

Teacher Qualification and Teaching Techniques in Nursery Schools in Kicukiro District, Rwanda

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Abstract

The scarcity of qualified teachers in Early Childhood Education in Rwanda in general, and in Kicukiro District in particular, raised interest and curiosity to conduct this study. Its main purpose was to examine the relationship between the qualification of teachers and their teaching techniques in preschools in Kicukiro District. The study used a cross-sectional sub-design of descriptive survey research. Data were collected from 151 teachers and 10 head teachers through a close ended questionnaire and a semi-structured interview. The findings showed that teachers are not adequately qualified. Indeed, the majority of them rarely use learner-centred approach. The study concluded that there was a strong, moderate and low positive correlation between teacher's professional training, teaching experience, refresher courses, academic qualification and teaching techniques used. From these findings, it was recommended to improve the qualification of teachers in nursery schools by providing in-service continuous professional development for teachers and strengthening the pre-service training of ECE teachers.

Key words: Teacher qualification, teaching quality, teaching techniques, early childhood education, early childhood development center

Introduction

Educating young children at home has been happening for many years, but the concept of Early Childhood Education (ECE) that occurs outside the home setting is still in its infancy. The evolution of ECE has transformed how adults view the importance of offering stimulating and exciting opportunities to their children in the early years to support their growth and development. The 19th Century ushered in the era of increased attention to the specific needs of the young child (OECD, 2006). OECD (2006) goes on to say that Early Childhood Development Center (ECDC) comprises one of the most immediate social and physical environments that can influence young children's development. In order for ECDC to provide the necessary conditions for children's holistic development, teachers should be well trained and highly qualified so as to ensure quality teaching and learning that is developmentally appropriate.

A strong and effective teaching profession requires well trained teachers. Teachers need not only a depth of knowledge about the developmental stages of students they are teaching but also how to reach those students effectively using age appropriate pedagogy. The Rwandan education system has been focusing more on primary and secondary education and the need to effectively train pre-school teachers has not been addressed so far. Difficulties in identifying threshold effects are due to the complexity of the issue of teacher preparation, which need to take account of the nature and content of the training that teachers receive (Muton et al 2002, Whitebook et al 2009). With an increased understanding that the early years play a critical role in later success in school, it is therefore imperative that pre-school teachers are trained and qualified to deliver effective early years education.

In this paper, the focus is put on the qualification of teachers, which is the independent variable and the teaching techniques they use which is the dependent variable. Qualification of teachers implies the level of

education, working experience, area of specialization and refresher courses undergone. Whereas the teaching techniques are strategies that the teachers use to deliver the lessons they are entitled to teach.

As Litjens and Taguma (2010) put it there is strong evidence that enriched stimulating environments and high-quality pedagogy are fostered by better qualified staff; and better quality pedagogy all those factors considered together, they lead to better learning outcomes. Within this backdrop, therefore, the teacher is considered to be the most important single factor in determining what an ECDC experience will be like. Thus, educating and training ECE teachers who are able to apply effective and appropriate teaching techniques, effective classroom management as well as other good practices in ECE is an essential issue (OECD, 2006). However, it is not the qualification per se that has an impact on child outcomes but the ability of better qualified staff members to create a high-quality pedagogic environment that makes the difference (Elliott, 2006; Sheridan et al., 2009).

It is worth noting that The Rwanda National Skills Audit Report (Ministry of Labor, 2009) stipulates that there are no managers; no trained pre-primary teachers and no administrators at the pre-primary category in Rwanda. The gap was reported at almost 100%. Educators, parents, policy makers, and other stakeholders alike have become increasingly interested in the quality of services and documentation of effectiveness in early childhood programs. It seems that in most of developing countries, including Rwanda this field is left to people who failed to pursue their studies, to those who failed to get other jobs and retirees who do not have enough energy to work effectively. This seems to be a challenge to us. Unqualified pre-school teachers are likely to use teaching techniques which are not suitable to young children and consequently leading them to bad attitudes towards schooling. There is no doubt, therefore that best practices in ECE like teaching techniques, classroom management and assessment require qualified teachers for a quality education. But what is the situation like in Rwanda where Early Childhood Teacher Education only started in 2013 in Teacher Training Colleges (TTCs)?

This research study answered the following questions:

- 1) What is the level of qualification of pre-school teachers in Kicukiro District?
- 2) What are the teaching techniques used by pre-school teachers in Kicukiro District?
- 3) What is the relationship between pre-school teachers' qualification and their teaching practices in Kicukiro District?

Review of Related Literature

Many lists of indicators have been identified by various authors to characterize the quality of education. Among them, trained and motivated teachers are often considered as the most crucial factor in the provision of quality education (UNICEF, 2000). Teacher qualification and teaching techniques are two correlated concepts as they are described below.

Qualification of teachers

Research shows that the behavior of people who work in ECE matters and that this is related to their education and training. Qualifications, education and training of ECE staff are, therefore, an important policy issue (OECD, 2006). The training and education of ECE staff affects the quality of services and outcomes primarily through the knowledge, skills and competencies that are transmitted and encouraged by practitioners. It is also considered important that staff believe in their ability to organize and execute the courses of action necessary to bring about desired results (Fives, 2003). It seems obvious, therefore, that the quality of teaching of untrained teacher is doubtful. The practitioners' ability to create rich, stimulating environments in ECEC is jeopardised when staff have inadequate, insufficient or incorrect content and pedagogical knowledge. When trained on matters related to early development and care, staff can better develop a child's perspective (Sommer et al., 2010).

A qualified teacher should focus on learning which strengthens the capacities of children to act progressively on their own behalf through the acquisition of relevant knowledge, useful skills and appropriate attitudes; and which creates for children, and helps them create for themselves and others, places of safety, security and healthy interaction (Bernard, 1999). With this regard, early childhood teachers should be highly qualified and have relevant trainings for them to offer good and strong foundation to young children.

According to Agyeman (1993), a teacher who does not have both academic and professional qualification would have a negative influence on teaching and learning of his/her subject which subsequently affects the performance of students. In this study, academic qualification referred to the level of education achieved whereas; professional training was related to whether a teacher is specialized in early childhood education or not. These two components are interrelated and both of them determine the quality of service a teacher can deliver to his/her students. Reuda (2002) believes that qualified teacher should be able to upgrade students' capability effectively, enhance their knowledge and skills, and improve their behavior and attitude and then make contributions to the organizational goal. Qualified teachers recognize the teaching approach that appreciates the fact that children have unique interests that need to be considered for any meaningful achievement. Gichuba, Opasta and Nguchu (2009) Such a situation begs the question of how the quality of teaching looks like in Rwandan nursery schools where most caregivers are volunteers who have completed only three years of secondary education (MINEDUC, 2010).

Quality education in ECE

Children are active learners from birth, constructing their knowledge, meanings and understanding through their interactions, relationships and experiences. They are able to form opinions, express their ideas, collaborate with others, plan and persist in learning. The starting point for all learning is what children already know. Rich, engaging environments and meaningful interactions, where children's voices are listened to and acted upon, build on this foundation for successful lifelong learning (Council of Australian Governments, 2009). This should be taken into account by teachers so as to be able to help children effectively.

Good teaching should therefore cater for learners' interests as well as their learning styles. The teacher should try his/her best to apply a variety of teaching approaches and techniques to cater for individual

differences. It is only competent teachers who can create maintain and manage the conducive teaching situation. For a teacher to be competent, he/she needs to be qualified so as to expect from him/her effective teaching/learning (Farrant, 1980).

Teachers whose instructional focus is to help students to pass exams only tend to produce students who are passive, inflexible, lacking in creativity and imagination, good at orders, but poor at working independently or generating in new ideas. Most of these teachers have poor qualification. Good teaching on the other hand is the instruction that leads to effective learning, which in turn means thorough and lasting acquisition of the knowledge, skills, and values the instructor or the institution, has set out to impart. For good teaching to take place, teacher qualification is mandatory (Fives, 2003).

According to Sanders and Rivers (1996), students who are assigned to several ineffective teachers in a row have significantly lower achievements and little academic progression than those who are assigned to several highly effective teachers in sequence. Are Rwandan nursery pupils facing the same problem?

Most of the authors discussed above in the previous paragraphs agree on the importance of teacher qualification for quality teaching/learning; and becomes greater in young children. The younger the learners are the more important the teacher is. This is obvious because young children need constant guidance.

Methodology

This study adopted the cross-sectional sub-design of descriptive survey design because data were gathered from a sample of population at a particular time (Akin, 2005.). The target population was 300 pre-school teachers and head teachers in 78 pre-schools of Kicukiro District. From this population, a sample of 151 teachers and 10 head teachers was selected. To select this sample, purposive sampling was used for head teachers and to give equal chance to every member, simple random sampling was used (Fraenkel and Wallen, 2010). To collect data from this sample, a questionnaire made of close-ended questions served to gather information on teachers' qualification and teaching techniques used. Furthermore, a semi-structured interview protocol with head teachers provided additional information related to teaching techniques applied by teachers. To check face validity as well as the content validity of the instruments, expert judgment technique was used whereby the instruments were given to two experts to judge the degree to which each item correspond to variables under investigation (Amin, 2005, Fraenkel and Wallen, 2010). Doing this, two experts in the area of early childhood education were given the research instruments and research objectives to give their expert judgments on the relevance of the question items to the research objectives. Test-retest method was used to check the reliability of the instruments where the computed correlation coefficient was 0.75; hence the instruments were reliable. For quantitative data, descriptive statistics such as frequencies, percentages were used and Pearson product moment correlation coefficient was used to describe the relationship between teachers' qualification and their teaching techniques (Christensen, 1991) whereas qualitative data were analysed thematically where respondents' answers were presented in relevant themes (Orodho, 2009). Quantitative findings were presented in tables and qualitative findings were presented verbatim.

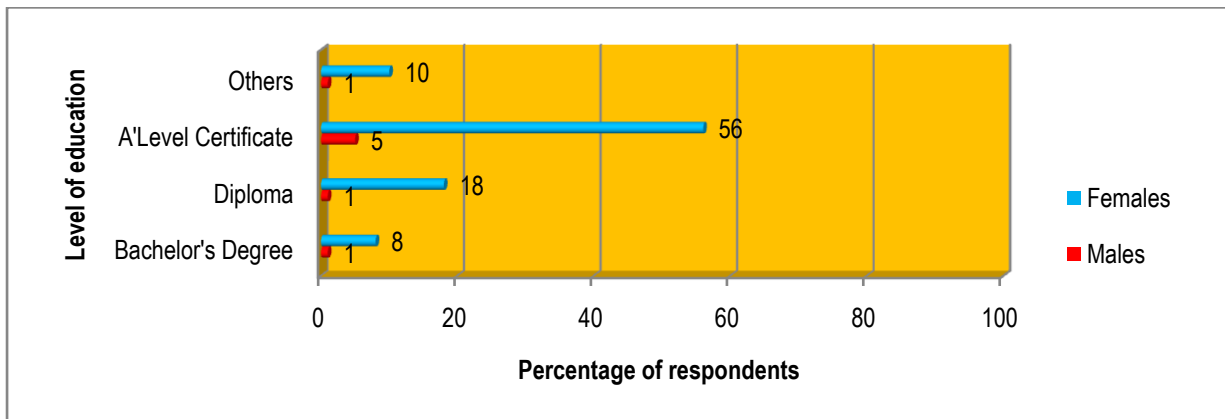
Presentation and discussion of the findings

This section deals with the presentation, discussion and interpretation of data pertaining to the qualification of preschool teachers, the teaching techniques used by nursery school teachers in Rwanda. The correlation between the independent variable and the dependent one is also highlighted.

Qualification of nursery school teachers in Kicukiro District

The figure below shows the qualification of teachers at the schools where the survey took place. Teachers are categorized by gender.

Figure 1: Respondents' Level of Education by Gender (n = 151)



The highest level of education of the majority of respondents to this research is A' Level Certificate (61%).

However, some of them have achieved higher qualifications like Advanced Diploma (19%), Bachelor's Degrees (9%) and others (11%). A question arises to know which specialization they have. As we all agree that the level of education itself is not enough to be qualified as a teacher. Indeed the area of specialization of these teachers needs scrutiny consideration among other factors. Only 19.86 of nursery school teachers specialized in ECE at least at the level of certificate. This means that more than 80% of teachers at that level of education have specialized in other subjects. As in the words of Fives (2003), the training and education of ECE staff affects the quality of services and outcomes primarily through the knowledge, skills and attitudes that are transmitted and encouraged by practitioners. This has been also highlighted by Arnett (1987) who asserts that the quality of teaching of untrained teacher is doubtful. In addition, teachers with early childhood training were rated as more positive and less punitive, employing a less authoritarian style of interaction with the children.

Among other aspects of qualification of teachers we need to mention is their classroom teaching experience. The data shows that 50% of preschool teachers in Kicukiro District have below 10 years of teaching experience: respectively, 27% within the range of 1 to 5 years and 23 % within the range of 6 to 10 years. This number is too high. We have to remember that these are the same teachers who have not specialized in the field of their work i.e. ECE. Therefore, this would negatively affect their performance and the quality of service thereof. To overcome some of the shortcomings appertained to the lack of experience; refresher courses should be

constantly organized in order to equip them with some teaching skills. Refresher courses are therefore of paramount importance as far as teacher qualification is concerned.

The importance of refresher courses is acknowledged by every teacher who participated in this study. Farrant (1980), asserts that the existence of a large number of untrained teachers who have not received in-service training for many years since their initial training contribute to teaching that is inefficient because it is insensitive to the needs and characteristics of growing children and ignorant of the ways in which they learn. Nonetheless, 42% of the respondents to this study have never attended any or rarely attended the refresher courses.

Teaching techniques used by nursery school teachers in Kicukiro District, equally raised our interest. Successful teaching begins by preparation for teaching. This involves, lesson plan, gathering and/or developing the teaching learning materials, preparing the classroom setting among others. If this stage of teaching is well done, it might lead to successful effective teaching. The reality on the ground seems to be contradictory in nursery schools in Kicukiro District.

A very significant number of teachers (48%) do not adequately plan for the lesson they teach and 42 % do not set proper objectives to their lessons. One cannot claim to deliver a good lesson without an adequate lesson plan. Moreover, teaching learning materials are of a great importance for a good teaching learning in general and in early childhood education in particular. These must be adequate, adapted to both, the lesson and the level of learners and prepared beforehand. As much as possible concrete teaching learning should be given priority.

Good lesson plan is nothing if it does not result in effective teaching. It is during this phase of the lesson that the teacher applies a number of teaching techniques, a variety of methods and approaches of teaching. Many researches and educators (Driscoll 1994; Bandura 1997; Marzano 2007) argue that learning must be situated in the context of meaningful activity for knowledge to be used in similar situations later in life.

The following table is about the teaching techniques used by the preschool teachers in Kicukiro district. The list of the techniques was conceived in accordance to the learner centered principles by the researchers.

Table 1: Teaching techniques applied by nursery school teachers in Kicukiro District (n=151)

Teaching techniques	Never%	Rarely%	Sometimes %	Often%	lways%	Total%
I value the learners' observation in my lessons.	6	17	32	30	15	100
I link the lesson with the previous knowledge of the learners.	2	17	30	25	26	100
I cater for logical progression in my lessons	3	15	31	27	24	100
I expose learners to direct experience in my lessons.	8	18	33	25	16	100
I facilitate students' own inquiry.	9	23	36	21	11	100
I encourage students learning by finding solutions to problems by their own.	9	20	38	21	12	100
My lessons are hands on.	4	17	39	33	7	100

I involve learners in the lesson, as much as possible.	1	5	33	38	23	100
I teach my lessons through play.		5	21	57	17	100
I use rhymes to deliver my lessons.	1	6	23	47	23	100
I teach my lesson through songs.		3	28	50	19	100
Most of the activities in my class are done in groups.	8	25	34	24	9	100
At the end of the lesson, I direct pupils to summarize what they have learnt.	13	17	32	25	13	100
In conclusion of the lesson, pupils link what they have learnt and their real life.	8	17	32	21	22	100

Source: Findings of the study

Table 1 shows how nursery school teachers in Kicukiro District use some teaching techniques appertained with learner centered approach. Gichuba, Opasta & Nguchu (2009) say that learner-centred approach is referred to as heuristic teaching approach. It readily addresses the needs and interests of the learners. This approach appreciates the fact that children have unique interests that need to be considered for any meaningful achievement. Therefore, learners should be actively involved in decision making in regard to the content to be taught, the methodology, activities to be carried out, and learning resources to be used to offer learning experiences. This approach is given credit in such a way it is the most recommended to all levels of education in general and to early childhood education in particular.

In general, we can observe that the extent to which nursery school teachers in Kicukiro District use learner centered approach is still low. For instance, only 45% value learners' observation, 41% expose the learners to direct experience, 32% allow learners to conduct their own inquiry while only 33% of the respondents encourage students learning by finding solutions to problems by their own. Although some principles of learner centered approaches are applied by more than a half of the respondents, the number of teachers that do not use them remains very significant.

Learner-centered approach is still a challenge to nursery school teachers in Kicukiro District as it has been confirmed by the majority (80%) of head teachers interviewed. One of them said "*our teachers try their best to effectively teach their lessons but learner-centered approach is not yet fully achieved.*" As they revealed, this is due to their under-qualification of teachers and the unavailability of some resources. To overcome this challenge, head teachers suggested that refresher courses should be regularly organized. Head teachers therefore believe that teachers may cope with the situation as they adjust very quickly.

Relationship between teacher qualification and teaching techniques

The third question guiding this study was about the relationship between the pre-school teachers' qualification and the teaching techniques they use. The level of qualification was conceptualized into academic certification, area of specialization, teaching experience, and refresher courses attended. Pearson Product Moment

Correlation Coefficient (r) was used to correlate the two variables. The following table summarizes the findings on this research question.

Table 2: Teacher qualification and their teaching techniques

Qualifications	R	P-value	Interpretation
Academic qualification	.164	.346	Low positive correlation
Professional training	.792	.002*	Very strong positive correlation
Teaching experience	.748	.001*	Very strong positive correlation
Refresher courses	.642	.011*	Moderate positive correlation

Dependant Variable: Teaching techniques *p<.05

Table 2 indicates that there is a very low correlation between teachers' educational level and the teaching techniques they use. This implies that whether a teacher has a certificate, diploma, or bachelor's degree does not significantly correlate with the teaching techniques he/she uses. However, Table 2 indicates that the area in which the teacher has specialized, strongly correlate with the teaching techniques he/she uses. This means that teachers who have undergone pedagogical training use more teaching techniques than teachers who specialized in areas that do not relate to education. Table 2 further indicates that there is a very strong positive correlation between the teachers' teaching experience and the teaching techniques they use. The implication for this is that experienced teachers use more appropriate teaching techniques than their counterparts with less teaching experience. This may be attributed to refresher courses they receive in the course of their teaching career. Table 2 finally reveals that there is a moderate correlation between the amount of refresher courses a teacher has received and the teaching techniques he/she uses. This means that teachers who have received more refresher courses use more sophisticated teaching techniques than teachers who have received fewer refresher course or who have not received any. The results of this research corroborate the findings of Iyamu (2005), Darling-Hammond (2000), Krueger (1999) and Monk (1994) who found in their studies that in addition to teaching materials, students' family background, motivation to learn, and students' cognitive abilities, students' exposure to well qualified, professional and experienced teachers positively affect the overall school performance because they use more sophisticated teaching materials to deliver the content.

Conclusion and Recommendations

The research found out that many teachers of nursery schools in Kicukiro District are not yet fully conversant with learner-centered approach. This might be the most challenging situation as learner-centered approach is both a way of teaching that facilitates classroom management. Through learner centered approach, children learn skills of collaboration, conflict resolution, cooperation all of which influence the classroom environment and behavior. Teachers, who are well grounded with learner-centered teaching approach, are able to motivate learners, involve them in the process of teaching and learning, engaging them in all teaching and learning related

activities, and have good rapport and communication with parents of the learners. To some extent, some teaching techniques that involve learners in a more child centered approach are present in Kicukiro District.

Teacher qualification and teaching practices are like the two sides of the same coin. They go hand in hand and, according to the findings of this research, the qualification of teachers highly correlate with the way he/she manages his/ her class, the teaching techniques he/she uses in general on his/her teaching practices. The qualification of the teacher as it has been conceptualized in this study is to be catered for in order to assure quality education in ECE in Rwanda.

In order to meet the standards of ECE teacher qualification, the Ministry of Education in partnership with the University of Rwanda-College of Education, should strengthen early Childhood teacher education. Early Childhood Teacher Education has already started in all 16 TTCs all over the country, but the number of students enrolling in this combination is still low compared to the demand at the ground. The Ministry of education should, therefore, empower it by providing means to enroll a big number of students.

School owners should plan and organize refresher courses for ECE teachers to equip them with knowledge and skills required for effective teaching practices in early childhood setting. This can be done in partnership with development organizations that are working in the field of education.

School owners should plan and organize short courses to the head teachers of pre-schools in order to equip them with knowledge that will enable them to provide positive supports to the teachers so as to improve on their teaching techniques.

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