Teachers' Competence and the Development of Thinking Skills in Primary School Pupils in the South West Region of Cameroon

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ABSTRACT

This study was initiated from a critical look at what is happening in most primary schools today in which most teachers do not adequately equip pupils with higher order thinking skills. This was aimed at investigating teachers' competence in teaching methods, interpersonal skills, assessment, classroom management strategies, and their influence on pupils thinking skills. It was guided by four research questions which were transformed into four research hypotheses to test if teachers' competence in methods, knowledge of subject matter, interpersonal skills, assessment, and classroom management strategies influence the development of thinking skills. The study was a survey that made use of a sample population size of 200 primary school teachers. A closed-ended questionnaire and observation guide were used to collect data. Data were analyzed inferentially using Pearson product-moment correlation coefficient statistical tool. Findings revealed that teacher's competence in teaching methods, interpersonal skills, assessment and classroom management strategies have significant influence in the development of thinking skills in primary school pupils in the South West Region. Implications and recommendations are discussed.

Keywords: Primary schools, South West Region, development, teaching methods, skills

The effective functioning of all other systems depends directly on the effective functioning of the education system. Education is identified also by most nations as being critical for economic growth and poverty reduction. The primary school is expected to build capacity for life-long learning in individuals, and to develop knowledge, skills, and attitudes which will contribute to the general development of the community in which individuals live by meeting man power needs and play an active part in civic and economic life thereby improving community life (Taylor and Mulhall, 2001; Shuayb and O'Dannell, 2008).

The importance of thinking skills in Cameroon pupils cannot be undermined. The teaching to develop thinking skills in Cameroon pupils will lead pupils to be creative and innovative within their environment. This will enable pupils not to be limited only to knowledge gained in class but can transfer this knowledge to real life situations. If primary school pupils thinking skills can be developed as they grow more to higher educational levels, they will be able to make use of these skills in a manner in which industries of this country will

develop rapidly and the global competitiveness of the county will grow.

Ndongfack (2007) posits that the effective participation of citizens in today's knowledge economy will necessitate quality teachers with competences to endow learners with 21st century skills. Consequently, Mufer (2013) and Endeley (2014) assert that no educational system can rise above the quality of its teachers. The type of training or professional development that a teacher has will equip him with competences for effective teaching practices with regards to teaching methods, classroom management, assessment techniques and interpersonal relationship for the development of thinking skills in learners.

Background to the Study

Contextual Background

In Cameroon, according to Law N° 98/004 of April 1998 to Lay Down Guide Lines for Education in Cameroon, one of the objectives of education is to develop creativity, a sense of initiative and of enterprise. In section 37 it is stated that the teacher shall be the principal guarantor of the quality of education. Tambo (2003), pointed out that the emphasis on teaching thinking or development of thinking skills on learners as "new" can be accepted mainly from the consideration that rote learning has for long prevailed in many Cameroon schools' classrooms.

Teachers need to identify teaching methods that encourage the development of these skills. It is appropriate to focus on the development of thinking skills in learners bearing in mind the economic situation of Cameroon such that pupils will be able to think out of the box. By this therefore the teaching methods, strategies and techniques employed by teachers should encourage learners to be able to correlate classroom work with real life expectations, so as to be able to integrate into the society, to be able to use knowledge acquired to create jobs for themselves thereby curbing the societal problem of unemployment.

Review of Literature

Empirical Review

Teaching methods and the development of thinking skills

Tambo (2012), asserts that in order to ensure that teaching in Cameroon schools become more student-centered, problem-solving and that it responds to the realities of Cameroon society, teachers should progressively abandon the predominant use of direct teaching that has continued to characterize teaching in our schools. Rather that they should increasingly use direct and indirect teaching methods to complement each other. Also the rigidity of primary school curricula and examinations seemed to discourage teachers from moving beyond the boundaries of subject area. Pupils are rarely required to participate actively in lessons, other than to repeat by rote what had been said by the teacher or to sing and clap (Taloy and Mulhall, 2001). It is based on this assertion that the following teaching methods that promote the development of thinking skills in pupils have been discussed.

Pupils should be made to involve in problem solving through inquiry teaching. This exposes the learner more to the actual learning material. In this premise basic scientific attitudes, knowledge and skills are exploited in much deeper terms. The value of the method is the ability to enable pupils to learn to think and find out things for themselves which is the highest form of learning (Tambo, 2003; Tchombe, 2009; Gagne, Wager, Golas and Keller, 2005).

While the discussion method is also important Arends (as cited in Tambo, 2003 and Tchombe 2009) reported that discussion is a situation in which teacher and students talk or pupils and other pupils talk with one another and share ideas and opinions. The purpose is to improve pupils' thinking and communication skills, to improve pupils' involvement in the lesson, encourage tolerance for others views as well as fairness and open mindedness.

Equally the Cooperative learning is highly encouraged since pupils work in small groups

mixed ability groups. This encourages pupils to be assisted by their peers through peer tutoring and using brainstorming strategy. This calls for pupils thinking skills to develop as each individual has to contribute in the lessons through positive interaction which raises their self-esteem (Clarke, Widerman and Eardie cited in Tambo (2012) and Sadker and Sadker, 2012).

There is plenty of evidence that good quality teaching makes a difference. Projects stressing active learning methods have shown marked increases in learning performance that resulted from the development of pupils' thinking skills.

Interpersonal skills and development of thinking skills

Pianta, Hamre and Allen (2012), assert that classrooms are complex social systems and student-teacher relationship and interactions are also complex multicomponent systems. The nature and quality of relationship between teachers and pupils are fundamental to understanding pupils' engagement which could be made possible by teachers' interactive behaviours and cues that necessitate pupils thinking skills to develop. This is necessitated by the type of questions and responses teachers give to students.

In addition, Moos as cited in Silverman and Casazza (2000) pointed out that it is important to look more closely at the interaction between students and teachers and among the students themselves and the supportive environments in which they are involved, help each other, and feel comfortable expressing themselves openly and freely. In the same note Ryan and Deci, 2000; Skinner and Belmont, 1993; Santrock 2001; Tambo, 2003 suggest children are most motivated to learn when adults (teachers) support their need to feel competent, positively related to others, and autonomous. That these good positive interpersonal relationship and positive environment, motivated by teacher ends to encourage pupils to think and improve intellectually. This provides a means for promoting learning and development of thinking skills. Conversely if relationship is tensed and unfriendly there will be

no flow of communication and consequently no effective learning. Ensuring the appropriateness of the classroom transactions in the communication of meaning and in the educative processes depends on the teacher's interactive skills used for questioning, explaining and reacting (Sadker and Sadker, 1991).

Assessment of pupil's performance and development of thinking skills

Swartz and McGuinness (2004) assert that Bloom's taxonomy of six educational objectives; Knowledge, comprehension, application, analysis, synthesis, and evaluation is probably the best known frame work for assessing pupils learning. Cameroon as well is greatly making use of this taxonomy as far as assessment is concern. For instance, in Cameroon's educational policy, following the law No 98/004 of 14th April 1998 to lay down guidelines for education in Cameroon, in part 1 section 5, objective 7, emphasizes the development of creativity which is synonymous to Bloom's 5th and 6th levels of educational objectives. For this objective to be fulfilled it entails various assessment strategies that will lead to develop creativity. It is in this light that Alkharasi 2008; Nsamenang and Tchombe, 2011) assert that assessment must be as exhaustive as possible, making use of alternative forms of assessment so that as many student competencies as possible are assessed and that the process needs to be holistic. Given that all the domains are assessed that is cognitive, psychomotor and affective domains that will lead pupils to think out of the box. Not just contextual but also practical integration activities in real life situations which leads to the development of thinking skills. Another study carried by Kulieke *et al.* (1990); Gronlund, (2006) identified that assessment such as multiple choice, true/false, matching items are often lower in realism and complexities of tasks assessed, while alternative assessments like portfolio, hands-on-activities and other performance-based assessment are higher in both realism and complexity of task assessed leads to building a student profile; from assessing low level of competence and understanding to assessing high level of skills.

Classroom Management strategies and the development of thinking skills

Teaching, an interpersonal activity has as main objective to bring about learning and for the teacher to realize this, there is need for appropriate classroom management (Tchombe, 2004). Good management facilitates teaching and prompts in pupils the desirable cognitive maps for learning (Nsamenang and Tchombe, 2011). According to Tambo (2003), pupils' engagement in lessons and activities is the key to successful classroom management. On the contrary Tchombe, (2004); Nsamenang, (2004) asset that the teacher needs a repertoire of skills, strategies, information and attitude for effective planning and behavior modification in the classroom. Nsamenang also highlighted that to reduce the rigidity of traditional classroom settings it is important to adjust the seating position of each child to each of her personal needs. For example, those who are short-sighted can be allowed to sit nearer to the chalk board, those who are restless can be put in positions where the teacher can see them easily, those who are hard to hear can be allowed to sit near the teacher. Which leads to pupils' engagement in the teaching and learning process thus effecting effective classroom management. Seating arrangement should also be conducive to learning. While some lesson activities may require pupils to work in groups with desks connected or arranged in rows, other lessons may require pupils to be engaged in the activities and desk arranged in u-shape or circular manner depends on the teachers' management skills. Teachers should help pupils see themselves as effective learners so they can develop a greater internal locus of control (Katkousky, Crandall, and Goods, 1967; Lefcourt, 1966; Strickland; as cited in Crowl *et al.* 1997).

In another study carried out by Crowl *et al.* (1997), it is stated that how well the pupils progress depends in great part upon the teacher, the climate the teacher establishes and the instructional strategies which can be seen as the classroom management skills he employs can motivate pupils to learn and think on higher levels.

Statement of the Problem

Many primary school leavers can neither read nor write nor exhibit higher–order thinking skills like application, analysis and creativity. For the most part they can only memorize or recall. If Cameroon must attain emergence by 2035 teaching and learning need to take a new approach that enhances critical and creative minds. Considering the importance of purposeful and meaningful education, teaching to develop critical and creative minds is a significant venture towards nation building in a developing country like Cameroon. A critical look at what is happening in most English-speaking primary schools today is that most of the teachers do not adequately equip pupils with higher order thinking skills. As a result, a good number of the products of the primary school find it difficult to cope in the secondary school or they drop out of school. With such a situation Cameroon cannot achieve poverty alleviation or industrialization by 2035. The teachers' competence is the key in enhancing critical and creative skills in the pupils. Thus this study set out to find out if teachers have competences in enhancing the development of thinking skills in pupils.

Purpose of the study

The purpose of this study is to investigate teachers' competence in developing thinking skills in pupils.

Research hypotheses: The study was guided by the following hypotheses:

Teachers' competence influences the development of thinking skills in pupils.

Specific research hypotheses

1. Ho: There is no significant relationship between teachers' use of teaching methods and the development of thinking skills in primary School pupils in South West Region.

2. Ho: There is no significant relationship between teachers' knowledge of subject matter and the development of thinking skills in primary School pupils in South West Region.

3. Ho: There is no significant relationship between teachers' interpersonal skills and the development of thinking skills in primary School pupils in the South West Region.

4. Ho: There is no significant relationship between teachers' communication and the development of thinking skills in primary School pupils in South West Region.

5. Ho: There is no significant relationship between teachers' assessment of pupils' performance and the development of thinking skills in primary School pupils in the South West Region.

6. Ho: There is no significant relationship between teachers' use of classroom management Strategies and the development of thinking skills in primary School pupils in South West Region.

Methodology

The survey was used for the investigation of teachers' competence in the development of thinking skills in primary school pupils in the South West Region. The issues under study were teaching methods, subject matter knowledge, interpersonal skills, communication, assessment of pupils' performance, and classroom management strategies. The sample population was made up of 200 teachers from 40 schools selected through stratified random sampling. Also 20 teachers were observed from three divisions that constituted the targeted population. A closed-ended questionnaire made up of 49 items measured teachers' competence following the constructs teaching methods, subject matter knowledge, interpersonal skills, communication, assessment of pupils' performance and classroom management strategies. The items were rated on a four-point Likert scale ranging from strongly agreed to strongly disagreed. The questionnaire was validated by 20 teachers who did not take part in the study. The reliability stood at 0.72 in most of the scales which made the instrument reliable for the research following Cronbach's Alpha reliability test which states that for a scale to be reliable it should be 0.7 and above. Data were analyzed descriptively and inferentially using the Pearson Product-moment correlation coefficient. The data from observation were simply reported.

FINDINGS AND DISCUSSION

Hypothesis 1: *Teachers' competence in the use of teaching methods influences the development of thinking skills in primary school pupils.* The findings revealed that there was a significant positive correlation between thinking skills and teachings methods [r = .406, n = 200, p = .000] implying that teachers use teaching methods that positively improve on the thinking skills of the pupils. This is in line with a research carried out by Brownyn (2003) in which he concluded that learners do not learn in the same way and that teachers who do not use valid teaching methods may place students at risk of some not grasping the content of studying and consequently their thinking skills will not be developed. Though from observations it was observed that teachers made use of teaching methods that develop thinking skills in pupils but to a lesser extent.

Hypothesis 2: *Teachers' competence in interpersonal skills influences the development of thinking skills in pupils.* The correlation analysis revealed that there was a significant positive correlation between thinking skills and interpersonal skills [r = .306, n = 200, p = .000] implying that teachers' interpersonal skills positively affect the thinking skills of the pupils. Similarly, a study carried out by Santrock (2001) revealed that pupils need a positive environment for learning. When motivated by the teacher, they are encouraged to think and improve on some intellectual, laudable and desirable skills. The nature and quality of teacher-pupil relationship is fundamental to understanding pupils' engagement, which is made possible by the teachers' interpersonal skills performed. Pupils' engagement increase if the teacher seeks to put in place behaviors that necessitate interactions between them and the pupils, which will foster the pupils to think following the type of questions and responses teachers give them. Though the responses from the questionnaire revealed that the teachers exhibit interactive skills, the observation revealed that interactive act was mostly that of teacher asking questions and pupils responding by answering. The

pupils weregiven the opportunity to interact with each other like putting them in cooperative groups that could allow for pupil-pupil interactions to a lesser extent.

Hypothesis 3: *Teachers' competence in assessing pupils' performance influences the development of thinking skills in pupils.* The correlation analysis revealed that there was a high positive correlation between thinking skills and assessment [r =.563, n = 200, p = .000] implying that good assessment positively affects the thinking skills of the pupils significantly. This corroborates with the views of other researchers that the more teachers' use different forms of assessment to assess pupils' performance the better the thinking skills of the pupils. It is noted that assessment is very practical in developing thinking skills in pupils and also assessment format can measure or bring out all the skills and competences of the pupils (King., Rohani and Goodson, 1997). Though from observations issues of higher-order thinking were like questions that would allow pupils to analyze, infer, evaluate, compose new ideas were addressed at a lesser extent. Teachers' use of different forms of assessment enables the development of pupils thinking skills.

Hypothesis 4: *Teachers' competence in classroom management strategies influences the development of thinking skills in pupils.* The correlation analysis further revealed that there was a significant positive correlation between thinking skills and classroom management skills [r = .322, n = 200, p = .000] implying that teachers have good classroom management skills that positively affect the thinking skills of the pupils. This is in line with the view of (Nsamenang and Tchombe, 2011) that good classroom management facilitates teaching and prompts the desirable cognitive maps for learning. For a teacher to effectively manage the class entails the aspects of using effective teaching methods that will get pupils to be fully engaged in the teaching learning process and consequently their thinking skills will be developed. Though from the questionnaire classroom management strategies influence the development of thinking skills, observation revealed that the teachers sparingly used classroom management strategies that could influence thinking skills development to a higher extent.

Recommendations

Even though some effort is made at developing thinking skills in pupils, it is not enough. Educational authorities of the nation have to reinforce the training of teachers in the Teachers Training Colleges (T.T. Cs) and Government Higher Teachers Training Colleges (GHTTCs) to be geared towards empowering teachers with the skills, teaching methods, strategies, techniques and knowledge about thinking skills so as to help learners develop their thinking skills as they go out into the field. Teachers already in the field should be given more opportunities for in service and continued training to update them with the new approaches in teaching. Teachers should be able to implement instructional approaches that can promote thinking skills development like probing, giving feedback, asking higher-order questions during classroom discussion, lengthening wait-time during classroom questioning and using educational technologies. Allowing pupils to participate actively in the teaching learning process and also to give them freedom to express their ideas.

Implications of the study

The teaching to develop thinking skills in Cameroon pupils will lead pupils to be creative and innovative within their environment. This will lead pupils not to be limited to only knowledge gained in class but can transfer this knowledge to real life situations. If every child can think critically and creatively they can create products that are suitable in this time as well as create innovative services. Since primary school pupils thinking skills are being developed it will enable them grow and go to higher educational levels. Pupils will be able to make use of these skills in a manner in which industries of this country will develop rapidly and the global competitiveness of the county will grow. It is therefore very important for the pupils from the base of educational ladder to be equipped with thinking skills especially in a developing country like Cameroon, so that these

skills can greatly contribute when made functional to reduce the phenomenon of over- dependence as they grow up especially as the nation Cameroon looks forward to emerge as a developed nation by 2035.

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