



THE STUDY ON THE IMPACT OF LITERACY ON HEALTH AND WEALTH OF INDIVIDUALS AND NATION

SUBTITLE: WHAT ARE ZAMBIAN STUDENTS LACKING IN LEARNING ACCOUNTING AND MATHEMATICS?

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I. ABSTRACT

It is obnoxiously considered that a country that attained independence from the British colony fifty years (52 years after) and some months still go through levels of illiteracy. Literacy impact on Zambia creates health systems as a third world country progressing to attain wealth of individuals and nation. This paper intends to stipulate the importance of education for citizenry, meaning Zambians. The methodology applied will be literature from Ministry of education, Central statistic of Zambia, Curriculum Development Centre of Zambia and None Governmental organizations undertaking or undertook the same study. Literacy has a significant role to play in the health and wealth of an individual and nation at large.

I also intend to discuss the importance of Mathematics and Accountancy in the life of a growing economy. It is vitally important to take note in this paper that, Zambians have struggled with the named subjects in schools due to inconsistency in policy and curriculum change. I will unfold the already collected statics which gives evidence of this argument through quantitative and qualitative gathered data. The Zambian government has outlined strategies and implementation which I will highlight, some for the purpose and justification of this study stating that mathematics and accounting are key subjects but lacks understanding by many pupils and students in Zambia. The paper will depict clear evaluation, monitoring and measuring of this impact on health and wealth in Zambia. It is from this point, further recommendations will be presented. The hypothesis of this study has been tested and confirmed that

literacy on health and wealth of individuals and nation has impact on development of a nation such as Zambia.

Key words: (Literacy, learning, health, wealth, individuals and nation, Accounting and Mathematics, evaluation, strategy, implementation, monitoring and recommendations).

II. INTRODUCTION

The rationale of this study is to indicate that, the only way a country can prosper is through educating of citizens. At this stage, it is imperative to provide the definition of illiteracy. Wikipedia definition of illiteracy is as follows, “Traditionally understood as the ability to read, write and use arithmetic” (wikipedia.org). Furthermore, the UNDP human development report of 1996, defines literacy as “the ability of a person aged 15 and above who can, understand, both read and write a short, simple statement on their everyday life. It is important to take mention of the fact that Zambia has always emphasized the importance of education. “In common with inhabitants of other parts of Africa, the people living in what is today called Zambia had evolved their own system of education long before Europeans penetrated the interior of the continent. Indeed, the security and well-being of any tribal community depended upon the efficacy of the training given to its members from infancy to adulthood” (Mwanakatwe : 1)

A nation such as Zambia has had a strong emphasis on subjects such as English, Mathematics and Sciences. In this paper, my focus will be outlining why mathematics and accountancy (both numerical related subjects) has been a problem for our students and a nation at large. There is need to categorically point out to those characteristics which hampers the interest in our student to understand mathematics and accountancy. The main key here is mathematics. Mathematics is central to all subjects that are numerical related such engineering, accounts and sciences.

III. STATEMENT PROBLEM

“Several studies have found that adult literacy courses and literacy teaching improve self-esteem, personal autonomy, creativity and critical thinking. Given their intrinsic value, these benefits may produce others directly or indirectly related to literacy, as stated by the UNESCO report on Education for All. Such benefits include improved health and increased political participation or social integration” (UNESCO, 2005).

Mathematics and accountancy play a big role in any developing country. Zambia has had some challenges with passing rates of mathematics and finding other subjects such as accountancy, engineering and sciences difficult. A child that has a strong foundation in mathematics, will find it easy to study accounts and other arithmetic related subjects such as engineering and accountancy. Mwanakatwe in his book the growth of

education in Zambia has this to say, “It is true that the skills of reading, writing and mathematical computations as we know them today were not part of traditional education. Nonetheless, the role of traditional education was vital and, in fact, indispensable for the smooth integration of growing children into society. Therefore, to the extent that education instruction made a contribution to the preparation of boys and girls for the life in society, it was in every sense true education “ (2013:1).

It has generally been observed that, the performance of students in mathematics of those attending secondary schools in Zambia continue to remain poor. “According to 2014 examination council of Zambia report, it was observed that Mathematics, science, and Biology only 9.98 percent of candidates obtained a credit or better, while 18.59 percent of candidates obtained passes and 71.72 percent failed the examination”(International Journal of Scientific & Technology Research Volume :5, Issue 08, August 2016:72). The same Journal in the year of its publication stated that, a study conducted by the Southern and Eastern Africa Consortium for Monitoring and Education Quality (SACMEQ) aimed at testing Mathematics and reading achievements in 15 countries.... Zambia was ranked as the worst...” (IBID: 72). We can further state that, poor performance in key subjects such as Mathematics and accountancy will not bring impact on health and wealth creation of individuals and nation, instead the country will continue lagging behind major development. Creation of good health standards and wealth for a nation, is dependent on the levels of education of the citizens. DMI. St. Eugene University was established in Zambia out of the need to contribute in the area of Mathematics, sciences, engineering and business studies (accountancy).

IV. APPROACH UNDERTAKEN TO ADDRESS LACK OF LEARNING IN ACCOUNTING AND MATHEMATICS

The ministry of education has taken highly benchmarks approach to attend to this problem. The document which was released in 1996 entitled, ‘Education Our Future’ highlights some ways of mitigating lack of learning accounting and Mathematics. Let me extract from the document approaches to be taken as this has influenced the shaping up of education system in Zambia. Let me just outline some related points to this topic:

- I. Concentrate efforts on improving achievements in mathematics and science.
- II. Develop holistic programmes around critical technological, agricultural, commercial, and aesthetic areas and facilitate their being offered in selected schools.
- III. First, the majority of schools will continue to offer the current general academic programmes.
- IV. As far as resources permit, these schools will also continue to offer practical and technical subjects on the educational grounds that these constitute a unique and valuable mode of knowledge and experience for the development of worthwhile understanding, qualities and skills.
- V. In accordance with the concerns that have been expressed about mathematics and science, schools offering a general academic education will concentrate efforts on effecting significant improvements in these subjects.

- VI. Moreover, some among them will be identified to specialize more explicitly in mathematics and the sciences, in order to augment the output of trainable individuals needed by higher education and industry and so that they can serve as Centre of excellence that might help to raise the quality of mathematics and science education in other school.
- VII. The difficulties of many pupils with mathematics and science go back to the way they were introduced to these areas in primary school.
- VIII. One aspect, therefore, of a long-term solution to the problem must be suitable interventions at the basic and teacher training levels.
- IX. In the shorter term, however, it is still possible for the schools to provide considerable remediation and establish an adequate foundation for high school work in mathematics and science.
- X. To accomplish this, qualified teachers need to work with pupils from Grade 8 onwards. It is too late trying to lay in Grade 10 a foundation that should have been in place much earlier. This points to the need to strengthen the teaching of mathematics and science at the upper basic level.
- XI. It also highlights the importance, noted above, of providing remedial teaching in these areas at the commencement of Grade 8 (1996:54).
- XII. A fundamental aim of the curriculum for lower and middle basic classes is to enable pupils to read and write clearly, correctly and confidently, in a Zambian language and in English, and to acquire basic numeracy and problem-solving skills. The levels of achievement to be attained should be such that those who leave school are able to function effectively in society, while those who continue in school have an adequate basis for further education (IBID:34).

Another measure that was introduced and implemented was “School Club Zambia: Literacy Development Programme,” (2015 Report). This Development Programme was designed to tackle the low literacy levels in pupils at 3 primary schools in Zambia by giving schools access to effective learning materials and comprehensive teacher training.

Mr. Joel Kamoko who worked for the Teaching Service commission, now PS technical in the ministry of education, after interviewing him being a man that has worked for the ministry in different capacity proposed the following for implementation as we shape the future.

- I. To intensify the programmes for mathematics and accounts related subject at an earlier stage. Children should be introduced to numerical, before producing to mathematics.
- II. Teachers teaching children at the earlier age, should indicate interest in the subject
- III. The Teacher training should emphasize style which will interest children to do mathematics.
- IV. The fight against the attitude or myth that mathematics is tough.
- V. There is need to have specialized teachers at all levels who can teach mathematics.

V. IMPLEMENTATION OF STRATEGIES TO ERADICATE THIS PROBLEM

- (a) The Ministry will promote entrepreneurship education and place particular emphasis on scientific, mathematical and practical skills; and will specifically promote computer science in schools.
- (b) The Ministry of Education will give priority to the improvement of mathematics and science in high schools of all types. To this end it will ensure that:
- (c) All schools which offer general academic programmes will devote more of their resources and time to the teaching of mathematics and science;
- (d) And some schools which offer general academic programmes will specialize more explicitly in the teaching of mathematics and science.
- (e) To introduce more institutions and universities to specialize in the area of mathematics and accounts.
- (f) The change of mathematics curriculum should be in consultation with teacher's qualification.
- (g) Establishing regular parent-teacher meetings to discuss student progress and guide school activity planning;
- (h) Increasing children's access to and retention in primary and secondary schools through such mechanisms as scholarships or improved homeschool transportation;
- (i) Upgrading teachers' skills in conducting action research within classrooms;
- (j) Implementing peer-to-peer and participatory learning programmes;

Promoting life skills development; Zambia Basic Education Syllabi for grades 1 – 7 analyzed some of their outcomes which they also observed as implementations such as to develop mathematical knowledge and skills, communicate mathematical ideas effectively, develop skills in problem solving, develop skills for use in social and commercial mathematics, apply mathematics concepts in their environment, develop interest in mathematical skills for everyday use and to apply mathematical operations in problem solving (2003:76).

VI. RECOMMENDATION ON THIS STUDY

After looking at different study materials, I recommend the following in line with other people's recommendations.

1) MATHEMATICS RESOURCES

It has been strongly observed that material used for mathematics and accounts are not adequate. There is need to stock enough materials for student to use than to share books and sometimes difficult to find recommended books

2) INFRASTRUCTURE DEVELOPMENT

Infrastructure is key in order to create an environment favorable for learning. Some places pupils/student have no desks and material to use. Some pupils write on the ground or floor. This type of learning is not conducive.

3) TEACHING METHODS

Some students spoken to, feel that, some lecturers are very fast. There is need to allow participation of students in class. To move with the learner on the subject without taking it for granted that, they are understanding.

4) RESOURCE DEVELOPMENT CENTRES

The teachers should have well stocked materials in all areas of study in their centres. These centres should have good furniture, internet and sections on major areas of study in schools such as mathematics and sciences.

5) LIBRARIES

All councils should have good stock of books in areas such as mathematics, sciences, and business management.

6) CLUBS FOR YOUNG PEOPLE TO ENGAGE IN ARITHMETICS

Formation of clubs for quiz and other form of competitions in mathematics and sciences should be created. Deserving students should be awarded with something.

VII. EVALUATION AND MEASURING THE IMPACT UNDER STUDY

According to the document already cited namely Education Our Future (MOE: 1996) and Child Friendly School (UNICEF: 2009) outlines the following understanding of assessment and evaluation.

- a. Assessment and Evaluation is a process by which it is determined whether the education system is, in fact, achieving its objectives. It has internal and external aspects.
- b. The internal aspect is concerned with determining whether the curriculum, programmes, methods and materials employed do in fact promote the expected learning and attitudinal outcomes.
- c. It is also concerned with the pupil, essentially by determining his or her standard of performance in school areas. The external aspect relates to evaluation undertaken to determine how effective the school system is in producing graduates of the caliber expected by society.
- d. . Each school will develop a clear schedule of performance-monitoring activities that check pupils' progress.
- e. The Inspectorate will monitor each school's programme of school-based assessment and the use to which it is being put by teachers in improving the quality of teaching and learning.
- f. The Inspectorate, in cooperation with the Examinations Council, will determine how school-based assessment can be better conducted....

VIII. FEEDBACK, SUPERVISING AND MONITORING OF THIS PROJECT

According to Ministry of education and Sport while at the sport event in Kampala, Uganda had this to say: Monitoring and supervision are very critical in supporting performance of teachers to improve delivery of quality education services and the following strategies are presented.

Making monitoring and supervision work plans and implement them timely and fully. Budgets at all levels should sufficiently cater for monitoring and supervision programs. Head teachers should be fully prepared to offer regular monitoring and supervision services to their teachers by discussing and agreeing with them on how best to implement. Timely reports and feedbacks should be agreed upon between the monitors and the teachers and conduct remedial or workshops to address the weaknesses observed during the exercises.

Sensitize the teachers and other stake holders to develop a positive attitude towards monitoring and supervision. Produce and disseminate written information on the advantages of monitoring and supervision schools. Use radio and other media programs to create awareness and appreciation of monitoring and supervision. Because many teachers believe that government is not honoring the promised salary enhancements timely, they are expressing dissatisfaction. It is important that this dissatisfaction be addressed so that the teachers can be effective in and outside the classrooms (October: 2013).

IX. RECOMMENDATION FOR FURTHER RESEARCH ON THIS STUDY

- a) The recommendation is to replicate this same study in other schools.
- b) To continue monitoring and evaluating the results of our pupils and students so as to come up with tools to mitigate the problem.
- c) To have more specialized teachers in mathematics who can be assigned from grade 1 – 12. To have teachers of mathematics with Master degree teaching grade 1 up to grade 12. By the fact that you have a high degree does not mean you cannot teach lower grades/upper classes.
- d) All mathematics teachers should be evaluated and monitored based on the results they are producing.
- e) The ministry of education to continue investing more money in the area of mathematics for the on-going training of teachers.
- f) To look for bursaries to train teachers and students in the area of mathematics and science/accountancy.
- g) Equip the teachers with understanding of a new syllabus. The change of syllabus has to involve the teachers teaching the subjects.

X. CONCLUSION

The main objective of this research is to investigate what students are lacking in learning Mathematics and Accountancy in schools. Attributed to many literatures is the issue of sciences as well. It is evident to take note that, a number of schools are lacking good materials for mathematics and accounting. Also, the style or methodology used for teaching has to be evaluated. In many cases, some schools are lacking teachers to teach these subjects. This has mainly got large impact on rural areas where the number of teachers is low.

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