

The Practice and Challenges of School Based Continuous Professional Development (SBCPD) Through Lesson Study in Zambia Secondary Schools

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ABSTRACT--- *The intent of this article is to reflect on SBCPD in which I took part for more than five years, as to shed some light on practices and challenges of the program based on lived experiences and literature review on the area. The quality of education in Zambia has been demonstrated by low student achievement in national and international assessments. This is partly due to poor teacher performance in the classroom. It has been observed that there are a lot of under qualified teachers in high school because of the severe shortage. The government introduced Continuous Professional Development programs but still could not cater for everyone. However, the introduction of School Based Continuous Professional Development through Lesson Study has brought in noticeable change among teachers. It has been well received and teacher participation is very good, even though there is lack of commitment from the education standards officers and some head teachers for it to continue facilitate learning and updating -teacher's performance as to cope up with dynamics of teaching and learning profession.*

Keywords--- CPD, SBCPD, Lesson Study

1. INTRODUCTION

1.1. Background

Zambia is located in the sub-Saharan Africa, consist an area of 752,000 square kilometres, bordering from East Malawi, from South Zimbabwe, from North DRC and Tanzania and from West Angola. Most part of the country is a high plateau and mountain ridges which is mostly broken by hills, crystalline rocks which are thought as stores of the mineral resources of the country (Hampway and Mweemba, 2012)¹.

According to the (2010)² population and housing census, Zambia's population was 13,092,666 with the growth rate of 2.8 percent per annum of which 49.3 percent were male and 50.7 percent were female. The distribution further shows that 60.5 percent were in rural areas while 39.5 percent were in urban areas.

1.2. Education

According to the Education Statistical Bulletin (2009)³ Zambia has a total of 8783 schools of which 8111 are basic schools and 672 are high schools. There were 3,617,160 pupils from grade 1 to 12, of which 1,846,946 were males and 1,770,215 were females. A total of 3,352,365 pupils were attending basic education while 364,795 were in high school (grades 10-12). The education system in Zambia consists of 7 years (grade 1-7) of primary schooling and 5 years (grade 8-12) of secondary schooling before students can enter university, college, or other institutions of higher learning (MOE, 1992)⁵. At the end of grade 7 and grade 9 pupils write selection examinations to grade 8 and grade 10 respectively. At the end of grade 12 pupils sit for School Certificate Examinations. In recognition of its economic and social value, the government have made a lot of noticeable achievements to improve quality of education at all levels.

Education in general, quality education in particular, is a means for enhancing the well-being and quality of life for the entire society. But in Zambia, the status of quality of education has been demonstrated by low student achievement in national and international assessment studies in Zambia. Therefore the educational system must respond to the needs of both the individual and of society. According to Ministry of Education (2007)⁶ the quality of education in Zambia has been compromised by various factors. The overloaded and compartmentalised curriculum, coupled with dismal pupil-teacher contact time and lack of sufficient educational materials, learning achievement remains at low levels. According to SACMAQ (2000)⁷ tests in reading and mathematics, Zambia ranked the second low among the 14 participating

countries. One of the contributing factors of the poor quality of performance of pupils is linked to teacher performance in classrooms. Having shed some light on the status of quality of education and education system now I turn my focus on teacher's professional development efforts made in Zambia in which I take part actively from 2007 to August 2015.

2. CONTINUOUS PROFESSIONAL DEVELOPMENT (CPD)

According to Gray (2005)⁸, CPD is a lifelong learning process, embraces the idea that individuals aim for continuous improvement in their professional skills and knowledge, beyond the basic training initially required to carry out the job. Due to low quality of education in Zambia especially in mathematics, the department I belong to, and science were critical that, the Ministry embarked on improving teacher's professional qualifications and methodological competence. According to Mubanga, (2012)⁹ before 1998, there were two types of professional development programs: In-Service education and training programmes, and a long term up-grading for school teachers. These were offered by the National In-service Training College (NISTCOL), the Zambia Institute of Special Education (ZAMISE) and the University of Zambia.

Short term In-Service Training (INSET) or Continuing Professional Development (CPD) consisting of capacity building programmes mostly school based or held in Teachers' Resource Centres. The objectives were, improving class room practice of teachers. To support this effort, Action to improve English mathematics and Science (AIEMS) project was started in 1994 offered in-service training to all teachers in Mathematics, English and Science. At the end of (AIEMS) in 1998 the Ministry of education introduced the School Program of In-service for the Term (SPRINT). This was found necessary to improve English, Mathematics and Science (AIEMS) subjects. Through SPRINT system teachers were provided with opportunity to participate in In-service education as most teachers did not benefit in the long term up-grading or professional courses. Teachers who used to go for long term upgrade used to leave one to attend to the pupils. Apart from long term courses other Continuous Professional Development activities included conferences, workshops, training, watching and talking with colleagues and learning just to mention a few. The In-service training also includes Continuous Professional Development (CPD) which targets on improving teacher performance.

2.1. School-Based Continuous Professional Development (SBCPD)

According to Kochhar (1985)¹⁰, teaching can be defined as an art, and is fundamentally a process of human interaction. In spite of the availability of several materials that could be provided for teaching and learning, it would still call for a teacher who is skilled in teaching. An effective teacher should have up-to-date instructional skills so as to help the learners understand concepts. Teachers are the guiders and facilitators, not just transfers of knowledge. For teachers to continue improving their teaching skills and cope up with the new way of thinking and doing the art they need a system of lifelong learning, Continuous Professional Development (CPD). This is in agreement with Ewnetu (2011)¹¹ that with the changing educational reforms new ways of instructional practice demand continuous improvement and updating of teachers. Hence, Ministry of Education Policy document 'Educating Our Future', acknowledges the two pillars on which the professional competence of teachers rests: initial training and on-going in-career professional and personal development (MOE 1996)¹².

Before 2006 Continuous Professional Development was mainly done in districts and in zones as cluster meetings. The attendance was discouraging as it was mostly done during holidays when other teachers were out on holidays. Although holidays were chosen so that the pupils do not miss lessons but it was not so beneficial to all the teachers. Therefore in 2006 a program involving Continuous Professional Development was started in Central Province in Kabwe district as a pilot project. This program was started with the aim of improving teaching and learning activities in classroom through lesson study by strengthening CPD activities of all subjects learning areas of school and college level (Ministry of Education, 2007)⁶.

To help the teachers practice the School Based CPD the Ministry of Education came up with a teaching skills book called SBCPD, through 'Lesson Study'. The Teaching Skill Book for the SBCPD was produced based on the experiences of conducting lesson study presentations (Ministry of Education, 2009)¹³.

2.2. Teachers In High School

The following table shows the total number of teachers teaching in High Schools according to certification.

Qualifications	Total	% of Total
Pre-School Teacher's Cert	29	0.4 %
Primary Teacher's Cert	794	9.8 %
Certificate in Special Ed	60	0.7 %
Diploma (Basic or Secondary)	5,301	65 %
Special Ed. Diploma	84	1.0 %
Advanced Diploma	425	5.2 %
Education Bachelor's Degree	873	10.7 %
Other Bachelor's Degree	73	0.9 %
Master's Degree	103	1.3 %
Special Education Degree	7	0.1%
Untrained	30	0.4 %
Unknown	365	4.5 %
Total	8, 143	100 %

Source: (Zambia Education Statistical Bulletin 2004)¹⁴

The required qualification for teachers in high school (grades 10-12) is an education degree and for junior secondary school (grades 8-9) is an education diploma. From the table above it is clear that teachers with diploma qualifications have taken over the teaching in high school with 65% compared to 10.7% of the required education bachelor's degree holders. It is shocking that there are also untrained teachers at 0.4% teaching in high schools and teachers with very low qualifications such as pre-school certificate holders at 0.4% as well. Therefore there was dire need for these teachers to learn from others on how best they can teach in high school to enhance classroom performance.

3. LESSON STUDY

White and Southwell (2003)¹⁵, states that lesson study as a small group of teachers who meet regularly to plan, design, implement, evaluate and redefine lessons for a unit of work they have selected. On the other hand, Stepanek (2001)¹⁶, provides an excellent overview of lesson study, describing the lesson process as flowing through the following phases; focusing the lesson, planning the lesson, teaching the lesson, reflecting and evaluating, revising the lesson, teaching the revised lesson, reflecting and evaluating. Lesson study was introduced to shift chalk-and-talk lessons, which mainly aim at the transmission of knowledge, to participatory lessons, which aim at the development of children's thinking and activities (Takuya Baba and Kazuyoshi Nakai, 2012)¹⁷. Behind this movement, there is an education policy which targets development of human resources with various abilities of not only knowledge and understanding but also of interests, attitudes, thinking abilities and skills. SBCPD in secondary schools in Zambia became compulsory for all teachers in Government schools. It takes place within schools and in different departments with individual subjects. Each school has a CPD co-ordinator to facilitate the CPD activities. This is called lesson study and it is part of the school time table.

3.1. Lesson Study Stages

According to the Ministry of Education (2007)⁶ there are eight stages of lesson study. These are; defining problems or challenges; collaboratively planning the lesson; implementing the demo-lesson; discuss lesson and reflect on its effect; revise the lesson; teach the revised lesson; discuss and reflect again; and lastly reflections compiled and shared. I briefly discuss all steps of lesson study with the following paragraphs.

The first stage involves evaluation of the topics in the syllabi and other activities related to teaching and learning. Teachers come together to look at the challenging topics to teach or difficult topics to understand by either both parties of the teacher and the learner or just one party. They discuss and write down all these challenges and then chose a common topic which can be studied. This is the topic which is supposed to be taught to the pupils within that term according to the schemes of work.

The second stage involves the planning of the lesson as subject teachers for that particular topic. All teachers in the department gather to look at the appropriate teaching materials needed for the teaching of the lesson chosen they prepare a lesson plan and own the lesson as a group.

The third stage involves the teaching of a demonstration lesson to a selected class. With proper agreement, a teacher is chosen to teach the lesson while others observe. The observers concentrate on the lesson and not on the teacher. The

main parts of the lesson they focus on are the objectives, teaching methods, activities, use of teaching aids and involvement of the learners. This is done using an evaluation sheet which is provided. In case of wrong presentation by the teacher, other teachers are at liberty to come in for correction or clarification. The Education Standards Officers, the head teacher or deputy head teacher and the school CPD coordinator are expected to be among the other teachers to observe the lesson.

The fourth stage involves the evaluation of the lesson demonstration. All those who participated in the lesson observation will gather to give their views on the lesson. The first person to talk about the lesson is the person who taught the lesson. Others then also will give their suggestions on how the lesson can be improved. These suggestions are compiled for use in the next lesson.

The fifth stage involves the planning of the lesson with changes according to the compiled suggestions. The suitable teaching materials are put in place and better activities are suggested to make sure that the lesson is improved. All teachers still have to own the lesson.

The sixth stage involves the actual teaching of the final lesson on the topic. The same teacher is asked to teach the same lesson to a different selected class depending on the schemes of work using the improved lesson plan. Other teachers and educators will still be required to sit in class and observe the lesson. During lesson evaluation other teachers usually take part in checking and marking the pupils' books. This helps them to check whether the objectives have been met or not.

The seventh stage involves the evaluation of the final lesson. All teachers give their views on the strengths and weaknesses of the lesson. New suggestions are brought out and a report is compiled. The eighth stage is about the reflections compiled and shared. At this stage final reports are compiled and submitted to the school CPD coordinator which also submits them to the deputy head teacher. The reports are given to relevant authorities for publications.

3.2. Challenges of Lesson Study

- ✓ CPD coordinators and Heads of department are supposed to be trained on how to conduct SBCPD. It has been observed that some of these teachers are not trained, hence not performing their duties as expected.
- ✓ It is a requirement for each school to put lesson study on the school time table according to departments, but most schools have been operating without proper planning of lesson study meetings.
- ✓ For teachers to be committed to having lesson study, it starts with commitment from the head teachers, but most head teachers have no interest and know little about its benefits to the teachers, hence the studies are poorly done.
- ✓ With the Ministry's recommendation that the Education Standards Officers, head teachers and school CPD coordinators be part of the observers during lesson presentations, I have not seen any of them observe the lessons. Lack of expertise in this regards to some extent affect its quality.

4. CONCLUSION

According to Burghes, (2009)¹⁸, Lesson study in general improves the awareness of what good teaching is. It serves as an eye opener for teachers. It develops reflective, critical analysis of teachers' own teaching and that of others. It increases knowledge of the subject matter and raises awareness of different pedagogical strategies and develops their ability to evaluate these methods in a constructive way. It encourages all teachers in the department to collaborate in supporting and learning from others and to regard problems as difficulties to be overcome and not barriers to development. It develops personal skills in being able to give and take constructive criticism without causing or taking offence, rather seeing it as means to professional learning.

My lived experiences and observation comply with the above conclusion that lesson study has positive impact on teaching and learning practices. Also the teaching skills books for lesson study have proven to be well-received and successfully utilized schools. Their continued utilization and roll out to new areas provide additional positive impact I am convinced.

According to Japan International Cooperation Agency (2007 as cited in Takuya and Nakai 2012)¹⁶ report of evaluation on School Based CPD in Zambia, School Based CPD has helped the teachers to prepare lessons plans for the lessons to be taught which was not happening in the past. The process of monitoring and evaluation of lessons has brought in openness among teachers which has led to promotion of team work and synergy among teachers. Teachers are able to consult one another without focusing on one another's weaknesses. It has been observed that there is so much willingness and proactiveness towards lesson study. It is evident that teachers are learning a lot from these small groups.

As to my observation it is not easy to tell the outcome of School Based CPD on the side of the pupils as at now in terms of performance during national examinations, but it has been observed that when a class is used for lesson study pupils tend to concentrate more and they feel honoured to have all teachers for that subject including the head teacher or deputy head in their classroom. The pupils are motivated; this is seen through their participation in trying to answer questions and taking keen interest in the activities given.

The SBCPD in Zambia has its strength in the school administrators and supervisors; these are the head teacher, deputy head teacher and the head of department. Without supervision it is difficult to have effective lesson studies, this is in agreement with Ewnetu (2011)¹¹ who states that the effectiveness of CPD is highly dependent on the support and close supervision of administrators. Head teachers who want to follow government regulations and be able to change the nature of teaching in their schools always take his program seriously. But others do it just because it is a government regulation. Some schools already stopped doing it due to lack of focus and interest. Where it is serious, lesson study appears even on the school time table as it is difficult to arrange for meetings every week without disturbing learning time for pupils if not planned for in advance.

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