2018) and Silverman (2018) argued that in South Korea, school head teachers maintain a tight and highly monitored schedule for candidates to ensure that they meet the expected performance. Private tuition and coaching are common and highly recommended in their last year of high school. This often leads to burnout among students, and research by Bloemert and Vandegrift (2019) showed that South Korean students are most stressed during their exam times because the education system in South Korea is highly competitive and places a significant emphasis on standardized testing, especially the college entrance exam. This could be the reason why students often spend long hours studying, attending after-school academies, and participating in various extracurricular activities in an attempt to excel academically.

In the United States of America, high schools spend incredible amounts of time and resources preparing students for high school exit examinations (Mohamed & Mohamed, 2018). School head teachers organize prepackaged curriculum guides, practice workbooks, study guides, and computer-based preparation materials (Bourke & MacDonald, 2018). Students in their final year often attend extra coaching sessions away from school, and there is intense consultation and collaboration with teachers. In the United Kingdom, Weale (2018) highlighted examination anxiety and pressure on students to perform well as the key determinants of the strategy used by school head teachers in designing a candidate preparation program. Weale (2018) noted that candidates are often subjected to make-up sessions or extra classes, relaxation sessions, yoga classes, and resilience programs to support worried pupils. These studies expressed a geographical gap because they were done in countries outside Mozambique. The current study sought to fill the gap by studying the influence of head teachers' candidate preparation strategies on students' academic performance in the Primary Certificate of Education in Chimoio District, Mozambique.

In South Africa, candidates are required to excel in their Grade 12 exams to secure a place at the University. Goulas and Megalokonomou (2019) argue that exit exams hold such high esteem in South Africa that school principals spare no effort, allocate resources, and arrange extra classes to bridge any performance gaps. In recent times, additional tutoring, referred to as "*shadow education*," has become a prevalent practice in South Africa to prepare students for high school exit exams. This study clearly indicates that for students to achieve strong exam results, school administrators must invest effort in preparing them, including devising appropriate strategies.

In Nigeria, concerns have been raised regarding a variety of exam preparation activities conducted by school administrators and teachers. The extent and intensity of exam preparation and supplementary tutoring have also raised concerns, as they could

potentially create negative incentives for schools to focus solely on teaching the test or even engage in collusion with examiners to facilitate cheating (Jayachandran, 2014). This underscores the notion that achieving excellence in examinations in Nigeria requires dedicated efforts not only from teachers but also from principals.

In Kenya, preparation for candidates for final exams is a shared responsibility with the school principal in charge. Teachers are encouraged to work harder with the students, and several consultative sessions are organized between teachers, students, and parents (Kariuki & Mbugua, 2019). This helps students develop positive attitudes toward exams, relieve fear and anxiety, and become more competitive in the exams. In Tanzania, school head teachers are known to vary teachers' instructional methods when dealing with candidate classes and more when dealing with low achievers (Mbonyiryivuze & Yadav, 2021). To that effect, teachers become more available, accommodative, and ready to help the candidates.

Mozambique operates a 7-3-2 system of education where primary school takes 7 years, 3 years in middle school, and 2 years in secondary school, leaving between 3 and 5 years for university. The Mozambique National Examinations System administers the Mozambique Primary Certificate of Education (MPCE). A candidate must gain a primary school leaving certificate based on their standard 7 final exam results in order to progress to secondary school. Secondary school education in Mozambique is provided by the government as well as private institutions. The Mozambique Education Sector Analysis (MESA, 2019) and Servaas (2017) reported that among the challenges facing the education sector are the high teacher-to-student ratio (1:50) and a general lack of resources to facilitate teaching and learning. The majority of primary school candidates fail to reach the 40% threshold to enter secondary school.

This reality puts a lot of strain on the head teachers' side to ensure that candidates in primary school perform well in the national examinations and favorably compete for the few vacancies in secondary schools. However, research estimates by the World Bank (2020) and Classbase (2017) show that less than half of those who complete primary school join secondary school. Many reasons have been advanced for these sad statistics, but the key among them is poor performance at the primary level. The way candidates are prepared for these examinations by the schools probably contributes to the number of students who fail.

National examinations are standardized and administered externally, and candidates are required to prepare well for them (Salvi, 2018). While these examinations are a measure of an individual student's achievement, they are also an unspoken way of assessing the effectiveness of strategies put in place by school head teachers to prepare candidates. In the Chimoio district, performance among primary school candidates has been dismal despite efforts by the government to reverse the situation. In the last three years, the report from the Office of the Director of Education and Youth Affairs (2021) showed that very few students managed to get a chance in the national schools. Research by Salvi (2018) and Jones (2017) attributes the failure of students in examinations to students' motivation, exam difficulty, and learning environment, but there is no mention

of whether the head teachers' preparation strategies are linked to the students' performance, hence the need for the current study.

2. Statement of the Problem

The pursuit of delivering quality education lends paramount significance to the academic performance of students on a global scale (Humphrey & Nartey, 2023). This acknowledgement of students' academic achievements has a profound impact on individuals, societies, and even worldwide progress. A creditable academic performance can open the doors to a diverse range of life opportunities (Gagnon, 2022). Nevertheless, it is crucial to recognize that for students to excel in their examinations, educational institutions must employ effective strategies to thoroughly equip them. Regrettably, this does not appear to be the situation for primary school students in the Chimoio district of Mozambique.

Over the years, the academic performance of primary school students in the Chimoio district national examinations has been declining. Data obtained from the Director of Education and Youth Affairs (2021) indicates that over fifty percent of the students fail to reach the threshold required for admission to secondary school. Reports from the World Bank (2020), Maneb (2020), and Classbase (2017) all highlight that the performance level in the Chimoio District dropped to 49.7% in 2021, a significant drop from the 66.7% recorded in 2008.

The Mozambique National Education Strategy (MNES) instructed school head teachers to develop strategies aimed at ensuring improved performance in national examinations. Despite these dedicated efforts, candidates in the Chimoio District have consistently demonstrated unsatisfactory results. This situation is a source of concern for various stakeholders, including parents and the broader community. If students continue to achieve subpar academic results, there is worry that their self-esteem might suffer, leading to diminished motivation. This, in turn, could exacerbate the challenges they face in their learning journey. Students who grapple with persistent academic difficulties are at a higher risk of discontinuing their education, which could severely limit their future prospects for advanced learning and skilled employment. This unfortunate outcome has the potential to trap them in a cycle of poverty, further underscoring the importance of addressing the academic challenges faced by students in the Chimoio District.

The reviewed literature related to the study did not clearly reveal whether the declining performance of students in the Chimoio District is linked to the strategies used to prepare them. This study, therefore, aimed to assess the influence of head teachers' anxiety management and motivation strategies. It sought to establish a connection between these factors and the performance of students in the Primary Certificate of Education in the Chimoio District, Mozambique.

2.1 Objective of the Study

1) To examine the influence of head teachers' candidate examination anxiety management and academic performance in the Primary Certificate of Education in Chimoio District, Mozambique

2) To evaluate the influence of head teachers' motivation strategies on students' academic performance in the Primary Certificate of Education in Chimoio District, Mozambique.

2.1 Research Questions

1) How does head teachers' candidate anxiety management strategies influence the academic performance of students in the Primary Certificate of Education in Chimoio District, Mozambique?

2) How do head teachers' motivation strategies influence the academic performance of students in the Primary Certificate of Education in Chimoio District, Mozambique?

3. Theoretical Framework

The study was guided by Felder and Silverman's (1998) Dimension Model Theory of teaching and learning. According to Felder and Silverman, there are four dimensions of learning styles related to each student's preferred mode of receiving information in class. A learning style is simply the manner in which one learns best. It is based on individual characteristics and preferences. Recognizing individual learning styles is crucial for effectively preparing candidates for examinations because students exhibit diverse ways of learning. Each student possesses distinct characteristics and is consequently inclined towards a particular learning approach that empowers them to excel in examinations (Kariuki *et al.*, 2019).

The first dimension distinguishes between an active and a reflective way of processing information. Active learners learn best by working actively with the learning material and by trying things out. They tend to be more interested in communication with others and prefer to learn by working in groups where they can discuss the learned material. Active learners also value a cooperative and competitive learning environment. Such learners are guided by the teacher and then supplied with challenging materials that they can cover on their own (Hamzah & Joarder, 2014). In contrast, reflective learners prefer to think about and reflect on the material. Regarding communication, they prefer to work alone or in a small group together with one good friend. Other learners prefer a sensing learning style and tend to favor learning facts and concrete learning materials. They like to solve problems with standard approaches and also tend to be more patient with details (Nasrullah & Saqib, 2015).

Furthermore, sensing learners are considered to be more realistic and sensible; they tend to be more practical than intuitive learners and like to relate the learned material to the real world. In contrast, intuitive learners prefer to learn abstract learning

materials, such as theories and their underlying meanings. They are able to discover possibilities and relationships and tend to be more innovative and creative than sensing learners.

Another group of learners is the visual-verbal dimension, which differentiates learners who remember best and, therefore, prefer to learn from what they have seen pictures, diagrams, and flow charts). Furthermore, learners get more out of textual representations, regardless of whether they are written or spoken (Hamzah *et al.*, 2014). In the fourth dimension, the learners are characterised according to their understanding. Sequential learners learn in small incremental steps and, therefore, have a linear learning progression. They tend to follow logical, step-by-step paths in finding solutions. In contrast, global learners use a holistic thinking process and learn in large leaps of information. They tend to absorb learning material almost randomly without seeing connections, but after they have learned enough material, they suddenly get the whole picture. Then, they are able to solve complex problems, find connections between different areas, and put things together in novel ways, but they have difficulties explaining how they did it. Since the whole picture is important for global learners, they tend to be more interested in broad knowledge, whereas sequential learners are more interested in details.

3.1 Examination Anxiety Management and Students' Academic Performance

Test anxiety has become a universal issue in contemporary society. Test anxiety refers to the specific issue of anxiety related to achieving high test scores in educational careers (Miller & Bichsel, 2004). Since test scores are crucial for student evaluation at school, empirical evidence has shown an inverse relationship between test anxiety and school achievement. Spagnolo and Schirripa (2022) conducted a review focusing on the connection between student test anxiety and their academic achievements in the USA. The researchers explored how anxiety influences students' performance in math, literature, and science, looking at the entire range of scores. Their objective was to investigate whether setting higher goals leads to increased test anxiety. The findings from their study indicated a clear and significant negative relationship between test anxiety and overall school performance. However, the study did not provide details about the specific aspects of student performance, prompting the need for the current study to address this gap.

Yusefzade (2022) conducted a quasi-experimental study aiming to determine how study preparation affects the performance of public health students at Urmia University of Medical Sciences in Iran during the academic year 2016–2017. The study focused on second- and third-year bachelor's students majoring in public health, who were divided into intervention and control groups using study preparation criteria and a defined benchmark. To measure the impact, the study gathered data on general stress and test anxiety through self-assessment surveys administered via paper and pencil. These surveys were conducted in the first week of the semester and just before the final examinations. The findings indicated that, initially, there was no significant distinction

in the general stress level between the two groups based on the study preparation items. The level of test anxiety in the intervention group was lower than that in the control group at the conclusion of the semester. Additionally, the intervention group exhibited a higher mean score on the exams. This study's findings lead to the conclusion that interventions effectively reduced test anxiety and enhanced student performance. Consequently, it is recommended that faculty members and department heads provide support to students in acquiring effective study preparation strategies to bolster academic achievement. Although conducted in Iran, this study establishes a foundational basis for the ongoing research that investigated the influence of preparation strategies employed by head teachers on the academic performance of grade seven students in primary schools within the Chimoio District of Mozambique.

Examinations are the only common way of evaluating the academic outcomes of learners. As such, emphasis is put on learners by their parents and teachers to perform well in examinations. This eventually brings about anxiety and stress, particularly for learners as they approach examination periods. Hence, such examination-related anxieties may affect their performance in one way or another. In Kenya, a study was conducted by Asakhulu (2016) about the effects of examination anxiety on the academic performance of students in secondary schools in Khwisero District, Kakamega County, Kenya. A sample size of 275 students who sat for the 2012 Kenya Certificate of Secondary Education (KCSE) exams participated in the study by responding to the exam anxiety 5-point Likert scale. Their scores from the 5-point Likert scale were then compared with their KCSE aggregate scores. The results indicated that there was a significant negative correlation between exam anxiety and academic performance in KCSE. This study did not provide any information concerning how anxiety management strategies by the head teacher affected the performance of students, hence the need for the current study.

Stress and coping in schoolchildren can have negative effects, such as health-related outcomes, poor academic performance, and maladaptive behavior if not well managed. Namakando (2017) conducted a study in Zambia aimed at exploring stress and coping strategies among grade 12 pupils in selected secondary schools. A total of eighty (80) grade twelve pupils (girls and boys) from Highland and New Northmead Secondary Schools in Lusaka filled out a questionnaire on stress and coping. The results indicated that the pupils in this study experienced high-stress levels. The study further revealed that if stress and coping issues are not managed in Zambia, they might continue contributing to negative effects on schoolchildren in several ways, such as health and behavior problems and poor academic performance. The cited study, however, did not discuss who should manage the stress levels of learners, which necessitated the current study to cover the gap.

Pires (2022) conducted a quantitative study on the prevalence of anxiety and depression among medical students in Mozambique. The study aimed at investigating anxiety and depression prevalence and determinants in health sciences students during the COVID-19 pandemic. Results were analyzed with the Statistic Package for Social Science with a confidence interval of 95% and an error margin of 5%, using the Q2 test to

determine statistically significant associations. The results revealed that anxiety and depression affect 25.9% of medical students, and the effects are expressed in substance abuse, interpersonal problems, and academic failure. With high rates of anxiety and depression among students, mental disorders limit not only academic performance but also students' overall life quality. The Pires study was short on how anxiety could be managed to improve student performance, which was investigated in the current study to fill the gap.

3.2 Head Teachers' Motivation Strategies and Students' Academic Performance

Motivation is a fundamental ingredient for academic success. It involves internal and external factors that stimulate desire and energy in people to be continually interested in and committed to a job, role, or subject or to make an effort to attain a goal. Motivation explains why people decide to do something, how hard they are going to pursue it, and how long they are willing to sustain the activity. Motivation is what gets people going, keeps them going, and determines where one is going. The students who have optimum motivation have an edge because they have adaptive attitudes and strategies, such as maintaining intrinsic interest, goal setting, and self-monitoring.

Moorehouse and Ching (2022) conducted a study in China aimed at investigating teacher support and student motivation to learn with artificial intelligence. This study used self-determination theory as the underpinning framework to investigate how head teachers and teacher support moderate the effects of student expertise on needs satisfaction and intrinsic motivation to learn with AI technologies. The study involved 123 grade 10 students and used chatbots as AI-based technologies in the experiment. The analyses revealed that intrinsic motivation and competence to learn and perform with the chatbot depended on the support of the head teacher, teachers, and student expertise. Unlike this study by Moorehouse and Ching, the current study used the Dimension Model Theory to investigate how motivational strategies employed by the head teachers influence the performance of learners in primary schools in the Chimoio District, Mozambique.

Pearl (2016) established that the nature of motivation and learning strategies used are vital to improving student learning outcomes in Liberia. This study was intended to explore the motivational beliefs and learning strategies used by Liberian junior and senior high school students in connection with their academic performance. It also solicited students' self-reports about presumed factors hindering their learning. Utilising a cross-sectional research design, 323 participants took part in the study. The study showed that motivation is vital for the academic success of students. The result further showed that students' help-seeking strategies were the least utilized as they insignificantly reported seeking help from peers or instructors when needed, not focusing much on the use of others in learning. The study, however, did not show how the head teachers are involved in the motivation of students for successful performance in the examinations, hence the need for the current study.

In Nigeria, Okoro (2021) conducted a study aimed at ascertaining the influence of motivation on students' academic achievement in the teaching of JSS III Social Studies in Jalingo Metropolis, Taraba State. The target population was 3150 students, covering all the 17 public secondary schools across Jalingo metropolitan. Test-rest was used to ascertain the reliability of the research instrument using the Pearson Product Moment Correlation technique, which yielded a coefficient of 0.67. It was established that intrinsic and extrinsic motivation in a proper blend has the potency to improve students' academic achievement in social studies. The study recommended that students be empowered to realize that they play the most important role in motivating themselves first, before anyone else, and that social studies, alongside other teaching subject areas, be made interesting so as to arouse and sustain students' interests and enhance learners' achievement. This study focused only on social studies, which is the gap that the current study intended fill in its endeavor to establish how the head teachers' candidates' preparation strategies influence grade seven students' academic performance in primary schools in the Chimoio District, Mozambique.

The idea of student motivation is not new in Mozambique. Schools come up with strategies to inspire learners to perform better on exams. At a secondary school in Nampula, Mozambique, Carlino (2022) conducted a study to examine the motivating elements for students to participate in physical education lessons. The study had 150 students, both sexes, in grades 8 through 12, who ranged in age from 13 to 17. The intrinsic and extrinsic motivation questionnaire, which evaluates the identification of intrinsic and extrinsic motives in physical education classes, was utilized for data collection. The findings demonstrate that students' attendance in physical education classes is driven by external factors. The results of the study by Carlino cannot be extrapolated to cover primary school learners because it concentrated on secondary school students, making it necessary for the current study that sought to find out how motivational strategies employed by the head teachers influence the academic performance of grade seven students in primary schools in the Chimoio District, Mozambique.

A quantitative study was conducted in a Mozambican university by Ndapulo (2013) about teacher and student motivation, beliefs, and expectations about English language teaching and learning. The study established that teacher and learner beliefs about second language instruction have a significant influence on the language teaching and learning process and, consequently, on students' achievements. It was clear from the study that students who are more motivated to learn persist longer, produce higher-quality effort, learn more deeply, and perform better in classes and on standardized tests. It is important to note, however, that the cited study only looked at general English and not English for academic purposes. Contrary to the study by Ndapulo (2013), the current study sought to establish how motivation strategies employed by the school head teachers influence grade seven students' academic performance in primary schools in the Chimoio District, Mozambique.

4. Research Methodology

This study was guided by the Dimension Model Theory and Catastrophe Theory. A convergent parallel mixed method design was used. The study adopted a cross-sectional survey research design for quantitative data and a phenomenological design for qualitative data. The focus was on public primary schools, head teachers, teachers and Mozambique's Ministry of Education officer. Simple random sampling was used to select 18 out of 23 primary schools and 125 out of 312 teachers; criterion purposive sampling was used to select 18 head teachers and 1 Ministry of Education officer.

Proportionate sampling, simple random sampling, was used to select 316 out of 1500 students. Questionnaires were used to collect data from students and teachers. An interview guide was used to collect data from head teachers and the Ministry of Education officer. Instrument reliability was tested using the test-retest technique, where a score of 0.82 was realized. The researcher ensured the validity of the quantitative instruments by consulting the experts. Member checking technique was used to validate qualitative instruments. Quantitative data was analyzed by the use of SPSS version 25 and findings were reported in percentages, frequency tables, and graphs. The qualitative data were analyzed into themes according to the research questions and reported in narratives and direct quotations.

5. Research Findings

5.1 Examination Anxiety Management Strategies and Students' Academic Performance

The first question of the current study sought to examine the influence of head teachers' candidate examination anxiety management and academic performance in the Primary Certificate of Education in Chimoio District, Mozambique. The teachers and students were requested to choose the response that best represented their opinions on a five-point scale. The scale of rating as presented in Table 1 was: Strongly Agree (SA), Agree (A), Undecided (UD), Disagree (D), and Strongly Disagree (SD). The findings are presented in Table 1.

Table 1 shows that slightly more than the average number of teachers (55.3%) agreed that their students are adequately prepared to reduce anxiety for exams. This finding was also affirmed by one of the head teachers who asserted that:

> *"I'm aware of how preparation is vital to reducing exam anxiety, and so we do our best to prepare our students well. I know that when students are well-prepared for examinations, their anxiety levels tend to decrease because thorough preparation instills confidence and a sense of control over the material. Familiarity with the subject matter, gained through consistent study and practice, reduces the fear of the unknown, which is a common source of anxiety among students."* (Head teacher C, 18/06/2024)

Table 1: Examination of Anxiety Management Strategies and Students' Academic

Statement Teachers (n = 123)	SA		A		UD		D		SD	
	F	%	F	%	f	%	f	%	f	%
Our students are adequately prepared to reduce anxiety for exams.	68	55.3	27	22.0	7	5.7	1	0.8	20	16.3
Learners are given ample time to read for exams, which reduces exam anxiety and leads to effective performance.	28	22.8	6	4.9	3	2.4	77	62.6	9	7.3
Our head teacher encourages learners to have a study plan, which helps them stay focused in preparation for examinations.	109	88.6	3	2.4	3	2.4	6	4.9	1	1.6
Positive thinking about exams is encouraged among the learners, which reduces exam anxiety and improves the students' grades.	67	54.5	47	38.3	1	0.8	1	0.8	7	5.7
Timely syllabus coverage provides learners with enough content to feel confident in their exam preparation.	85	69.1	21	17.1	3	2.4	4	3.3	10	8.1
As learners, we are always given ample time to read for exams, which reduces exam anxiety and leads to effective performance.	152	49.7	124	40.5	13	4.2	11	3.6	6	2.0
Our head teacher encourages us to have a study plan, which helps them stay focused in preparation for examinations.	192	62.7	26	8.5	48	15.7	29	9.5	11	3.6
Positive thinking about exams is encouraged, which reduces exam anxiety and improves the students' grades.	192	62.7	60	19.6	21	6.9	11	3.6	22	7.2
Timely syllabus coverage provides learners with time to cover enough content which improves confidence among the learners.	203	66.3	88	28.8	2	0.7	7	2.3	6	2.0
Students (n = 306)										

This finding was reinforced by the argument of the Ministry of Education officer who contended that:

> *"I'm aware of how much effort our schools put into preparing candidates well for examinations, and as such, most of the students tend to be well prepared, which has often reduced their anxiety as they approach examinations. We encourage teachers and head teachers of schools to ensure candidates are well prepared, and effective preparation often includes developing test-taking strategies and time management skills, all of which contribute to a more composed and focused mindset. This combination of knowledge, skills, and confidence helps students approach exams with a calmer and more positive attitude, significantly reducing their anxiety levels."* (Ministry of Education officer, 19/06/2024)

These findings reveal that head teachers are making efforts to prepare candidates well for examinations, as this helps to reduce their anxiety levels and improves their performance. As Spagnolo and Schirripa (2022) found in their study, well-prepared

students tend to be less anxious about examinations, which increase their chances of excelling.

There was a disagreement from most of the teachers (62.6%) that learners are given ample time to read for exams, which reduces exam anxiety and leads to effective performance. There were also 2.4% of the teachers who were undecided regarding whether learners were given ample time to read for exams. This could be attributed to inconsistencies in how different teachers allocate study time, leading to varied perceptions among teachers. Additionally, some teachers may feel uncertain due to a lack of clear policies or guidelines on providing dedicated reading time for students. Differences in classroom management and individual teaching styles might also play a role, with some teachers potentially struggling to balance curriculum requirements and exam preparation. Lastly, external pressures such as standardized testing schedules and extracurricular activities can create conflicting priorities, making it difficult for teachers to definitively state whether students have sufficient reading time. It must be noted that when learners are given ample time to prepare for examinations, their academic performance tends to improve. As noted by Moreau (2022), extended preparation allows students to engage more thoroughly with the material, leading to a deeper understanding and better retention of the content studied. In addition, Goldsmith (2021) argued that when learners are given ample time to prepare for examinations, they can allocate time to review and practice extensively, address areas of weakness, and develop effective study strategies. This increased preparation time also reduces stress and anxiety, which often negatively impact performance.

One of the head teachers narrated that in their school, students are given enough time to prepare for examination arguing that adequate preparation time allows them to thoroughly understand and internalize the material, leading to better retention and comprehension. The head teacher further argued that when students are given time to prepare for examinations, it reduces stress and anxiety, as students feel more confident and less rushed, allowing for more effective study.

Regarding giving students enough time to prepare, the Education officer had this to say:

"Sufficient preparation time enables students to engage in various study techniques, such as spaced repetition and active learning, which have been proven to enhance learning outcomes. It allows students to identify and address any gaps in their knowledge, seek help if needed, and develop effective test-taking strategies. Overall, ample preparation time leads to improved academic performance and a more positive educational experience." (Education officer, 28/08/2024)

It is clear from the findings that students tend to prepare well for examinations when they are given ample time, which enhances their chances of performing well. A study by Obiekwe and Elizabeth (2019) found that students' performance tends to be high when they effectively manage the ample time given to prepare for examinations.

Regarding whether head teachers encourage learners to have a study plan, which helps them stay focused in preparation for examinations, 88.6% of the teachers agreed with this statement. This aligns with the findings from one of the head teachers, who said that learners in their schools are highly encouraged to plan well for their time and seek help from teachers in planning when needed so that they can prepare well for examinations. A study by Yusefzade (2022) revealed a correlation between study habits, study planning time, and the performance of students. Yusefzade further argued that when students plan well for their examinations, they increase their chances of performing well. There were 54.5% of the teachers who consented that positive thinking about exams is encouraged among the learners, which reduces exam anxiety and improves the students' grades. In relation to this finding, one of the head teachers commented:

"As a head teacher, I encourage positive thinking about examinations among learners by fostering a supportive and encouraging school environment. I do this by having regular motivational talks, emphasizing the importance of a positive and growth mindset, and highlighting that exams are opportunities for learning and personal growth rather than just assessments. I also ensure there are resources and workshops on effective study strategies and stress management techniques to help students feel more prepared and confident." (Head teacher E, 21/06/2024)

In addition to the assertion of the head teacher, the education officer also argued that "*celebrating small achievements boosts students' self-esteem and resilience. A positive atmosphere created by head teachers fosters a constructive attitude towards exams, ultimately enhancing students' performance.*" This result shows that head teachers in Chimoio District, Mozambique, are making efforts to create a positive attitude among learners towards examinations, which enhances their academic performance.

The majority of the teachers (69.1%) agreed that timely syllabus coverage provides learners with enough content to feel confident in their exam preparation. In addition, one of the head teachers narrated, "*Timely syllabus coverage gives students the opportunity to understand the material. It also allows teachers to identify areas where learners need improvement to minimize knowledge gaps.*"

The education officer of Chimoio District also had this to say:

"Timely syllabus coverage helps to reduce the need for last-minute cramming, which often leads to superficial learning and higher stress levels. By pacing the learning process effectively, students can engage more deeply with the content, participate actively in discussions, and complete assignments and assessments with a thorough understanding. This systematic progression enhances retention and overall academic achievement." (Education officer, 24/06/2024).

In relation to the findings of the study about syllabus coverage and learners' performance, a study by Kiprono (2018) revealed that there exists a positive and statistically significant relationship between syllabus coverage and the academic performance of students. The findings from students revealed that 90.2% of the students agreed with the statement that learners are always given ample time to read for exams, which reduces exam anxiety and leads to effective performance. These findings concur with what one of the head teachers said, "*I encourage teachers to have the syllabus covered in time so that we allow the students to revise in preparation for the examination, and this has always helped our students to perform well in examination.*" The study further found out that most of the students agreed with the idea that the head teacher encourages them to have a study plan, which helps them stay focused in preparation for examinations. It is important to acknowledge that having a study plan is crucial for students as it provides structure, organization, and direction to their academic pursuits. A well-designed study plan helps students prioritize their tasks, allocate sufficient time for each subject or topic, and set realistic goals. By outlining specific study sessions, students can manage their time effectively, ensuring they cover all necessary material in a timely manner.

Additionally, a study plan promotes consistency in learning, reduces procrastination, and enhances retention of information through regular review and practice. A study by Brunton (2020) argued that a study plan fosters self-discipline and accountability, empowering students to track their progress and make necessary adjustments to achieve academic success. As noted in an interview with one of the head teachers, a study plan serves as a roadmap that supports academic achievement by optimizing learning efficiency and minimizing stress.

Further, most of the students (62.2%) agreed with the idea that positive thinking about exams is encouraged which reduces exam anxiety and improves the students' grades. In line with these findings, the education officer of Chimoio District had to say:

"Every time I talk to head teachers, I encourage them to actively promote positive thinking about academics and examinations among students because a positive mindset significantly influences academic performance and overall well-being. When students approach studies with optimism, they are more likely to engage actively in learning activities, persevere through challenges, and maintain motivation even during stressful periods such as examinations." (Education officer, 24/06/2024)

In addition to this finding, a head teacher asserted:

"Positive thinking enhances students' self-confidence; I encourage them to set ambitious but achievable goals and strive for continuous improvement. Moreover, fostering a positive academic environment cultivates a supportive culture where students feel empowered to seek help, collaborate with peers, and view mistakes as opportunities for growth rather than setbacks. Encouraging positive thinking about academics and examinations has not only

enhanced academic outcomes but also nurtured resilience, emotional well-being among our students." (Head teacher A, 26/06/2024)

The findings in Table 1 also revealed that most of the students (66.3%) agreed that timely syllabus coverage allows them to cover enough material, which improves confidence among the learners. This finding agrees with what the education officer said in an interview, which is that timely syllabus coverage plays a crucial role in enhancing learners' confidence for examinations by ensuring sufficient exposure to the required content. The education officer further argued that when students have ample time to cover the syllabus in a structured manner, they can engage deeply with each topic, clarify doubts, and reinforce understanding through practice and revision. One of the principals also asserted, "*timely syllabus coverage instills confidence among the learners as they tend to feel adequately prepared to tackle diverse questions and challenges that may arise in examinations.*" These findings seem to show that when the syllabus is covered in time, learners tend to cover enough content, which is important for them as they revise in preparation for examinations. These findings also concur with the findings of the study by Nakhanu (2017), who found that timely syllabus coverage allows learners ample time to prepare for examinations and reduces anxiety, which normally affects learners' academic achievements.

5.2 Influence of Motivation Strategies and Students' Academic Performance

The second question of this study sought to evaluate the influence of head teachers' motivation strategies on students' academic performance in the Primary Certificate of Education in Chimoio District, Mozambique. The teachers and students were requested to choose the response that best represented their opinions on a five-point scale. The rating scale as presented in Table 2 was: Strongly Agree (SA), Agree (A), Undecided (UD), Disagree (D), and Strongly Disagree (SD). The findings are presented in Table 2.

The results from Table 2 highlight a strong consensus among teachers regarding the significance of motivation in learners' academic performance, with a substantial majority (79.7%) affirming its importance. However, a minimal proportion (4.1%) of teachers expressed strong disagreement with this statement. This dissenting view, though a minority, suggests that there may be varying perspectives among educators on the extent to which motivation directly impacts academic outcomes. Such divergence could stem from differing interpretations of motivational factors or varying experiences in educational contexts. Nonetheless, the overwhelming agreement underscores the widely recognized belief among teachers in the pivotal role of motivation in fostering successful learning outcomes among students.

Table 2: Influence of Motivation Strategies and Students' Academic Performance

Statement	SA		A		UD		D		SD	
Teachers (n = 123)	F	%	F	%	F	%	F	%	f	%
Motivation is essential for learners' academic performance.	98	79.7	10	8.1	7	5.7	3	3.4	5	4.1
Students who are motivated to learn to persist longer and perform better.	61	49.6	50	40.7	6	4.9	5	4.1	1	0.8
The head teacher provides gifts to motivate learners in their studies.	1	0.8	1	0.8	4	3.3	2	1.6	115	93.5
The principal encourages teachers to take time and work with students individually to motivate them.	53	43.1	40	32.5	2	1.6	8	6.5	20	16.2
Learners are given timely feedback about their performance, which motivates them to work harder.	5	4.1	41	33.3	70	56.9	7	5.7	0	0
Motivation is essential for learners' academic performance.	186	60.8	21	6.9	27	8.8	62	20.3	10	3.3
Students who are motivated to learn to persist longer and perform better.	165	53.9	123	40.2	5	1.6	4	1.3	9	2.9
The head teacher provides gifts to motivate learners in their studies.	12	3.9	163	53.3	8	2.6	5	1.6	118	38.6
Learners are given timely feedback about their performance, which motivates them to work harder.	91	29.7	21	6.9	28	9.2	21	6.9	145	47.4
Students (n = 123)										

Regarding the motivation of students, one of the head teachers had this to say:

"Motivating students before exams is crucial because it enhances their psychological readiness and academic performance. When students feel motivated, they are more likely to approach exams with confidence, enthusiasm, and a positive mindset. This motivation serves as a catalyst for effective study habits, encouraging them to engage actively in revision, practice, and preparation. Moreover, motivation helps alleviate anxiety and stress commonly associated with examinations, allowing students to focus more clearly and perform to the best of their abilities." (Head teacher E, 29/06/2024)

The education officer also asserted:

"I normally encourage head teachers and the teachers in schools to encourage and motivate learners, especially towards examinations. I do this because I know that by fostering a motivated mindset, educators empower students to persist through challenges, maintain concentration during exams, and approach questions with critical thinking and problem-solving skills honed through their preparation." (Education officer, 23/06/2024)

The findings highlight that motivating students before exams not only boosts their morale and self-esteem but also contributes significantly to their overall academic success and long-term learning outcomes. Related findings were established by Safiyeh (2015), whose study findings revealed a correlation between students' motivation and their academic performance.

The findings further indicate a near-unanimous consensus among teachers, with 90.3% agreeing that motivated students persist longer and achieve better performance. This strong agreement underscores the critical role of motivation in sustaining student engagement and enhancing academic outcomes. The minimal 4.1% of teachers who were undecided suggests that only a tiny fraction may have reservations or require further evidence to fully endorse this perspective. The overwhelming majority supports the idea that motivation is a key driver of student perseverance and success, highlighting its importance in educational strategies and interventions aimed at improving learner achievements.

The findings of the study revealed a significant consensus among teachers, with 93.5% strongly disagreeing that the head teacher provides gifts to motivate learners in their studies and only 0.8% agreeing with the statement. This overwhelming disagreement suggests that the practice of offering material incentives is not a common or endorsed strategy within the primary schools in Chimoio District. It indicates that teachers may believe in or adhere to other forms of motivation, such as intrinsic motivation, encouragement, and recognition, rather than relying on extrinsic rewards.

Table 2 further indicates that most of the teachers (75.6%) agreed that the principal encourages teachers to take time and work with students individually to motivate them. Only 1.6% were undecided on the matter. The results of this study indicate that a substantial majority of teachers (75.6%) agree that the principal encourages them to spend time working individually with students to provide motivation. This strong agreement reflects recognition of the importance of personalized attention in fostering student motivation and engagement. The encouragement of the head teachers regarding such practices likely promotes a supportive and nurturing educational environment where students receive tailored guidance and support. The very low percentage of undecided responses (1.6%) further underscores the clarity and general acceptance of this approach among the teaching staff. This finding emphasizes the value placed on individual student-teacher interactions as a key strategy for enhancing student motivation and academic success.

In relation to these findings, the education officer asserted:

"As a head teacher, I often encourage teachers to take time and work individually with students to motivate them because personalized attention significantly enhances student engagement, understanding, and motivation. When teachers provide one-on-one support, they can address specific learning needs, clarify doubts, and tailor their teaching strategies to each student's unique strengths and weaknesses." (Head teacher, 02/07/2024)

The education officer also commented that "*one-on-one approach to assisting students fosters a stronger teacher-student relationship, making students feel understood. As a result, their confidence in their studies and academic performance improve.*"

It is important to acknowledge that personalized interactions allow teachers to identify and nurture each student's intrinsic motivations, setting personalized goals that align with their interests and aspirations. By encouraging such practices, the head teacher promotes a supportive and inclusive learning environment that can lead to improved academic outcomes and a more positive attitude towards education.

The findings reveal that slightly more than half of the teachers (56.9%) were undecided on whether learners receive timely feedback about their performance to motivate them to work harder. This significant level of indecision suggests a potential inconsistency or lack of clarity in the implementation of feedback practices within the primary schools in the Chimoio District. Timely feedback is crucial for student motivation as it helps learners understand their progress, identify areas for improvement, and feel supported in their efforts. In a study by Mohammad (2021), it was highlighted that a lack of proper communication information on feedback was found to be the main barrier affecting students' academic performance.

Table 2 further shows that most of the students (60.8%) agreed that motivation is essential for learners' academic performance. These findings highlight the recognized importance of motivational factors among the learners themselves. This consensus among students underscores the direct impact of motivation on their engagement, persistence, and success in their studies. When students understand and acknowledge the value of motivation, they are more likely to seek out and respond positively to motivational strategies implemented by educators. This alignment between student perception and educational practices is crucial for creating an effective learning environment. The findings suggest that fostering a motivational culture within schools can significantly enhance academic outcomes, as students who feel motivated are more inclined to put in the necessary effort, overcome challenges, and achieve their academic goals. As one of the head teachers noted, "*when students are encouraged and motivated, they tend to perform beyond the mean minimum.*"

The findings indicate that slightly more than half of the students (53.9%) agree that motivated students persist longer and perform better, suggesting a moderate recognition among students of the link between motivation and academic success. This majority viewpoint reinforces the notion that motivation plays a critical role in sustaining student engagement and enhancing performance. However, the fact that a significant portion of students either disagreed or were undecided highlights a potential gap in understanding or experiencing effective motivational strategies within the primary schools in the Chimoio District.

The findings show that slightly more than half of the students (53.3%) agreed that the head teacher provides gifts to motivate learners in their studies. This suggests that students see this practice as relatively common and visible within the school. This perception among students highlights the use of extrinsic rewards as a motivational tool,

which can be effective in the short term by providing tangible incentives for academic effort and achievement. However, as noted by Safiyeh (2015), while gifts can boost motivation and engagement temporarily, reliance on extrinsic rewards may not foster long-term intrinsic motivation, which is crucial for sustained academic success and personal growth.

The head teacher, in an interview, argued:

"I normally give gifts to students when they perform well, and I have realized that they work hard to earn them. However, I also ensure that they are intrinsically motivated by encouraging teachers to talk to them and sometimes inviting external speakers to communicate, inspire, and motivate them. By combining extrinsic rewards with efforts to cultivate intrinsic motivation, I have observed that students are encouraged to value learning and develop a deeper, self-sustained commitment to their studies." (Head teacher E 2/7/2024)

The findings reveal a contrast in perceptions between students and teachers regarding the head teacher providing gifts to motivate learners. While slightly more than half of the students (53.3%) believe that gifts are used for motivation, an overwhelming majority of teachers (93.5%) strongly disagree with this practice. This discrepancy suggests a significant divergence in understanding or awareness between the two groups regarding motivational strategies employed within the educational setting. Teachers' strong disagreement likely reflects a preference for fostering intrinsic motivation and academic engagement through other means, such as personalized encouragement and recognition of effort.

The study revealed a disagreement among the students (54.3%) regarding whether they are given timely feedback about their performance to motivate them. These findings contradict the findings from one of the head teachers regarding feedback who commented:

"We ensure that learners receive timely feedback regarding their performance in school. Effective feedback not only supports academic growth but also enhances student confidence and motivation by providing clear pathways for improvement. I encourage teachers to enhance communication channels and ensure that feedback is timely, specific, and actionable. This approach has been instrumental in improving students' academic performance in our school." (Head teacher F, 01/07/2024)

The findings from students point to concerns about the effectiveness of feedback as a motivational tool in primary schools in the Chimoio District. Timely and constructive feedback is essential not only for improving learning outcomes but also for fostering motivation by helping students understand their strengths and areas needing improvement. The disagreement among students suggests that there may be

inconsistencies or perceived shortcomings in how feedback is currently delivered or perceived.

6. Conclusions and Recommendations

The study revealed that head teachers' candidate preparation strategies, including exam anxiety management and student motivation, have an influence on students' academic performance in the Primary Certificate of Education in Chimoio District, Mozambique. It was further found out that head teachers use gifts and other extrinsic motivations to encourage students to perform well in examinations, which were found to be ineffective. Therefore, the study recommended that in preparing candidates for examinations, head teachers should prioritise and promote intrinsic motivation strategies. These include fostering a supportive learning environment, encouraging student autonomy, and emphasizing the value of learning itself. Such strategies are expected to have a more sustainable and positive impact on student engagement and academic performance.

Conflict of Interest Statement

As authors of this journal article entitled *Head Teachers' Candidate Preparation Strategies and Students' Performance in the Primary Certificate of Education in Chimoio District, Mozambique,* we have no conflicts of interest to declare. We have all seen and agreed with the contents of the manuscript, and there is no financial interest to report. We certify that the submission is original work and is not under review by any other publication.

About the Authors

Victoria Tito is a Master's Student at Tangaza University, Kenya, with a strong passion for research in educational leadership.

Dr. Kinikonda Okemasisi is a Lecturer, School of Education, Tangaza University, Kenya. She has a keen interest in research.

Dr. Rose Wambui is a Lecturer, School of Education Tangaza University, Kenya. She has an interest in educational leadership research.

References

Abawi, K. (2014). *Data collection instruments.* Accessed from https://www.gfmer.ch/SRH-Course-2013/Geneva-Workshop/pdf/Data-collection-instruments-Abawi-2014.pdf

Abe, T. O. (2014). *The effect of teachers' qualifications on students' performance in access?* Available at https://www.wider.unu.edu/publication/has-qualitymozambique%E2%80%99s-education-been-sacrificed-altar-access

Aduke, A. F. (2015). Time management and students' academic performance in higher institutions, Nigeria—a case study of Ekiti State. *International Research in Education*, 3(2), 1-12. https://doi.org/10.5296/ire.v3i2.7126

Amzalag, M., Shapira N., & Dolev, N. (2021). Two sides of the coin: lack of academic integrity in architecture undergraduates. *Creative Education*, *7*(02), 364-371. https://link.springer.com/article/10.1007/s10805-021-09413-5

Antera, S. (2023). *Competence importance and acquisition: comparing qualified and non-qualified vocational teachers*. Accessed from https://www.tandfonline.com/doi/full/10.1080/13639080.2023.2167956

Armando, A. (2014). *Building warm relationships between teachers and students in Mozambique.* Accessed from http://crc.mysite.nu/Userfiles/Apps/Text/112/Text/mozambique-batch-18---published-report.pdf

Asakhulu, N. (2016). *Effects of examination anxiety on academic performance of students in secondary schools in Khwisero District, Kakagema County, Kenya*. Accessed from http://ir-library.mmarau.ac.ke:8080/handle/123456789/4425

Ayalp, G. G., & Özdemir, N. (2016). Relationship between test anxiety and learning styles of benefits of EFL literature education, *The Language Learning Journal*, 47(3), 371-384. http://dx.doi.org/10.4236/ce.2016.72036

Besir, S., & Pismek, N. (2018). *A convergent parallel mixed-methods study of controversial issues in social studies classes.* Accessed from https://files.eric.ed.gov/fulltext/EJ1179818.pdf

Bloemert, J., Paran, A., Jansen, E., & van de Grift, W. (2019). Students' perspective on the benefits of EFL literature education. *The Language Learning Journal*, *47*(3), 371-384. https://doi.org/10.1080/09571736.2017.1298149

Bourke., R., & MacDonald, J. (2018). Creating a space for student voice in an educational evaluation. *International Journal of Research & Method in Education*, *41*(2), 156–168. https://doi.org/10.1080/1743727X.2016.1256983

Brunton, J. (2020). Balancing act: a window into online student engagement experiences. *International Journal of Educational Technology in Higher Education, 17*. Accessed from https://link.springer.com/article/10.1186/s41239-020-00199-x

Bryman, A. & Bell, E. (2015). *Business Research Methods*. London: Oxford University Press. Retrieved from https://books.google.ro/books/about/Business_Research_Methods.html?id=l7u6BwAAQBAJ&redir_esc=y

Carlino, A. (2022). *Motivational factors for student participation in physical education classes in a secondary school in the city of Nampula-North of Mozambique*. Accessed from https://web.s.ebscohost.com/abstract?direct=true&profile

Choudhury, S., & Chechi, V. K. (2022). *The relationship between academic anxiety and academic performance among upper primary Muslim students*. Accessed from https://iopscience.iop.org/article/10.1149/10701.10085ecst/meta

Classbase, A. (2017). *Education system in Mozambique*. Accessed from https://www.classbase.com/

Comighud, S. M. (2017). *Extent of implementation of instructional supervision in relation to teachers' job performance* (unpublished master's thesis, Foundation University). Retrieved from https://www.researchgate.net/profile/She-Writes/publication/352061603_Extent_of_Implementation_of_Instructional_Supervision_In_Relation_To_Teachers'_Job_Performance/links/60b794994585154e5eff98d9/Extent-of-Implementation-of-Instructional-Supervision-In-Relation-To-Teachers-Job-Performance.pdf

Consiglio, B. (2022). *Positive teacher-student relationships lead to better teaching.* Accessed from https://cehd.missouri.edu/2022/03/positive-teacher-student-relationships-lead-to-better-teaching/

Creswell, J. W. (2014). *Research design: Qualitative, quantitative, and mixed methods approaches.* California: Sage Publications. Retrieved from https://www.ucg.ac.me/skladiste/blog_609332/objava_105202/fajlovi/Creswell.pdf

Elmurabet, O. A. (2015). Impact of a Public Examination Change on Teachers' Perceptions and Attitudes towards Their Classroom Teaching Practices, *Engineering Educational Journal, 78*(7), 674–681. http://dx.doi.org/10.9790/7388-05517078

Faisal, Z. M., Abdulla, F. A., & Mohammad T. (2014). *The relationship between time management and the academic performance of students from the petroleum institute in Abu Dhabi, UAE.* Retrieved October 1, 2022 from: http://www.asee.org/documents/zones/zone1/2014/st udent/pdfs/177.pdf

Felder, R. M., & Silverman, L. K. (1988). Learning and teaching styles in engineering education. *Engineering Education*, *78*(7), 674–681. Retrieved from https://engr.ncsu.edu/wp-content/uploads/drive/1QP6kBI1iQmpQbTXL-08HSl0PwJ5BYnZW/1988-LS-plus-note.pdf

Gagnon, D. (2022). Top 7 Reasons why college is important. Retrieved from https://www.snhu.edu/about-us/newsroom/education/why-is-college-importantimportant

Gall, M. D., Gall, J. P & Borg, W. R. (2010). *Educational Research: An introduction (8th ed).* New York: Pearson Education Inc.

Ginni, J. (2022). *What are the strengths of Dimensional Modeling?* Accessed from https://www.tutorialspoint.com/what-are-the-strength-of-dimensional-modeling

Goldsmith, G. (2021). *Instructor Strategies to Alleviate Stress and Anxiety among College and University STEM Students*. Accessed from https://www.lifescied.org/doi/full/10.1187/cbe.20-08-0189

Goulas, S., & Megalokonomou, R. (2019). *Marathon, hurdling or sprint? The effects of Guardian.* Retrieved from https://www.theguardian.com/education/2018/may/17/stress-and-seriousanxiety-how-the-new-gcse-is-affecting-mental-health

Raj Chetty & John N. Friedman & Jonah E. Rockoff (2014). Measuring the Impacts of Teachers I: Evaluating Bias in Teacher Value-Added Estimates, *American Economic Review, American Economic Association, vol. 104*(9), pages 2593-2632. Retrieved from https://www.aeaweb.org/articles?id=10.1257/aer.104.9.2593