Teacher Collaboration in Curriculum Design Teams: Prospects and Challenges in the Zambian Education System

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Abstract

Curriculum development is a task which must not be carried out by an individual or a group of curriculum specialists only since the process demands for collaborative efforts from various key stakeholders such as; teachers, teacher educators, Non-Governmental Organisations, religious leaders, learners, parents and community leaders. Based on research and the theoretical thinking of curriculum development across the globe and in Zambia inclusive, the authors in this paper sought to explore prospects and challenges of teacher collaboration in curriculum design teams in the Zambian education system. The reviewed literature especially from the Zambian perspective indicated that teachers were dissatisfied with the existing practice of curriculum development which insignificantly involved them. In addition, it was established that in most cases, the teacher education curriculum offered in teacher education institutions was not appropriately aligned with the curriculum offered in the school. This led to a number of consequences in as far as curriculum implementation was concerned because teachers who are the implementers of the curriculum were left in a dissonant condition. Consequently, most teachers' encountered challenges when implementing the curriculum in schools given the fact that they were trained on a teacher education curriculum that was not aligned to the school curriculum. Additionally, upon graduation they were to implement a school curriculum whose development they did not participate in. It was thus recommended that the Ministry of General Education through Curriculum Development Centre (CDC) should broaden the scope of teacher involvement in curriculum development teams through extensive research and adequate communication channels. There was also need for colleges and universities to review their curriculum so that the teacher education curriculum was appropriately aligned to what teachers were to later on teach in schools.

Keywords: Teacher Education, Curriculum Design, Curriculum Implementation, Teacher Involvement.

1.0 Introduction

Ogula (1998) explained that designing a curriculum is one of the most important work of a curriculum specialist. Despite it being the work of curriculum specialists, it is worth stating from the outset that curriculum design and development as a task requires not only the expertise of curriculum specialists but also the full input of various stakeholders such as teachers, teacher educators, Non-Governmental Organisations, religious leaders, learners' parents and community leaders (Ornstein & Hunkins, 2018). Bishop (1985) contended that teacher involvement in educational reform and innovation is crucial. He further argued that unless teachers are available and willing to participate in curriculum development there is no future for it. This means that the success and the failure of any curriculum design begins and ends with the teacher. This points to the relevance of teacher collaboration in curriculum design teams.

Teachers' world over play four critical roles in as far as the development of the curriculum is concerned. According to Print (1993) teachers are curriculum developers, curriculum implementers, curriculum adapters/modifiers as well as researchers. They are considered to be essential pillars in the teaching and learning process as they are the key stakeholders that give life to the written curricula materials through guiding, facilitating and directing various learning activities to the learners. In view of the significance of the role that teachers play as implementers, Mulenga and Lubasi (2019) posted that 'effective curriculum implementation is the one that reflects what the learner eventually takes away from an educational experience'. The teacher is able to do this task because he/she is a mediator between the curriculum and the learners and it is the teacher who understands individualised needs of the learners (Ahmed, 2018). Despite this being very clear in most curricula documents, it is not clear enough on the extent to which teachers are collaboratively involved in matters pertaining to curriculum designing teams.

If teachers are to do a commendable job in all the four roles as explained by Print (1993) including the designing of the curriculum, it is expected that teachers need to be equipped with relevant competencies during their teacher education programme (Changwe, 2017; Jadhav & Patankar, 2013). It could be as a result of this fact that Bishop (1985) argued that the quality of the teacher is as good as the quality of the teacher education curriculum. It is indeed the teacher education programme that is expected to provide a platform to all student teachers to enable them acquire relevant knowledge, skills and to develop in them positive attitudes, values and skills that would make them better curriculum developers, implementers, adapters as well as curriculum modifiers. If such a curriculum does exist, then it would be inevitable for the teacher education curriculum at various levels to produce teachers who would be better placed in performing critical roles such as: curriculum planners, curriculum designers, curriculum managers, curriculum evaluators, researchers as well as administrators.

Jadhav & Patankar (2013) asserted that if teachers were to be collaboratively involved in efficient curriculum design teams, it would be imperative for them to have a thorough understanding of design factors such as: schools, educational technology, universal vocational, social reconstruction, analysis of social needs, translating the needs into courses/subjects or learning objectives, writing of various subject matter, specification of the required materials for each subject matter as well as syllabus formulation. One question that would then demand a quick response is that when and where could the teacher acquire such design skills if they have no knowledge of curriculum studies and if their teacher education curricula does not expose them to such relevant experiences? It is because of this gap in knowledge that enabled the authors of this paper to interrogate the effectiveness of the teacher education curricula in preparing teachers who can add value to the curriculum development process as well as to establish the extent to which teachers are involved in collaborative curriculum design teams.

2.0 Theoretical Underpinning

Assertions raised in this paper were invigorated by the contentbased and competency-based teacher education curriculum theoretical approaches propounded by Haberman and Stinnert (1973) as well as the idea behind the curriculum development and diffusion theory by Lawton (1973). The authors found the theories to be appropriate to this discourse because they all had to put the teacher and the curriculum at the centre stage. According to Chishimba (2001) a content-based teacher education curriculum is the one that follows a common curriculum which is grounded on the traditionally accepted subject divisions which does not take into consideration the link that exists between theory and practice in teaching. On the other hand, Bowles (2012) considered a curriculum that has competencies to be acquired with explicit corresponding criteria for assessing which is arrived at through situation analysis to be a competency-based curriculum. No wonder Banja and Mulenga (2019:175) explained that;

the rationale for the Competency Based Teacher Education curriculum design forces teacher educators to take a hard look at what their curriculum is designed to accomplish and to review carefully the way they go about accomplishing it. This makes the teacher education curriculum 'fit for the purpose' which is a definition of quality teacher education curriculum.

Haberman and Stinnert (1973) explained that administrators and curriculum specialists were of the view that the products of the content-based teacher education curriculum are not adequately prepared for curricula roles while the products of the competencybased teacher education curriculum are likely to effectively perform curricula roles. Besides, Lawton (1973) also noted that curriculum development and diffusion theory emphasise that for any curriculum development model to be practical, the teacher has to be at the centre of the process irrespective of their limitations. Based on these grounds, the authors found these theories to be very supportive and apt in making various arguments pertaining to teacher collaboration in curriculum design teams. At this point it would be vital to make a clear distinction between the two terms that have been used in literature to describe the process of producing a teacher, these are teacher education and teacher training.

3.0 Teacher Education

Teacher education and teacher training are two terminologies that are interchangeably used by various scholars to mean one and the same thing. Mulenga (2015) tried to differentiate the two perceptions by arguing that teacher training involves teaching specific skills to student teachers for the short period of time while teacher education on the other hand takes a reasonable period of time and encompasses several skills, knowledge, values and attitudes that make student teachers effective and competent when they graduate as teachers. According to NCTE (1998) teacher education is a programme that is related to the development of teacher proficiency and competency that would enable and empower the teacher to meet the requirements of the profession and face the challenges therein. The basic principle behind this fact is that teachers are expected to undergo teacher education and not teacher training because they are being prepared to be curriculum developers, implementers, adapters as well as researchers. All these roles involve either directly or indirectly dealing with teaching and developing learners who are complex and have the intellect to view the world around them according to their experiences. It could be because of what has been highlighted that led Mulenga (2015) to state that teachers who are prepared through teacher education are expected to master their subject matter as intellectuals and professionals. It was as a result of this view that he considered teacher education as a concept that describes an all-round development of a person who is an intellectual, skilled and reflective practitioner of the teaching and learning process.

All the three main Zambian educational policy documents have not remained inaudible on teacher education because if any country is not to lag behind in terms of development, the only thing that such a country is to do is to improve and invest in the quality of its education system were teachers are key drivers. One of such Zambia's education policy documents is the 1977 *Educational Reform.* It is explained in the document that:

The teacher education curriculum should concentrate on enabling trainee teachers to understand the objectives of the school curricula and the underlying principle of learning in the choice and use of teaching materials (MoE, 1977: 67).

Based on the expected quality of teachers graduating from colleges and universities, MoE (1992: 97) through the education policy document *focus on learning* observed that;

The quality of Zambian's schools reflected the quality of the teachers manning these schools, while the quality of the teachers reflects the effectiveness of the institutions that train them. The focus of concern in an effective teacher education institution is on transforming its students into competent and committed teachers. The programme for teacher education, therefore, must be kept under constant review to ensure that it responds to the real needs of Zambian schools.

In addition, the 1996 education policy document *Educating Our Future* (MoE, 1996) also emphasised that teacher education curriculum needed to accommodate essential competencies that enabled the teacher to master the materials to be taught and a skill in communicating that material to the learners. Similarly, Avong (2013) and Okafor and Anaduaka (2013) revealed that teachers' who are ill-prepared contribute to ineffective classroom delivery of various concepts which eventually affects learners' learning. It is clear that all the three education policy documents point to the relevance of aligning the teacher education curricula to the school curricula for the student teachers to become proficient practitioners when they join the teaching profession. If teachers were to effectively collaborate in curriculum development they need to have a good head start through their teacher education programmes.

4.0 Teachers' Readiness to assume Curricula Roles

As earlier mentioned, one of the curricula roles of the teacher is to interpret and implement the curriculum of a specified subject matter. Thus, this role could be appropriately done by the teacher who has undergone a teacher education programme that prepared him or her to be fit for the purpose. Ball et al., (2003) and Chapman (2005) asserted that there is a strong relationship between teachers' subject matter knowledge and the ability to teach well in classrooms. The appropriate teachers' subject matter knowledge that the scholars referred to here can only be found in the teacher education curriculum that has been aligned to the school curricula. This assertion calls for critical examination of teacher education programmes if quality education is to be provided in schools for the common good of the learner and the nation at large.

Various studies that have been done at the University level in Zambia pertaining to teacher education, for instance, a study done by Banja (2012a, & b), Chabatama (2012, Mulenga (2015) as well as Changwe & Mulenga (2018) have all shown that the quality of teachers that had been produced at university level under teacher education curricula at the time lacked the appropriate knowledge and skills necessary for effective classroom teaching. The reason could have been that a lot of time was spent by teacher educators on very advanced topics and concepts that had little or no relevance to what student teachers were expected to do or teach upon graduation. The scholars were very much aware of the fact that teachers were not expected to be at par with the learners they would find in schools by providing student teachers with the exact knowledge and skills which is offered at secondary schools. It is worthwhile stating that for teachers to effectively perform their roles in schools, the teacher education curriculum should not in totality deny student teachers an opportunity to learn and understand in great details the concepts taught in schools which they did not understand as pupils but to learn them at the level where they are expected to be critical, analytical and justify why certain concepts in various subject matters are the way they are. This would help teachers to teach various concepts with full conceptual understanding rather than teaching and learning by rote. It might be a serious problem for the teacher who does not understand his subject matter very well to collaboratively get engaged with curriculum design teams later on.

Ogula (1998) explained that an effective teacher education curriculum would appropriately prepare student teachers on: what to teach, who to teach, which teaching and learning aids to be used, how to teach and why teaching what is intended to be taught. It could be such kind of thinking that can bring about rightful competencies in student teachers that would eventually make them effective contributors in matters of curriculum design and development.

Most of the studies that have been done not only in Zambia so far have shown that student teachers including graduates had gaps in their content knowledge in knowing how to apply and teach the secondary school especially upon their graduation (Mansfield, 1985; Ball & Wilson, 1990; Monk, 1994 & Bryan, 1999). Such teacher would later on gain their ground but would struggle a lot at the beginning of their careers. These findings have been supported by scholars who argued though from a general perspective that most teachers lacked either adequate background knowledge in the subjects they were supposed to teach or enough skills that were needed for them to teach effectively which eventually affected the teaching and the learning process (Shulman, 1987; National Research Council, 1996 and 1997; Darling-Hammond, 2000; Roofe & Miller, 2013). The scholars' assertions may lead to question the credibility of the contributions that would come from such products of the teacher education curricula when involved in collaborative curriculum design teams. Besides, Hurrel (2013) argued that if society requires effective learning, then effective teaching is necessary and inevitable. It is worth noting that if there is an appropriate curriculum in teacher education, then there could be a likelihood of having teachers who effectively understands their curricula roles in various societies. Similarly, the Masters (2009) report on the 2008 Queensland NAPLAN performance [Ministerial Council on Education, Employment, Training and Youths Affairs (MCEETYA), 2008: 4] revealed that;

Highly effective teachers have a deep understanding of the subjects they teach. These teachers have studied the content they teach in considerably greater depth than the level at which they currently teach and they have high levels of confidence in the subjects they teach. Their deep content knowledge allows them to focus on teaching underlying methods, concepts, principles and big ideas in a subject rather than on factual and procedural knowledge alone.

Furthermore, based on teachers of history graduating from Zambian Universities, Chabatama (2012: 14) asserted that "there seems to be no link between knowledge and skills the graduates from Universities go with and the school syllabuses." This clearly shows that there is no point in teacher education programmes to graduate thousands of teachers who have no knowledge in their subject area of specialisation as well as in their curricula roles. In this line of thought, Goma (1984) offered a caution;

If the university is to make meaningful contributions to the development of our country, it cannot do so from a position of mediocrity. If the training of its graduates is poor in quality, their contribution to society will be inferior and counterproductive. It is therefore essential to demand excellence in the performance of both the staff and the students of the university...to establish an intellectual and actual strength... to stand apart from sheer utilitarianism (Goma, 1984: 71).

One of the areas that may help to improve the quality of teacher education is to conduct situation analysis or job analysis prior to the development of the programme. This means that before designing any educational curricula for teachers, it is important to critically analyse the school syllabi so that there is a good linkage between what student teachers are expected to be taught in tertiary institutions of learning and their day to day curricula roles in schools. In line with this view, Mulenga & Luangala (2015) contended that job analysis is the first step to be done if the curriculum to be designed is to be of relevancy to the society for it is a process that unveils the needed knowledge, skills and responsibilities that future teachers need for their effective classroom teaching. Although Artique et al., (2001) argued that due time constraints, it is difficult for the teacher education curriculum to focus on everything that a teacher may require but some aspects can be learnt during the actual practice of teaching, it is valuable to provide teachers with a good foundation on key curricula roles to prevent them from being alien in their profession.

4.0 Prospects of Teacher Involvement in Curriculum Design Teams

A good curriculum requires careful planning and development and it is worthless and ineffectual if teachers are not alert and receptive to what is required of them and if they cannot see how the innovation can be successfully applied in their own classrooms (Marsh & Willis, 1998). Involvement of teachers in educational reform and innovation is crucial if educational programmes are to be effectively implemented at both national, regional and school levels (Mulenga & Mwanza, 2019). Teachers' understanding of the principles underlying reform strategies play a significant role in the degree of implementation of an innovation because teachers with a low degree of understanding may generate a low degree of implementation (Kirgkoz, 2008b). It is reported that teachers often show resistance and lack of commitment to the implementation of curriculum reform precisely because they are seldom involved in the development or in establishing how best to implement them (Oloruntegbe, 2001). Teacher involvement in the conceptual and development stages of the reforms will therefore facilitate their understanding of the crux of the new curriculum and its necessity as well as the expected end results

(Bantwini, 2010). This entails that teachers' non-involvement in the development of the curriculum may result in a sense of lack of ownership, which may consequently affect the implementation of the curriculum reform. In recognising the significant role played by teachers in the success of curriculum implementation, Kennedy (1996:87) emphasised that;

Teachers can be a powerful positive force for change but only if they are given the resources and support which will enable them to carry out implementation effectively otherwise the change is more likely to cause stress and dissatisfaction with change remaining as a pilot with certain schools rather than creating renewed national system.

The teacher is required to have broad knowledge and understanding of educational views, knowledge of learners, a positive teaching attitude and educational relationships and also knowledge and expertise in respect to both general curriculum studies and a particular subject. This can only be actualised if the teacher education curriculum is appropriately aligned with the curriculum the teacher is expected to implement thereby equipping the teacher with the necessary expertise to effectively participate in the entire curriculum process. According to Carl (2002), Connely & Clandinin (1986) and McDonald (2003), teachers are to be actively involved in the design of the new curricula and are expected to have the capacity to interpret, criticise and implement current curriculum innovations. It is generally accepted that the success or failure of any curriculum depends on the attitude, skills and knowledge of teachers (Mwanza, 2017; Dori, Tal & Peled, 2002 and Taba, 1962).

Brain, Reid & Boyes (2006) agreed that the success of any education policy depends on how the practitioners, namely teachers accept the mandated policy and adopt the desired practices. Teachers' openness and willingness to accept changes or their resistance to government policy could affect implementation process and eventually determine the success or failure of the new policy. Knowing how teachers perceive a curricular reform and the attitudes they hold towards it is important because their perceptions and attitudes will govern the kind of behaviour that will be cultivated in real classroom activities (Carless, 1998). While curriculum specialists, administrators and outside educational companies spend countless hours developing the curriculum, it is the teachers who should know best what the curriculum should look like. After all, they work directly with learners who are meant to benefit from the curriculum. In order to create a worthwhile curriculum, teachers must play an integral role in every step of the process. This requires good teacher empowerment from the appropriately aligned teacher education curriculum to enable teachers implement the curriculum in their own classroom sticking to the plan that has taken so much time, careful planning and effort to develop.

On the basis of the preceding explanation, it is important to note that the teachers' role should not only be seen when it comes to curriculum implementation, it should be seen from the very first stage of curriculum planning and design because they are the ones who know the needs of communities they serve. Based on that, their input in the curriculum development process is likely to result into a relevant curriculum that may easily respond to the needs of society. It is evident from literature that the development of any nation largely depends on the right calibre of teachers because the majority members of any nation will pass through the moulding hands of the teacher. This implies that whatever levels of development a particular nation passes through will partly be a true reflection of the calibre of the teacher (Okeke, 2004). Teachers therefore are nation builders. It is thus imperative that any curriculum reforms should largely be influenced through decisions by teachers in the classroom because they know the local situations and local dynamics. Teachers at the classroom level know their learners' needs better than others involved in the curriculum development process. Teachers are key players of curriculum implementation in the life of the school and so it is crucial that they are fully involved in any curriculum development for effective curriculum implementation to be realised.

5.0 Collaborative Root Cause Challenges

Research indicate that generally, a large number of teachers encounter challenges in implementing the curriculum developed without their involvement in the development process and Zambia is not an exception (Mwanza, 2017). It has been noted that most challenges that secondary school teachers face in Zambia when implementing the curriculum are as a result of lack of wide consultations with the teachers since they are not adequately involved in the development of the curriculum. In fact, Mulenga and Mwanza (2019:38) mentioned that;

Teachers know what to teach and how they can contribute to the improvement of the curriculum development processes in Zambia but the system seems to ignore them and only thinks of them at implementation stage. Thus teachers feel that their school and classroom experiences, skills and knowledge are underutilised.

In addition, Batwini (2010) added that the repeated failure of curriculum reform to achieve the desired outcomes was because curriculum developers overlooked the social issues that surrounded teachers, schools or districts. Warters and Vilches (2008) supported this idea that classroom level implementation had been difficult to achieve due to among others, lack of professional support and instructional materials.

Lack of resources was one of the prominent challenges that teachers encountered when implementing the developed curriculum. For instance, Carless (1999) and O'Daniel (2005) rightly noted that lack of resources and insufficient curriculum time, expenses for training and lack of appropriate materials are some of the other factors that made curriculum seldom implemented as intended. In addition, Carl (2009) observed that teachers faced tremendous challenges several of which were related to curriculum. The challenges manifested themselves at various levels and in various areas ranging from the national level to within the classroom level. This scenario becomes evident especially when teachers were absent to answer the very significant curriculum questions in the process of curriculum development. In line with this, Eshiwani (1993) explained that the objectives of any educational system can be achieved mainly through very pertinent curriculum questions that require the teachers themselves to answer rather than the teachers having the questions answered for them by detailed syllabi, study guides, examinations boards, inspectors and other ways employed by central bodies that develop the curriculum. While lack of teaching and learning resources are a big factor in teachers implementing a curriculum in Zambia, the few resources such as textbooks that are provided are also produced without their involvement. For instance, Sianga and Mulenga (2019) found out that teachers of Social Studies were completely side lined in the development of these important textbooks. It is for this reason they stated that;

Education is not a field for politics but intellectualisation and clear thinking that are based on workable theory and practice. Teacher involvement is fundamental in the development of quality textbooks. Teachers are qualified and interact with the curriculum and learners' day in and day out and thus they are in a better position to write good textbooks for learners. Teachers know what can work and what cannot work well for learners. However, in the Zambian situation, teachers seem to be marginalised to the classrooms (Sianga and Mulenga 2019:107). Introduction of completely new subjects without qualified teachers was another noted challenge faced during the implementation of the curriculum. In Zambia for instance, in the 2013 revised competency-based curriculum, computer studies was introduced as a compulsory subject for primary and junior secondary level and yet they were no trained teachers to teach the subject. Masumba and Mulenga (2019:99) actually confirmed this in their study that;

... the introduction of computer studies was done without having prepared teachers to teach the subject. Although some teachers were teaching computer studies to learners based on their interest for the subject, effective teaching cannot be based on interest alone but mostly on how one has been adequately prepared to teach the subject.

In relation to this, Sherin, (2004) argued that curriculum change implies teacher change. If teachers were not empowered to effectively implement the new curriculum, the investment of time and resources in developing a new curriculum package can be a waste. This is another receipt for lack of effective involvement of teachers in curriculum development. If the education system does not have educated teachers for a particular subject area such as computer studies, then its development is likely to be done by people who have no educational ideas of the subject. This is likely to have adverse effects on learners.

According to Thompson (1992), what teachers do in the classroom is fundamentally influenced by their personal views and beliefs. Teacher's attitudes are a major predictor of the use of new technologies in instructional settings (Isleem, 2003). Consequently, the negative attitudes held by teachers about changes in the curriculum may negatively affect the curriculum implementation process which may in turn compromise the quality of teaching and learners' academic performance. In

addition, Ponte et al., (1994) noted that when a new curriculum is introduced, teachers are normally concerned with the following: the overwhelming work required in the implementation of the new curriculum, lack of proper training on the new curriculum and inadequacy of supporting material for the new curriculum. Skilbeck (1982) emphasised that the best place for designing a curriculum was where the learner and the teacher meet. While curriculum experts often dictated the skills covered by the curriculum, a teacher provided insight into the types of materials, activities and specific skills that needed to be included in the curriculum. It can be noted from most research findings that the majority of teachers were in agreement with the point of view of Skilbeck as it was established that most of the challenges that teachers faced when implementing the developed curriculum were attributed to lack of consultation with them. In line with this, UNESCO Global Monitoring Report (2015) found that teachers lacked understanding of the reforms intentions and the reforms lacked grounding in the classroom reality as teachers were not involved in curriculum planning. In addition, most teachers in Zambia felt that the lack of full teacher involvement in the curriculum development process resulted in the removal of some important build up topics in the developed curriculum (Mwanza, 2017). This scenario can be avoided if the teacher education curriculum is well aligned with the curriculum taught in schools providing teachers with the necessary expertise required for them to effectively participate in the curriculum process.

If the teachers who are the actual implementers of the developed curriculum were well consulted, challenges that they faced when implementing the developed curriculum could be circumvented. Ramparsad (2006) further emphasised that teachers who had been left out of planning the curriculum appeared to be mystified by the jargon in the learning programme provided to them. These challenges support teacher participation in curriculum development process for effective implementation of the curriculum.

6.0 Conclusion

The quality of the curriculum is indeed as good as the quality of the teacher. Effective implementation of the curriculum can only be made possible if the implementer who is no one but the teacher is empowered adequately for the purpose. Educational goals can only be achieved with the presence of a well prepared teacher in terms of understanding and participating in the curriculum development process. Teachers need to be equipped with relevant competencies during their teacher education programme so that they are empowered to participate productively in the entire curriculum process. If teachers are exposed to appropriate teacher education curricular and are accorded opportunities to fully participate in curriculum design teams, effective curriculum implementation is definitely guaranteed. The alignment of teacher education curricular to the school curricula is a necessity for teacher proficiency. Collaborative curriculum design with teachers whose teacher education curriculum is properly aligned with the school curriculum and developed with their full involvement will definitely lead to effective learning which in turn leads to full actualisation of the nation's educational goals. With a lot of mushrooming colleges and Universities in Zambia, there is need for the education personnel to ensure that the teacher education curriculum offered in the learning institutions is properly aligned to the curriculum offered in schools. The Ministry of General Education through Curriculum Development Centre should also ensure that teachers are accorded ample opportunities to fully participate in the curriculum design processes so that they own authorship of the curriculum that they are going to implement in schools.

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