



Factors Influencing Teachers' Attitudes towards Language Material Selection, Development and Use in Early Childhood Education Program

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ABSTRACT

Research findings indicated that teacher attitudes are very vital in the teaching and learning process. There are real concerns raised by stakeholders regarding the teacher attitudes in implementation of the language curriculum in Early Childhood Development and Education programme with regard to development, selection and use of language materials. Factors influencing teacher attitudes towards development, selection and use of language materials need to be established. The study involved 68 ECDE teachers drawn from 115 ECDE centers in Gem District, Kenya selected by simple random sampling technique. It was based on descriptive survey design. Data was collected by attitude test questionnaires. The study found that age and teacher-pupil ratio had no influence on teacher attitudes, while gender, many years experience, high academic and professional qualifications had positive influence on teachers' attitudes and vice versa towards language material selection, development and use in the early childhood development and education programme.

Keywords: *Factors, Attitudes, ECDE Language materials, selection, development, use*

1. INTRODUCTION

Teacher attitudes are important variables in classroom application because of the relationship between attitudes and action. Teacher attitudes are often translated into specific classroom and instructional practices which in turn affect student behavioral and learning outcomes (Cook, 2002). Reinke and Moseley (2002) indicate that teacher attitude is an important variable in classroom application of new ideas and novel approaches to instruction. Kennedy and Kennedy (1996) say that methods must be established to facilitate the development of teachers' attitudes that supports contemporary instructional applications of research conclusions and correspond with best practices in education.

Attitudes are formed by direct experience as well as by implicit learning and may reflect personality (Zimbardo & Lippé, 1991). Attitudes are typically conceptualized as having three related components: cognitive (i.e., the idea or assumptions upon which the attitude is based), affective (i.e., feelings about the issue), and behavioral (i.e., a predisposition toward an action that corresponds with the assumption or belief) (Wood, 2000). Attitudes are functional enough as much as they simplify complex subjects, express fundamental values and beliefs, and mediate or guide behavior (Brock & Shavitt, 1994).

The teacher is key to effective implementation of the use of materials in the educational system and given that teachers have tremendous potential to transmit beliefs and values to students, it is important to understand the biases and stereotypes that teachers may hold about the development and use of language materials and the factors that act as facilitators to teachers' positive language material development, selection and usage.

Riley (2005) says that there is recognition of the need for teachers to be well equipped with a sound understanding of the curriculum

requires no defense. A strong academic and professional qualification enables a teacher to select content and identify key points appropriately. Such a practitioner is more accurate in assessing the extent of the child's understanding. Research shows that this type of teacher is able, also, to interest the children more and more and to teach in a more engaging fashion. Teachers with strong subject knowledge ask more appropriate questions and are able to incorporate the pupils' contribution into the lessons. Mayer & Moore (2000) stressed that there is need for teachers to acquire high academic skills. In addition teachers should teach in the field in which they specialize and was trained. They further observed that there is need for academic preparation and certification as a way of ensuring competence among teachers.

Aubrey(1994) made a strong case that educators supporting the earliest years of school need to be equally well informed(cited in Riley, 2005).The success of any initiatives to implement technology in an educational program depends strongly upon the support and attitudes of teachers involved. It has been suggested that if teachers believed or perceived proposed programs as fulfilling neither their own or their students' needs, they are not likely to attempt to introduce technology into their teaching and learning. Among the factors that affect the successful and effective selection, development use and integration of technology in the classroom are teachers' attitudes towards computers (Huang & Liaw, 2005). Attitude, in turn, constitutes various dimensions. Some examples of these are perceived usefulness, computer confidence (Rovai & Childress, 2002), training (Tsitouridou & Vryzas, 2003), gender (Sadik, 2006), knowledge about computers (Yuen, Law & Chan, 1999), anxiety, confidence, and liking (Yildirim, 2000). Yuen and Cheng (1991) found that experience and teacher training was of importance to teachers' continuance commitment to teaching.



Kumar and Kumar (2003) reported that most teachers believe that the amount of computer experience has a positive effect on attitude towards computers. Jackson, Ervin, Gardner and Schmitt (2001) indicated that female users, compared with males, are more inclined to hold negative reactions to computers and such differences may have resulted in the different ways of using computers.

In achieving excellence in schools, it is important to ensure that teachers are able to integrate technology into the curriculum. As such, the groundwork must be laid at the trainee or pre-service teacher's level. To do otherwise is to produce future teachers with underdeveloped skills in the use of technology. In the course of their training, pre-service teachers should be provided with the tools and experiences that will be useful for the regular activities in their future job: classroom instruction, research, and problem solving. Using technology enables pre-service teachers to arrange their environment and adjust their instructional strategies (Zhang & Espinosa, 1997). On the part of teacher educators, there is a need to understand the dimensions that influence pre-service teachers' attitudes towards computers as a means for effective development of teacher training curriculum that will prepare teachers to face the challenges in the information age (Fisher, 2000).

According to Fullan (2001) both individual teacher characteristics and collective or collegial factors play roles in determining curriculum implementation. Some teachers, depending on their personality and influenced by their previous experiences and stage of career, are more self actualized and have a greater sense of efficacy, which leads them to take action and persist in the effort required to bring about successful implementation.

Many educators agree that teachers' attitude and beliefs may affect instructional practice (Nespor, 1997; Pajares, 1992). This means that teachers' attitude affects the selection, development and use of language materials. Despite the lack of attention to attitudes in teacher workshops, research on teacher professional development consistently indicates that attitudes are closely related to teachers' knowledge acquisition and classroom practice (Pajares, 1992, 1996; Vartuli, 2005).

It has been noted that currently in Kenya, over half of the ECDE teachers are untrained (Republic of Kenya, 2006), majority are Class eight and Form four leavers while those who have been trained are certificate holders, thus creating a worrying scenario. The Kamunge Commission (Republic of Kenya, 1988) noted that majority of these teachers in Kenya end up in ECDE teaching profession simply because they have no alternative jobs. In Gem District about 65% of the ECDE teachers are untrained. Concerns have been raised over the poor state of the ECDE programmes with regard to teachers' attitudes towards ECDE learning in general and specifically to language material selection, development and use (District Education Officer, 2009).

However there is lack of information on factors influencing teacher attitudes towards language material selection, development and use. Without this information, it would be difficult to implement appropriate strategies to address the problem. Therefore, this study intended to determine the factors influencing teacher attitudes towards language material selection, development and use.

2. OBJECTIVES OF THE STUDY

The study aimed to explore the influence of age of teachers, academic and professional qualifications, teaching experience, child-teacher ratio and gender on Early Childhood Development and Education language material selection, development and use.

3. MATERIALS AND METHODS

Research Design

Descriptive survey design was chosen because it is appropriate for educational fact finding and yields a great deal of information, which is accurate. The research aimed at gathering accurate information on the influence of teachers' age, academic and professional qualifications, teaching experience, gender and child-teacher ratio on their attitudes towards language materials selection, development and use.

Sample and Venue

Simple random sampling technique was used to select 68 teachers drawn from 115 ECDE centers in Gem District, Kenya, representing 33.3% of the study population. Simple random technique was used because it reduces the chance variation between a sample and the population it represents (Grinnel, 1993; Mugenda & Mugenda, 1999).

Data Collection Instruments

Attitude Test Questionnaire (ATQ) was used to collect data from teachers regarding their attitudes towards selection, development and use of language materials. The rating scale constructed for this study followed the likert scale construction. The likert-type scale (or method of summated ratings) is the most widely used method of scale construction because of its relative ease of construction, its use of fewer statistical assumptions and the fact that, in contrast to other scaling techniques; no judges are required (Karakas-Doukas, 2011). The statements covered the main aspects of the language material selection, development and use: Human factors (teacher and learner characteristics); Target tasks (Lesson objectives and content); Administrative factors (material availability and cost) and Physical factors (availability of time and physical facilities). The initial pool of items consisted of 40 statements (16 favorable and 24 unfavorable statements).



Many statements overlapped in content but differed in wording; this was done in order to determine which wording was best. The statements were placed in random order and next to the items was a grid consisting of five columns: 'strongly agree' 'agree' 'Uncertain' 'disagree' and 'strongly disagree'. Each column had a particular value i.e. 5, 4,3,2,1 respectively. Respondents were asked to tick the appropriate box, to indicate how they agreed or disagreed with each statement. It was decided that a high score on the scale would imply a favorable attitude. Thus favorable statements (i.e. statements consonant with language material selection, development and use) would be scored at 5 for strongly agree down to 1 for strongly disagree; for the scoring of unfavorable statements the scoring was reversed (unfavorable items scored 1 for strongly agree to 5 for strongly disagree. Attitude scale was used to measure attitudes of respondents towards language material selection, development and use and was based on the Likert scale. The scale involved defining the issue towards which attitudes might be expressed and measured. It is made up of series of statements, which are related to a person's attitude towards a single object. Statements are either favorable or unfavorable.

Pilot Study

To establish reliability of the research instruments, a pilot study was carried out in 6 ECDE centers involving 12 teachers (6% of the study population) using test-retest method. The two tests were administered at an interval of two weeks. This was done so as to find out whether the terms used were understood by the teachers and also to guard against the response set, distortion of data and subjectivity of responses. Teachers who participated in the pilot study were not involved in the final study. This method of establishing reliability of instruments was appropriate for the instruments that gather data which is qualitative in nature (Joppe, 2000; Creswell and Miller, 2000). For validity of the instrument to be ensured, three experts on the topic from Maseno University, examined the content of the instrument and advised the researcher on the content validity. Their feedback was used to revise the instruments.

Data Collection Procedures

The researcher sought for a research permit and research authorization letter from the Ministry of Higher Education, Science and Technology before the process of data collection in the field. The instrument was administered through personal visits on appointment with teachers. The questionnaires were filled by the teachers and collected by the researcher after a fortnight.

Data Analysis Procedure

Quantitative data was analyzed by use of descriptive statistics, namely frequency, mean scores and percentages. Qualitative data

was categorized and reported in emergent themes. Watson (1994), defines qualitative data analysis is a systematic procedure followed in order to identify essential features, themes and categories. Data was then presented in frequencies, percentages, scores, mean scores and tables.

4. RESULTS

Age of Teachers

Based on the responses of 68 teachers, the teachers' ages were classified in years as: Young age (20-29), Middle age (30-39), Old Age (40-49) Near Retirement age/ Retirement Age (above 50). The total mean scores obtained by respondents on the Attitude scale in relation to age brackets were worked out. The findings show that all the respondents had positive attitudes towards language material selection, development and use regardless of age differences. They all had a mean score of above average (>3). The findings show that age as a factor had no influence on the attitude of teachers towards language material selection, development and use. In other words the teachers' views regarding material selection, development and use were not influenced by their age.

Teachers' Academic Qualifications

Based on the responses of 68 teachers, the teachers' scores on the attitude scale were computed as per the academic groups as presented in Table 2. The teachers were categorized as holders of CPE/KCPE, KJSE and KCE/KCSE. The findings show that those with low academic qualifications that is Kenya/ Certificate of Primary Education (KCPE/ CPE) and Kenya Junior Secondary Education (KJSE) had negative attitudes towards language material selection, development and use. They all scored a mean score of below average (<3). However those with Kenya Certificate of Education (KCE) and Kenya Certificate of Secondary Education (KCSE) scored a mean of above average (>3). The above finding shows that those with higher academic qualifications had positive attitude while those with low academic qualifications had negative attitudes towards language material selection, development and use. This implies that academic qualification as a factor had influence on the attitudes of the teachers towards language material selection, development and use.

Teachers' Professional Qualifications

Based on the responses of 68 teachers, the teachers' scores on the attitude scale were computed according to the professional groups as presented in Table 3. The findings reveal that there were 6 untrained teachers, 8 in-trained, 8 short-courses trained, 37 certificate in ECDE holders and 9 ECDE diploma holders. The first three groups; the untrained, in-training and short-course



trained teachers had mean scores on the attitude scale that were below average (<3); (2.2, 2.6 and 2.5 respectively). This means that the three groups had negative attitude towards language material selection, development and use. The certificate and diploma holders had above average (3.3 and 3.8) scores on the attitude scale. From the findings, this implies that professional qualification had an influence on teachers' attitudes.

Table 1: Age of Teachers (n=68)

Age Range	Frequency	Percent	Total Score	Mean Score	Attitude
20-29	24	35	86.4	3.6	Positive
30-39	35	52	122.5	3.5	Positive
40-49	7	10	25.557	3.651	Positive
Above 50	2	3	7	3.5	Positive

Table 2: Academic Qualification of Teachers

Academic Qualification	Frequency	Percentage	Total Score	Mean Score	Attitude
CPE/KCPE	6	9	16.2	2.7	Negative
KJSE	2	3	5.8	2.9	Negative
KCE/KCSE	60	88	226.8	3.78	Positive

Table 3: Professional Qualifications of Teachers

Professional Qualification	Frequency	Percentage	Total Score	Mean Score	Attitude
Untrained	6	9	13.2	2.2	Negative
In-Training	8	12	20.8	2.6	Negative
Short-Course	8	12	20	2.5	Negative
Certificate	37	54	122.1	3.3	Positive
Diploma	9	13	34.2	3.8	Positive

Teaching Experience

Based on the responses of 68 teachers, the teachers' scores on the attitude scale were computed according to the teaching experience groups as presented in Table 4. The findings reveal that there were 14 teachers with less than two years experience, 35 teachers with between 2-5 years, 16 teachers with between 6-10 years and 3 teachers with over 10 years experience. The first two groups: those with less than two years and those with between 2-5 years experience had mean scores that were below average (<3); (2.4 and 2.72 respectively) thus implying that they had negative attitude toward language material selection, development and use. Those teachers with between 6-10 years and over 10 years experience had mean score of above average

(>3); (3.74 and 3.73) scores on the attitude scale. This implies that experienced teachers held positive attitudes towards effective selection, development and use of language materials.

Child- Teacher Ratio

Based on the responses of 68 teachers, the teachers' scores on the attitude scale were computed according to the child-teacher ratio groups as presented in Table 5. The child –teacher ratio ranged between less than 10 children and more than 76 children managed by one teacher (10:1-76+:1). There were 34 teachers (50%) managing up to 45 children in a class and another 34 (50%) managing classes of over 46 pupils in a class. Findings reveal that all the teachers had positive attitude towards language material selection, development and use in relation to child-teacher ratio.

Gender

Based on the responses of 68 teachers, the teachers' scores on the attitude scale were computed according to the gender groups as presented in Table 6. Findings reveal that majority 53 (78%) of the ECDE teachers are female while only 15 (22%) are male. The female gender mean score is above average (3.342) while the male gender mean score (2.921).is below average. The findings therefore imply that the female gender have positive attitude while the male have negative attitudes with regard to language material selection, development and use. However, the difference is insignificant.

Table 4: Teaching Experience of Teachers

Experience	Frequency	Percent	Total score	Mean Score	Attitude
< 2 years	14	21	33.6	2.4	Negative
2-5 years	35	51	95.2	2.72	Negative
6-10 years	16	24	59.84	3.74	Positive
> 10 years	3	4	11.19	3.73	Positive

Table 5: Child-Teacher Ratio

Class Size	Frequency	Percentage	Total Score	Mean Score	Attitude
>10	04	6	15.28	3.82	Positive
10-15	05	7	18.8	3.76	Positive
16-25	05	7	18.95	3.79	Positive
26-35	10	15	38	3.8	Positive
36-45	10	15	37.6	3.76	Positive
46-55	15	22	58.35	3.89	Positive
56-65	05	7	18.2	3.64	Positive
66-75	10	15	37.7	3.77	Positive
<76	04	6	15.4	3.85	Positive



Table 6: Gender of ECDE Teachers

Gender	Frequency	Percentage	Total Score	Mean Score	Attitude
Female	53	78	177.126	3.342	Positive
Male	15	22	43.815	2.921	Negative

5. DISCUSSION

This study found that teacher characteristics- age, academic and professional qualifications, teaching experience, teacher-pupil ratio and gender- generally influenced teacher attitudes towards language material selection, development and use Early Childhood Development and Education. Age as a teacher characteristic was found that had no influence in the selection, development and use of language materials. All the teachers irrespective of their age had positive attitude as they scored mean score of above average. This finding concurs with that of Teo (2008) in his study on pre-service teachers attitudes towards the use of computer found that there were no significant differences as far as age was concerned. His results suggested that pre-service teachers at all ages were similar in their attitudes. Wong et al. (2002) says that teachers of all ages seem to have built their confidence and ability to use computers and other technological advancement and thus no significant difference has been noted in studies where age was concerned.

This finding does not support past research which suggested significant differences in computer attitudes by gender (e.g. Margolis & Fisher, 2002; Markauskaite, 2006). For example, Houtz and Gupta (2001) found that males and female had rated themselves on their ability to use the computer in significantly different ways. Other studies have suggested that the masculine image of the computer has deterred females from benefiting from the technology and this has made them less confident or more anxious (Culley, 1988), resulting in females holding more negative attitudes to computers than males (Campbell, 1990). Consequently, female students tended to use computers less even when given equal access (Muir, 1987). The research on gender and computing has often reported, though not conclusively, that males have more experience and make more use of computers (Brosnan & Lee, 1998; Balka & Smith, 2000).

Chua, Chen and Wong (1999) and Coffin and Mackintyre (2000) in their meta-analyses on the relationships between computer anxiety, computer attitudes, computer self efficacy and computer experience stated that most findings usually reinforce the gender effects and suggested that greater levels of computer experience are associated with lower computer experience and more positive

computer attitudes. Females usually also have more negative attitudes towards computers (Durndell & Thompson, 1997) and greater computer anxiety (McIlroy, Bunting, Tierney & Gordon, 2001) than males. Research on computer self-efficacy in general also revealed that males on average tend to acquire computer self-efficacy faster than females (Todman, 2000).

The lack of computer attitude differences between genders in this study is consistent with research that revealed changing attitudes among female computer users. For example, females may have been socialized differently in today's computer generation to be more comfortable with computers and this may have resulted in lessening the barriers perceived by females, in the lack of training opportunities for them (Ray, Sormunen & Harris, 1999). To a large part, North and Noyes (2002) felt that increased use of computers for teaching and learning in schools has worked against the development of gender differences as reported in previous research, a situation consistent with the use of computers in the Singapore schools (Teo, 2006).

The findings in this study showed that years of computer use and level of computer confidence are positively correlated with positive computer attitudes, supporting previous research (Shashaani, 1997). In part, using computers more frequently and developing a variety of computer related skills and techniques increases one's knowledge of the computer as a whole. This widens one's learning horizon and potential that in turn promotes a positive feeling towards the computer (Houtz & Gupta, 2001).

The results of this study show that years of computer usage is positively correlated with level of computer confidence. While this may seem obvious, it is important that the length of computer use is associated with the successful use of the computer in order that positive feelings can be fostered (Huang & Liaw, 2005). Otherwise, a prolonged unsuccessful period of computer use may serve as a barrier instead of facilitating further usage of the computer (Lim & Khine, 2006).

This study seems to concur with that of Can S (2010), who in his study of attitudes of pre-school teachers towards the effects of material use in learning, found that the attitudes do not significantly vary depending on the gender variable. Yet, the attitudes of the female participants were found to be more positive than those of the male participants in this study with regard to language material selection, development and use. However, Jackson, Ervin, Gardner and Schmitt (2001) indicated that female computer users, compared with males, are more inclined to hold negative reactions to computers and such differences may have resulted in the different ways of using computers.

On teaching experience this study found that teachers with less than 5 years experience had generally negative attitude towards language material selection, development and use while the



senior teachers with more than 6 years experience held a positive attitude.

On academic qualification the study found that those who had low academic qualification had negative attitudes while those who had higher academic qualification such as the O' level certificates had positive attitude.

The findings also found that those with no training at all, those with short-course training and those undergoing training had negative attitudes while ECDE certificate and diploma holders had positive attitudes towards language material selection, development and use.

On the child-teacher ratio influencing teacher attitudes, this study found that all the teachers hold positive attitude regardless of the number of children in the classroom.

6. CONCLUSION

Based on the findings, the following are the conclusions of the study:

- (i) Teachers in Gem district held positive attitudes towards language material selection, development and use irrespective of their ages.
- (ii) High and low academic qualifications influenced teachers' attitudes positively and negatively respectively with regard to language material selection, development and use.
- (iii) Professional qualifications influenced positively language material selection, development and use in the Early Childhood Development and Education programme.
- (iv) Teaching experience had an influence in language material selection, development and use in the Early Childhood Development and Education Programme.
- (v) All the teachers held positive attitudes irrespective of the number of children they taught in the classroom.
- (vi) There is no significant difference between the females and males with regard to language material selection, development and use; however the female had a higher mean score than their male counterparts.

RECOMMENDATIONS

- (i) There is need for the government and other stakeholders to stress the importance of high academic grades for those set to join teaching as untrained teachers and those heading to train as ECDE teacher as these would lead to those having positive attitude towards teaching in the ECDE programmes.
- (ii) There is need to harmonize ECDE professional training so as to produce teachers with high caliber and with positive attitudes towards the early childhood education programme.

- (iii) There is need for the government and other stakeholders to develop a scheme for the ECDE teachers so as to enable them work for many years to enable them develop positive attitudes which are required to facilitate smooth learning in ECDE programmes.
- (iv) The number of the male teachers is very low compared to female, yet there is no significant difference with regard to attitudes, therefore there is need to sensitize the male to join the teaching profession in ECDE programmes.

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