

Administrative Mitigation Measures against Examination Attrition Rates in Tertiary Institutions: A Case of School of Education, University of Zambia

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Abstract. The purpose of the study was to formulate strategies that heads of departments can use in mitigating examination attrition. The study was done from the School of Education of the University of Zambia. A case design was used through a qualitative approach. The heads of department who once experienced examination attrition rates on the departments in the School of Education were the target population. Therefore, purposive sampling was used to gather participants' responses from the nine (9) participants. Coding and thematic analysis of data using the emerging themes from the findings was used to analyse data. From the findings, main factors leading examination attrition rates were cited as financial constraints, taking courses for prestige, ignorance about the importance of assessments and work overload. The findings revealed that heads of department play various roles in mitigating examination attrition such as allocating lecturers to each student to offer counselling to students who are faced with academic challenges. In addition, the findings revealed that heads of departments keep up to date with students' academic performances so that they can provide solutions if students are facing any challenges academically. From the findings, the following recommendations were made: students must meet with their course lecturers for consultation as it plays an important role in retention of students in schools, detailed feedback from lecturers must be given to students in time, academic and psycho-social counselling must be provided to all students.

Keywords: examination attrition, heads of department, counselling, mitigating

Introduction

The University of Zambia has maintained exceptionally high educational standards including quality instructional design, leading to the production of competent graduates. However, from 2017 to 2019 there were high examination attrition rates among undergraduate students in various programmes (Daka, Chipindi & Mwale, 2020). Attrition is defined as a student's departure from the school or possible departure from the entire educational system (De Remer, 2002). The university selects students based on merit (Daka, 2019). Despite decades of research on this phenomenon, attrition remains one of the most complex and least understood problems confronting educational institutions (Bean, 2005). Defining attrition and the factors behind it, and developing potential solutions are concurrent priorities in education theory and application (Sarrico, 2016). Hence, universities are becoming more aware of and accountable for graduation rates while they seek to ensure quality education (Reason, 2009). He further added that policy makers in most states use retention and graduation rates as performance indicators for higher education institutions. Nevertheless, Table 1 and Table 2 illustrates the recorded examination rates from three programs of 2017/2018 and 2018/2019 academic years, hence the researchers' interest for this study to critically examine the roles heads of departments play in mitigating examination attrition.

Table 1. Examination Attrition Rates (%) of 2017/2018

Programme	Year 1 (%)	Year 2 (%)	Year 3 (%)	Year 4 (%)
Bachelor of Education (Administration and Management)	37	32	24	09
Bachelor of Science with Education	52	37	11	26
Bachelor of Agricultural Science with Education	35	22	25	00

Source: Field data (2020)

Table 2. Examination Attrition Rates (%) of 2017/2018

Programme	Year 1 (%)	Year 2 (%)	Year 3 (%)	Year 4 (%)
Bachelor of Education (Administration and Management)	23	14	32	23
Bachelor of Science with Education	35	34	14	15
Bachelor of Agricultural Science with Education	75	29	24	13

Source: Field data (2020)

Problem Statement

Schools, colleges and Universities in Zambia have been charged with the responsibility to provide education for all irrespective of ethnicity, social background, gender, ability and colour (Daka & Changwe, 2020). However, completion of tertiary education has been hampered by escalating examination attrition. This questions the credibility of the administrators' role in enhancing students' retention. The University of Zambia has launched several initiatives aimed at improving the number and quality of graduates. These include; staff capacity building, increasing the number of lecturers and an improved learning environment as well as increased access to educational resources. However, despite these efforts, examination attrition rates remain seen in Tables 1 and 2 above high and hence, the study on roles heads of departments that they play in mitigating examination attrition.

Research Objectives

1. To explore causal factors of examination attrition in the School of Education of the University of Zambia.
2. To investigate the roles that heads of departments of the School of Education play in mitigating the examination attrition.
3. To formulate strategies that heads of departments can use in mitigating examination attrition.

Causes of Examination Attrition

Examination attrition is defined as a student's departure from the school or possible departure from the entire educational system (De Remer, 2002; Daka, Banda & Namafe, 2020). Examination attrition is one of the quality outcomes employed to determine the educational quality of a learning institution (James & Chilvers, 2001). Debate continues on the academic factors that contribute to attrition and these are likely to vary from one setting to another (Daka, Namafe & Katowa-Mukwato, 2019). Moore and Shurock (2006) assert that the examination attrition rate is a major indicator of quality that impacts student retention. When a lot of student's progress to the next year, the retention rate is usually higher (Daka, 2019), with the converse also true.

Despite decades of research on this phenomenon, attrition remains one of the most complex and least understood problems confronting educational institutions (Bean, 2005).

Defining attrition and the factors behind it, and developing potential solutions are concurrent priorities in education theory and application (Sarrico, 2016). Thomson (1999) and Wild and Ebbers (2002) highlight that a high attrition rate indicates that an institution has an educational quality problem. As a result, universities are becoming more aware of and accountable for graduation rates while they seek to ensure quality education (Reason, 2009). He also adds that policy makers in most states use retention and graduation rates as performance indicators for higher education institutions. High examination attrition rates have been attributed to various factors, including quality content, a quality learning environment, quality process and quality learners (Daka, Chipindi & Mwale, 2020).

Literature reviewed shows that there are three main factors which influence examination attrition. These factors may be associated with family background, students' behavior and those related to individual experience in schools (Hamaleka, Daka & Mphande, 2020). Poverty as one of the family factors is seen by Hunt (2008) as a multifaceted concept which encompasses social, economic and political elements. It is a condition which can lower the individual self-esteem and makes him or her vulnerable. Adverse poverty can impact negatively on the students' willingness to continue or drop out of school. Children from low-income families especially vulnerable and marginalized are likely to drop out of school than those from families with more resources (Hunt, 2008; Hamaleka, Daka & Mphande, 2020). These students are unable to pay cost of school activities such as development levy and educational trips. Therefore, this increases pressure on the students to look for a job and earn income for the school activities and for their families. The alternative solution is to leave schooling.

Another factor is academic motivation. Students' lack of motivation in academic affairs can have a positive impact on examination attrition. No matter how much effort teachers put on the students to improve their learning and if such students are not motivated it just hitting on a hard rock. Kakupa, Tembo and Daka (2015) posit that academic motivation seems to be a prominent problem for numerous high school students. Furger (2008) affirms that examination attrition is sometimes students being bored and seeing no connection between academic life and real life. Another factor is school policies and practices. Students will continue with school if the school policies and practices are child-friendly, caring, provide safety and encourage both academic and social engagement. An unruly school atmosphere makes students feel unsafe and is likely not to be committed to school activities. The safest place will be home, hence the decision to drop-out of School. Those related to student behavior include truancy, absenteeism, desertion, alcohol and substance abuse and low level of academic motivation. These findings are significant to this study as they beg the question as to whether this was correct for the University of Zambia students as well.

Smith (2009) and Daka, Banda and Namafe (2020) note that high examination attrition results from cognitive overload. For example, the author's research among nursing students in the US revealed that most of the causes of attrition were academic in nature (Smith, 2009), including failure to meet academic standards, students quitting due to academic pressure. Balon et al. (2013) examined student attrition rates in a Canadian nursing programme. The factors contributing to the high attrition rates included a heavy course workload and lecturers' failure to explain difficult concepts and a lack of academic staff trained in methodology.

An educational quality variable which causes examination attrition is mismanagement of courses (Daka & Changwe, 2020). Scholars posit that well-managed courses and sound assessment practices will result in low examination attrition rates. Bean (2005) and Frankola (2001) identify inadequate time for learning, poorly designed courses and incompetent instructors as causes of high attrition rates and low GPA. Establishing why students fail is critical in determining the quality of services and delivery methods of a particular learning institution (Bean, 2005), as the predictors might be different in different settings.

Lack of supervision and support of students as literature demonstrates that contact with

faculty plays an important role in retention, (Braxton, 2008). The contact can either be formal or informal. It has been suggested by Daka (2019) that students are expected to do well with guidance and support. It is a well-known fact that holding student high expectations is appropriate for all students. Setting high expectations for students and encouraging students to set personal learning goals also helps them achieve and succeed academically. It is also stated by Daka and Changwe (2020) that it is important for faculty to have high aspirations for learning outcomes, clear expectations for student performance, and standards for holding students accountable. This also helps students to work hard academically and reduce the attrition rates.

Timely feedback refers to a situation where students are given feedback before they write their final examination and before they are assessed on some other items (Kuhn, 2006). Detailed feedback means that the lecturer comments on the students' mistakes or correct answer. Such feedback helps the students to understand the marks awarded and can enable the student to answer the question correctly in case they failed it at first. Lack of timely feedback in assessments is another cause of examination attrition. Daka, Chipindi and Mwale (2020) also indicates that students learn from their errors. He adds that if feedback is not provided on time or not all the student may repeat the similar error in the final examination. Mukuka and Daka (2018) also adds that the timing of feedback to the students from the faculty is very vital. He stresses that prompt feedback is the best so that it is easy for the students to recall what they were asked. The feedback in assignments and tests helps serve as a corrective measure and helps the students to improve upon what they did not understand.

Roles Heads of Department Play in Mitigating Examination Attrition

Students retention is one of the vital roles expected to be executed by school management teams. The teams are solely responsible to come up with strategies to motivate students to complete their programs. For instance, a Department of Education (2011) conducted a study on Dropout and Learner Retention Strategy in South Africa. Findings indicated that, one of the strategies the school management teams may implement is monitoring students' school attendance. Attendance problems such as truancy, absenteeism and desertion can be early signs of examination attrition. An emphasis on keeping daily class registers by school managers will prevent unnecessary students' absence from school. Daily school attendance is a reflection of students' motivation to learn and a caring learning environment.

Another related study conducted by Furger (2008) on how to end the examination attrition Crisis. Results of the study revealed that one of the roles school managers or heads of department may play in curbing student dropout is developing programs and activities within schools. He further indicated that, the school management teams should always be looking for ways to improve the student experience at school. Engaging students in school programs and activities will enhance commitment to their goals and that of the school. This will ultimately enhance their social and academic integration and therefore promote retention. Furger (2008) further affirms that boredom and disengagement are two key reasons why students stop attending class and end up dropping out of school. Heads of department help individual students to make the most of their school experiences and prepare them for the future daily lives activities (UNESCO, 2020).

Strategies Heads of Department Put in Place in Mitigating Examination Attrition

Students retention is one of the vital roles expected to be executed by school management teams. The teams are solely responsible to come up with strategies to motivate students to complete their grades. One of the strategies the school management teams may implement is monitoring students' school attendance.

Attendance problems such as truancy, absenteeism and desertion can be early signs of dropout. Daily school attendance is a reflection of students' motivation to learn and a caring

learning environment. The University of Zambia's policy indicates that each student must attend 80% of the lectures in a course. This is to encourage all students to attend lectures so as to reduce attrition rates.

Being mindful of students' academic progress is another strategy. Poor academic performance may frustrate students to the extent that they develop a negative attitude towards a school. They may perceive the school setting as unsupportive and irrelevant. The school management teams may create an alternative learning atmosphere where mixed ability teaching is encouraged. The students will work in groups when they are given an assignment or topics for discussion. The intelligent students will help the low achievers to upgrade their grades and enhance their confidence.

Another strategy of student retention is by making learning relevant. Boredom and disengagement are two key reasons students stop attending class and wind up dropping out of school. Instruction that takes students into the broader community provides opportunities for students especially experimental learners to connect to academics in a deeper, more powerful way. For example, at big picture learning schools throughout the country, internships in local businesses and nonprofit organizations are integrated into the regular school week. Students work with teacher advisors to find out more about what interests them and to research and locate internship; then on the job mentors work with students and school faculty to design programs that build connections between work life and academics.

Talk to students about career realities. As the head of department talk to students about their own career path and the paths of others. Help them see the differences between gaining a university degree and how many more doors open for them at level. When talking about what they want to do with their professional lives, teach them how to find out what educational level is required for interesting jobs. By talking to them about their careers many hopes are raised in students especially those with poor performance in order to thrive and become what they want to be. They simply understand what it takes and the efforts to put in in order to achieve their goals hence most students will tend to work hard and the number of examination attrition will be reduced.

Research Methodology and Design

In order to understand the role heads of department play in mitigating first-year examination attrition, a qualitative method was used. This means that the kind of information that was collected is not numerical but words that express ideas, perceptions and attitudes of the respondents. A case study was used in a qualitative approach. In a case study design, the researcher seeks to develop an in-depth understanding of the case or phenomena by collecting multiple forms of data. Providing this in-depth understanding requires that only a few cases be studied, because for each case examined, the researcher has less time to devote to exploring the depths of any one case (Creswell, 2009). Therefore, a case study design was used to gain in-depth understanding of the role heads of department play in mitigating first-year students' examination attrition in School of Education of the University of Zambia.

The sample for this study was nine (9) respondents categorized as the three (3) heads of departments and six (6) students who had experienced examination attrition in the school of education. The sampled Heads of department were purposively sampled as these were the top departments where there were high attrition rates as compared to other departments. The Dean's office helped the researchers in identifying the students from their records. The target was to interview 5 students but opted out. However efforts were made to get 2 students from each department. Consent had to be taken from them. Thus, having this number of participants is suitable with a qualitative case study.

Semi-structured interview was employed in this study. Semi-structured interview schedules were chosen as the instruments for this study because they are one of the qualitative

research tools, they demand close interaction between the researcher and the participant and further provide an opportunity for a researcher to discuss with selected respondents. In addition, document analysis was also used to verify some of the information provided by the participants. Consent from the participants and relevant authorities and this was done in order for the researchers to be given permission to freely interact with the selected respondents without abrogating any research ethics rules. Thematic analysis of data in this research was done using the emerging themes from the findings.

Findings

Causal Factors of Examination Attrition

The findings of the study revealed that course workload has been one causal factor of examination attrition as one student narrated that:

I had a lot of consecutive classes and labs which hindered us to have enough time for personal studies.

Sadly, enough, an interviewed student pointed out that he had insufficient financial support. A student said:

I was on 75% bursary and I had carried 3 courses in first year and at second year failed to clear in the three courses I failed to clear the ones I carried at first year and additional failed two more. I was given a supplementary exam which I failed too and was later on put on part time in order for me to clear all the courses I had failed. Unfortunately, my sponsor could not afford to pay the tuition fee for one whole year for I was taken to self-sponsorship in that my bursary became inactive and that's how I failed to complete my program of study.

According to the findings from a male student who was interviewed, he explained that some students are ignorant about the importance of continuous assessments. He stated that:

I didn't know that the quizzes we were doing were being added to our continuous assessments (C.A). I took it lightly thinking that it was as a mere quiz we used to do in secondary, so I never attempted most of them.

The findings revealed that taking programs for prestigious reasons has contributed to examination attrition. According to one student interviewee said:

I took agricultural sciences with education because I wanted to have an opportunity to travel to Israel to further my studies from there as it is an opportunity that comes for taking the program.

Roles Heads of Departments Play in Mitigating Examination Attrition

In mitigating examination attrition in the school of education at the University of Zambia, one of the head department clearly stated;

My role as head of department includes guiding and counseling. I assign lecturers to counsel students in their academic behaviors and offer consultation to students who are facing challenges in their academics and counsel them on how to handle their challenges.

Moreover, another head of department of Science with education stated;

I advise career service and assist students in their career exploration and decision-making, that is to provide career counselling to students. I assist students with decision-making pertaining career direction. For instance, I assist students in the selection of courses and other educational experiences.

In addition, when the head department was asked about his roles in mitigating examination attrition, he responded;

I serve as the custodian of student registration and other records such as course grades and academic transcripts and I serve as the official keeper of student academic records. To manage student registration and records. I resolve any conflict in which a student is involved (student vs. Student) and conduct mediation sessions.

Strategies Heads of Department Use in Mitigating Examination Attrition

The following were the findings of research objective three (3) which required respondents to state what various strategies they use to address examination attrition in the School of Education at the University of Zambia. However, the following are the findings on strategies used in mitigating examination attrition by the 3 heads of department under this study:

I counsel those with challenges and make myself available to the students to open up to me. I also assign not just one but several lecturers as counsellors to the students (different subject counsellors) and know all the students in my department and be up-to-date with their records, thereby ensuring that I detect any challenges in students' academic performance so that I can provide solutions. (HOD A).

Another Head of department (HOD 2) further added that;

I monitor students' school attendance and attendance problems such as truancy, absenteeism and desertion can be early signs of examination attrition. An emphasis on keeping daily class registers by lecturers deters unnecessary students' absence from school and daily school attendance is a reflection of students' motivation to learn and a caring learning environment.

In addition, HOD 3 asserted that;

Engaging students in school programs and activities will enhance commitment to their goals and that of the school. This ultimately enhances their social and academic integration and therefore promotes retention.

Discussion

Causal Factors of Examination Attrition

Pascarella and Terenzini (2005) argue that variables relating to course management are the main causes of examination attrition. Institutional characteristics were examined, most of the students in the school of education at the University of Zambia were having a lot of courses and thereby experiencing work overload. It was observed that some students from the school of Agriculture had a lot of courses which led them to have difficulties in balancing their studies, attending classes and working on their assessments. Due to the work overload most students failed to cope up with the pressure which led them to fail some courses and face examination attrition. While Wild and Ebbers (2002) and Kakupa, Tembo and Daka (2015) pointed that teaching characteristics and institutional characteristics as major contributors. One of the few things scholars agree on is the importance of studying and improving retention (Wild & Ebbers, 2002; Phiri, Musonda & Daka, 2020). Additionally, it was found that some courses were bulky and having unnecessary concepts and have no application. For example, a course might be easy but the way it's taught can have a significant impact on examination attrition because lack of understanding what a course is really about.

Ignorance of importance of assessments was another causal factor of examination attrition. It was perceived that students did not take their assessments such as quizzes, assignments and tests seriously. Furthermore, an observation was made that the school social environment had a significant impact on examination attrition in that some students were being influenced from their peers in not taking studies seriously as they focused much on social

activities such as going out on a drinking spree. Additionally, some student's take programs for prestige with hope of getting other benefits that were not academic related for example students who take Chinese with hope of travelling abroad. Our findings presented that lack of proper orientation such as on course combination leads to higher attrition rates, some students combine courses that they latter find hard to cope with. Some students taking Mathematics and Geography find it hard to balance their time management because both courses require enough time and they involve laboratory attendance. However, the study suggested that the university must provide proper orientation in terms of course combination thus creating awareness about the hardships that come along in combining certain courses such as Mathematics and Science.

According to the results from the study, many students from the school of education argued that despite being granted the 75% loan by the Ministry of Higher Education, they still found it hard to pay the remaining 25% of the tuition fees, thereby causing them to drop out of school. This condition however, hindered them to continue with their studies due to the faced financial constraints. It should be stated that the government has taken this into consideration and all the students have been put on 100% sponsorship. Poverty as one of the family factors is seen by Hunt (2008; Hamaleka, Daka & Mphande, 2020; Kakupa, Tembo & Daka, 2015) as a multifaceted concept which encompasses social, economic and political elements. It is a condition which can lower the individual self-esteem and makes him or her vulnerable. Adverse poverty can impact negatively on the students' willingness to continue or drop out of school. Children from low-income families especially vulnerable and marginalized are likely to drop out of school than those from families with more resources (Hunt, 2008). Furthermore, Nakanjama, Dembo and Mossler (2012) Vieira noted that university fees are a very important factor affecting both attrition and retention rate. Their research found that some students discontinue their studies for some time, to seek employment that earn them money, and then reenroll to continue their studies. However, in some cases they don't go back to university to continue their studies. Similarly, Mulenga-Hagane, Daka and Kachebele-Sinyangwe (2020) found that being forced to pay for university was the number one factor that leads university students to drop out. These students are unable to pay cost of school activities such as development levy and educational trips. Therefore, this increases pressure on the students to look for a job and earn income for the school activities and for their families. The alternative solution is to leave schooling.

Roles Heads of Department Play in Mitigating Examination Attrition

In line with the objective that aimed at determining the roles heads of department play in mitigating examination attrition, the findings revealed that roles played by heads of department include guiding and counselling and keeping records for students. Akinade (2012) defines guidance and counselling as a process of helping an individual become fully aware of him or herself and the away in which he /she is responding to the influences of his or her environment. Counselling is a learning process in which a counsellor helps an individual or individuals learn, understand themselves and their environment and be in a position to choose the right type of behaviors that will help them develop, grow, progress, ascend, mature and step up educationally, vocationally and social personally (Egbo, 2013; Mulenga-Hagane, Daka & Kanchebele-Sinyangwe, 2018). The role of guidance and counselling programs is to bring about the maximum development and self-realization of human potential for the benefit of the individual and society. Guidance and counselling program aim at assisting students to harmonize their abilities, interests and values, thereby enabling them to develop their potential fully. The data collected from heads of department showed that they provide guiding and counselling to students.

They assign lecturers to counsel students in their academic behaviors and offer consultation to students who are facing challenges in their academics and counsel them on how

to handle their challenges. They also assist in decision-making. For instance, they assist students in the selection of courses and other educational experiences and help students who may experience difficulty in adjustments with peers, teachers and the environment as a result students are able to adjust and utilize the guidance available fully. To all students the university offers wide number of courses and core curriculum activities. They should provide an enabling environment so that students can freely approach and open up to them and also from the onset tell students who to approach when faced with challenges. As witnessed by researches, some students in the school of education do not fully avail themselves to the counselling and guidance services offered by the heads of departments as students tend to deal with academic challenges on their own which results in examination attrition and also some are not aware of whom to approach when they face any challenges. Only few students utilize these services and most of them utilize them when they are called for a meeting with the H.O.Ds concerning the academic performance.

According to the results from the study, heads of departments serve as the custodian of student registration and other records such as course grades and academic transcripts and serve as the official keeper of student academic records to manage student registration and records and keep up to date with student performances. For example, when they the notice that some scores from assessments from the records are not impressive, they assign the lecturer of a particular course to follow up on the poor performance.

Strategies Heads of Departments Use in Mitigating Examination Attrition

The data collected from the H.O.Ds showed that emphasis on keeping daily class registers by lectures will prevent unnecessary students' absence from class. Daily school attendance is a reflection of students' motivation to learn and develop interest in school and also by having a caring learning environment. If effective monitoring of student's school attendance to be done, it is essential to emphasis on keeping daily class registers by lectures to prevent students not to abscond from school. The only challenge is that some classes are too large to do register in every lecture. In some classes, there are more than 300 students. In such cases, tutorials will be better places to do register.

Further findings revealed that being mindful of students' academic progress is another strategy used by heads of departments. Poor academic performance may frustrate students to the extent that they develop a negative attitude towards school. They may perceive the school setting as unsupportive and irrelevant. As witnessed by researchers, in as much as H.O.Ds through their lectures try to make follow-ups on students with poor performance, some students do not take keen interests in their academic welfare and thus do not make follow-ups on their poor performance. On the other hand, H.O.Ds do not take keen interest in student's academic welfare.

Conclusion and Recommendation

Since the highest attrition rates were in the first year, the findings of the study revealed that the school of education needs to work on areas which could raise students' performance and lower the examination attrition for the first years and this can help also reduce in the other senior years. Financial constraints, academic pressure, taking programs for prestige and lack of academic commitment were seen as the major contributing factors leading to high examination attrition rates. The study therefore, recommends that adequate guidance and counseling and monitoring of students' performance should be implemented in order to mitigate examination attrition. This study used the findings to show that if adequate guidance and counseling and monitoring of students' performance is implemented student retention would be achieved.

Therefore, the following recommendations were suggested from the study. In order to mitigate examination attrition among first years, the following recommendations were made.

- a) Students must meet with their course lecturers for consultation. The contact can either be formal or informal.
- b) Detailed feedback from lecturers must be given to students on time. Feedback process does not only drive learning, but also improves the facilitation of that learning process.
- c) Counseling and academic guidance must be provided to students.

References

- Akinade, K. (2012). Solving the drop-out puzzle: strategies for success. *Principal Matters, Journal for Secondary School Leaders in Australia*, 76, 43-46.
- Balon, R., Alpert, J. E., Cluver, J. S., & Lewis, C. (2013). How to get help with starting your Research Project: ADMSEP Task Force on Research and Scholarship. *Academic Psychiatry*, 37(4), 221-222.
- Bean, J. P. (2005). A Conceptual Model of Non-Traditional Undergraduate Student Attrition. *Review of Educational Research*, 55, 485-540.
- Braxton, J. M. (Ed.). (2008). *The Role of the Classroom in College Growth for use in Teacher Evaluation System*. California: CRESST Partnership
- Creswell, J. W. (2009). *Educational Research: Qualitative, Quantitative and Mixed Methods Approaches*. Los Angeles; Sage Publishers.
- Daka, H. (2019). *Perspective on course management, Teaching and Assessment of Undergraduate Programs at the Medical School of the University of Zambia*. PhD Thesis, Lusaka, The University of Zambia.
- Daka, H., Namafe, C. M. & Katowa-Mukwato, P. (2019). Perspectives on Teaching Approaches and the Grade Point Average Attainment of Undergraduate Medical Students at University of Zambia. *International Journal of Humanities Social Sciences and Education*, 6(12), 75-82.
- Daka, H. (2019). Understanding the Correlation between Institutional Characteristics and Academic Performance: A case of Undergraduate Medical Students at University of Zambia. *Journal of Lexicography and Terminology*, 3(2), 96-116.
- Daka, H. & Changwe, R. (2020). An Exploration of Education Quality in the Light of the Grade Point Average and Examination Attrition Rate. *International Journal of Humanities Social Sciences and Education*, 7(6), 196-207.
- Daka, H., Banda, S. S., & Namafe, C. M. (2020). The Relationship Between Course Management And Examination Attrition Rates Among Undergraduate Medical Students at the University Of Zambia. *International Journal of African Higher Education*, 7(1), 97-112.
- Daka, H., Chipindi, F. M. & Mwale, M. (2020). The Relationship between Assessment Practices and Students' Academic Performances. A Case of Undergraduate Students at the Medical School of the University of Zambia, 2008–2016. *Zambian Journal of Educational Management, Administration and Leadership*, 1(1), 143-156.
- De Remer, M. (2002). *The Adult Student Attrition Decision Process (ASADP) Model*. Doctoral Dissertation, The University of Texas at Austin.
- Department of Education (2011). *Report on Dropout and Learner Retention Strategy to Portfolio Committee on Education*. South Africa: Department of Basic Education.
- Egbo, A. (2013). *Why Students Drop Out of School: A Review of 25 Years of Research*. California Dropout Research Project. Santa Barbra: University of California.

- Frankola, R. (2001). *Attrition from Australia ICT Degrees: Why Women Leave*. Paper Presented at the Proceedings of fourteenth Australian Computing Education Conference, Volume 123.
- Furger, R. (2008). *How to End the Dropout Crisis: Ten Strategies for Student Retention. Create Pathways to Access*. London: University of Sussex.
- Hamaleka, S. B., Daka, H. & Mpande, F. (2020). Strategies to Overcome the Challenges Faced Zambia. *Journal of Humanities Social Sciences and Education*, 7(6), 175-186.
- Hunt, F. (2008). *Dropping out of School: A Cross-country review of literature*. London: University of Sussex.
- James, D. & Chilvers, C. (2001). Academic and non-academic predictors of success on the Nottingham undergraduate medical course 1970-1995. *Medical Education*, 35(11), 1056-1064.
- Kakupa, P., Tembo P., & Daka, H. (2015). Linking Teacher Effectiveness to School Performance: Evidence from Rural Day-Secondary Schools in Western Province of Zambia. *Zambia Journal of Teacher Professional Growth*, 2(2), 17-30.
- Kuhn, T.S. (Ed.). (2006). *The essential tension: Selected studies in scientific tradition and change*. Chicago & London: Chicago University Press.
- Mukuka, L. M. & Daka, H. (2018). Sustainability and Accessibility of Private Schools in Zambia: Experiences of Low-Cost Private Primary Schools in Lusaka's Peri-Urban Areas. *Journal of Positive Psychology and Counselling*, 2(2), 47-77.
- Mukuka, L.M., & Daka, H. (2018). From Theory to Practice: Young People's Views on Medical Circumcision as an Intervention against HIV/AIDS and other STIs in Kaputa and Mporokoso Districts of Zambia. *Journal of Positive Psychology and Counselling*, 1(2), 78-86.
- Mulenga-Hagane, M., Daka, H. & Kanchebele-Sinyangwe, M. (2020). Learning from Change: Benefits and Implications of Distinct Primary and Secondary Schools for Education in Zambia. *Malcolm Moffat Multidisciplinary Journal of Research and Education*, 1(1), 121-136.
- Nakanjama, A., Dembo, G. & Mossier L. (2012). *Dropout Situation in Zambia*. Lusaka: Government Printers.
- Pascarella, E. T. & Terenzini, P. T. (2005). *How College Affects Students* (Vol. 2: A third decade of research). San Francisco: Jossey-Bass.
- Phiri, M., Musonda, A., & Daka, H. (2020). The Effects of Chinamwali Initiation Schools on Girl Child Education. A Case of Selected Public Primary Schools of Katete District, Zambia. *Malcolm Moffat Multidisciplinary Journal of Research and Education*, 1(1), 137-155.
- Reason, R. D. (2009). First things first: Developing Academic Competence in the first year of College. *Research in Higher Education*, 47, 149-175.
- Sarrico, S. C. (2016). Academic Staff Quality in Higher education. *Assessment & Evaluation in Higher Education*, 71(2), 143-162.
- Shurock, B. (2006). Student Satisfaction and Persistence: Factors Vital to Student Retention. *Research in Higher Education Journal*, 6(3), 1-8.
- Smith, M. (2009). Using High-Fidelity Simulation to Educate Nursing Students about end-of-Life care. *Nursing Education Perspectives*, 30(2), 115-120.
- Thomson, N. (1999). *Increasing Student Retention: Effective Program Practices for Reducing the Dropout Rate*. San Francisco: Iossey Bass.
- UNESCO. (2020). *Dropout and Early Unemployment*. Research. Hamburg: UNESCO Institute of Education.
- Wild, L. & Ebbers, L. (2002). Rethinking Student retention in Community Colleges. *Community College Journal of Research and Practice*, 26, 503-519.