

Influence of Teacher Attitude towards Instructional Resources on Teacher Effectiveness in Early Years Education Centers

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ABSTRACT

Teacher attitude is vital especially when it comes to how they view instructional resources in their teaching and learning in Early years education, this is because their perception towards instructional resources impacts on how they interact with the environment. Children at this developmental stage need a lot of materials for effective learning. However, in Siaya County Kenya, concerns have been raised on teachers lack of interest in using instructional resources during teaching therefore affecting their general effectiveness which inversely affects their pupils. The purpose of this study was to determine influence of teachers' attitude towards instructional resources on teacher effectiveness. The study involved 311 teachers drawn from a population of 1926 using Krejcie and Morgan sample estimation table from 628 Early Years Education (EYE) centers in Siaya County, Kenya. Sample selection was done by systematic random sampling technique. The study was based on correlational and descriptive survey designs. Data was collected by use of teacher questionnaire (TQ) and teacher effectiveness assessment form (TEAF). The findings show a neutral teacher attitude towards instructional resources, a positive correlation between Attitude towards the Instructional Resources and teacher effectiveness and highly significant relationship of ($r=0.215$, $p\text{-value}=0.005>0.05$).

Key words: Influence, Attitudes, EYE Instructional Resources, Effectiveness

INTRODUCTION

Haber (2005) says attitude is based on both ideas and feelings. It is the result of both cognitive and affective components. Psychologists agree that attitude has three main components; a cognitive or thought, an emotional or affective and behavioral or action component. Kalhotra (2014) says that attitude refers to a personal disposition common to individuals but is possessed by different individuals in different degree. It impels them to react to objects, situations or proposition in the way that can be called favourable or unfavourable. This basic motivation is responsible for moulding the nature of attitude in each individual. Continuous motivation manifests it in terms of appetite and aversions and through experiences that develop into favourable and unfavourable inclination towards various objects, classes of objects. Effective use of instructional resources can only take place if the teachers have positive attitudes towards the available, adequacy, relevance, frequency of use of instructional resources and attitude of teachers towards instructional resources. Attitude of the teacher towards the instructional process and the resources to be used has implications on the students' attitude, achievement, and understanding of the content. In order for teachers to incorporate new understandings into classroom practice, they need to have good mastery of the content, positive attitudes towards the instructional resources and effective instructional strategies (Clark, 2006).

Eshach (2005) indicated that one of the major problems facing science education today is the fact that elementary teachers have negative attitude. Some of these negative attitudes stem from the belief that they do not have strong content knowledge in some of the areas of activities to be taught. This negative attitude

towards some topics is likely to hinder the selection and use of instructional resources which are to be used in teaching. Kangori (2014) opines that teacher attitudes can influence the learners. Because their attitude impact on the learners; there is need to help the early childhood teachers to change their attitudes towards instruction.

Kalhotra (2014) carried out a study in India to examine the difference and comparison between effective and ineffective teachers in relation to their attitude towards teaching profession and their teaching experiences, age and sex. In this study two research instruments were used. The instruments were; Teacher effectiveness scale and Attitude scale were used for collecting data. Analysis of the data was done using correlation statistics technique. Findings of the study indicated that no significant difference between effective and ineffective teachers in their attitude towards teaching profession. Further the study found that effective and ineffective teachers do not differ in their attitude towards teaching profession, although they differ in their experience, age and sex.

The current study though looking at attitude and teacher effectiveness it does not incline itself to the teaching profession in general but narrows down to the attitude of the teachers towards instructional resources in early years education learning programme. While the former study used two tools which generally had positive worded items the current study developed a questionnaire in a likert scale format listing the 18 items and five options with regard to instructional resources and lesson observation schedule adapted from Maseno University teaching practice guide to collect data. In data analysis the former used correlation unlike the current study which used both descriptive and correlation techniques.

There is recent evidence that pre-service teacher attitudes toward classroom management are modifiable during teacher education (Johnson & Andrew, 2005). Research has shown that pre-service teachers do not necessarily develop new perspectives about teaching while in a teacher education program, they simply become more knowledgeable at defending the beliefs they already possess. Others conclude that beliefs about teaching not only act a lens by which teachers make meaning of their practice, but they influence their behavior to suit the context of the classroom experience. This is not to say that some belief change does not occur, but it varies individually among student teachers. For example, research has shown that

students entering teacher education programs with a reflective orientation are more likely to experience change in beliefs than those without such a perspective (Taylor, 2002). While the above studies looked at the attitude of pre-service teachers they were too general and not specific about the level of the teachers and the same time they did not explain attitude towards which aspects, however the current study sought to establish attitude towards instructional resources and its influence on teacher effectiveness.

The attitude of teachers can be assessed and established by three approaches. The first method is the use of a likert scale where several response sentences are given to the respondents whereby they check mark their level of agreement or disagreement then ranking is done. This approach is very objective but has a limitation of not enabling the researcher to get the reasons behind the attitude depicted by the respondents. The other approach is where the researcher observes the respondent for a time and then making own judgment. This approach has the limitation of being subjective and the researcher cannot get reasons behind an attitude. Besides, researcher can ask the respondents to give their views on their attitudes towards a curriculum. This approach has the advantage of being very objective and also enables the researcher to get the reasons behind the respondents' attitudes. There is recent evidence that pre-service teacher attitudes toward classroom management are modifiable during teacher education (Johnson & Andrew, 2005).

According to Eggen and Kauchak (2001) positive teachers' attitudes are fundamental to effective teaching. A teacher must be interesting. That is the teacher must work his students into such a state of interest in what the teacher is going to teach him that every other object of attention is banished from his mind. The teacher should also fill the students with devouring curiosity to know what the next steps in connection with the subject are. Eggen and Kauchak (2001) identified a number of teachers' attitudes that will facilitate a caring and supportive classroom environment. They are: enthusiasm, caring, firm, democratic practices to promote students responsibility, use time for lesson effectively, have established efficient routines, and interact freely with students and providing motivation for them. The above study only identified a number of teachers' attitude which was too general too on the hand the current study sought to establish the influence and perceived extent of influence of attitude towards instructional

resources and its influence on teacher effectiveness.

Khaemba (1998) stressed that implementing personnel and their dispositions have an impact on curriculum implementation. Educational and training institutions are considered the instruments of improvement and progress in each society. One of the pillars of these institutions are experienced and knowledgeable teachers who through their own knowledge and practice to lead the children and youth of their society to high objectives. Thus doing, they work to improve their own society. To possess such teachers in societies, it is necessary to provide them with classes of training.

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.

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. By this it means that the teachers are able to have positive attitude in choosing the best instructional resources in order to make their lessons a success.

Aubrey(1994) made a strong case that educators supporting the earliest years of school need to be equally well informed(cited in Riley (2005). Being well informed in this sense means having the latest information regarding the instructional resources which can be used in early years education to promote learning. 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 successful learning in the classroom are teachers' attitudes towards computers (Huang & Liaw, 2005). This means that the teachers should be able to put into use the available instructional resources. some other factors which are likely to influence teacher effectiveness may include their perception on the usefulness of the instructional resource in helping their students, confidence in an instructional resource for example a computer (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 and therefore teacher effectiveness.

In Siaya County with the level of poverty index at 0.4, making it difficult to provide adequate and necessary educational resources, concerns have been raised over the poor state of the EYE programmes with regard to teachers' attitudes towards EYE learning in general and specifically towards instructional resources. However, there is lack of information on influence of teacher attitude towards instructional resources on teacher effectiveness. Without this information, it would be difficult to implement appropriate strategies to address the problem. Therefore, this study intended to determine influence of teacher attitude towards instructional resources on teacher effectiveness.

Objective of the Study

The study sought to establish influence of attitude towards instructional resources on teacher effectiveness

MATERIALS AND METHODS

Research Design

This study used correlational and descriptive survey research designs. Descriptive Survey is a research procedure which involves depicting a situation as it exists in details. It entails an investigation of issues as they affect an activity such as pedagogical practice and teacher effectiveness. The subject is being observed in a completely natural and unchanged natural environment (Shuttleworth, 2008).The investigation is normally conducted within or across section of the society. Oriwa 2010) defines survey as a strategy used to collect information from a large population by use of structured interviews, questionnaires among other methods. 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 level of availability of instructional resources in early years education centers. On the same note Ravid (2011) correlation is defined as the relationship or association between two or more variables. Correlation is a statistical technique that is used to measure and describe a relationship that exists between two or more variables. The design is most appropriate because it enabled the researcher to map out the relationship between two or more educational variables (Orodho, 2003). In this study, the relationship to be investigated is between level of availability of instructional resources and teacher effectiveness.

Sample and Venue

A sample of 320 was arrived at using Krejcie and Morgan estimation table. Systematic random sampling technique was used to select 320 teachers drawn from a population of 1926 teachers in 628 EYE centers in Siaya County, Kenya. Systematic random technique was used because it reduces the chance variation between a sample and the population it represents (Grinnel, 1993; Mugenda and Mugenda, 2003).

Data Collection Instruments

Data collection instruments included Teacher effectiveness assessment form (TEAF) and Teacher questionnaire (TQ). The TEAF had five sections: Preparation, presentation, use of instructional resources/communication, conclusion and finally teacher personality. The score from the sections were summed up giving a final score over 100%. The level of teacher effectiveness in early years education centers was placed in 3 categories. Responses were elicited on a 3-point scale with the following options: Below 50% - Ineffective, 50% -74 %- effective, 75% and above very effective. Observation of the teachers were summed and averaged to yield a single score per case measured on the continuous scale; $0 \leq R < 50\%$ - ineffective, $50\% \leq R < 74\%$ - effective and $75 \leq R < 100\%$ - very effective.

On the hand teacher questionnaire had a rating scale for availability of the listed instructional resources constructed for this study following the likert scale format. 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).

Prior to establishing the intended influence, data were first explored to understand the level of attitude of teachers towards instructional resources in the early years education centers, consequently, 7 items were listed. Responses were elicited on a 5-point Likert scale with the following options: 1- strongly disagree, 2- disagree, 3- neutral, 4- agree, 5- strongly agree. Response score across the 7 items were summed and averaged to yield a single score per case measured on the continuous scale; $0 \leq R < 1.5$ - strongly disagree, $1.5 \leq R < 2.5$ - disagree, $2.5 \leq R < 3.5$ - neutral, $3.5 \leq R < 4.5$ - agree and $4.5 \leq R < 5$ – strongly agree.

Piloting

To establish reliability of the research instruments, a pilot study was carried out in 10 EYE centers involving 20 teachers 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, 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 relevant authorities and the county education office 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 and research assistants after a fortnight. The researcher and research assistants then made appointments with the teachers to be observed in their classrooms as they performed their duties in the classroom and also held discussions with the respective teachers during the collection of the questionnaires.

Data Analysis Procedure

The researcher sought for a research permit and research authorization letter from the relevant authorities and the county education office 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 and research assistants after a fortnight. The researcher and research assistants then made appointments with the teachers to be observed in their classrooms as they performed their duties in the classroom and also held discussions with the respective teachers during the collection of the questionnaires.

RESULTS

Teacher Effectiveness

As per the teacher effectiveness assessment form and scores for the teachers were awarded score from the observations carried out in class. The tally for the five components observed: Preparation, presentation, use of instructional resources/communication/classroom management/organization, conclusion and personality were added the final score given. Therefore those whose tallies were below 50% were considered ineffective, between 50%-74% were effective and finally above 75% were very effective. The teacher effective assessment form had sections which were scored and the tallies given to understand the level of teacher effectiveness in the early years education centers. Teacher effectiveness were elicited on a 3-point scale with the following options: those who scored 50% and below – were regarded as ineffective, those who scored between 50% -74 %- effective and finally those who scored 75% and above were regarded as to be very effective. Observation of the teachers were summed and averaged to yield a single score per

case measured on a continuous scale; $0 \leq R < 50\%$ - ineffective, $50\% \leq R < 74\%$ - effective and $75 \leq R < 100\%$ - very effective. The findings are as shown in Table 1.

Table 1. Teacher Effectiveness

1. < 50%	13	3.9	4.2	4.2
2. 50-74%	94	28.5	30.2	34.4
3. 75-100%	204	61.8	65.6	100.0
Total	311	94.2	100.0	

Key: 1. Ineffective; 2. Effective; 3. Very Effective

Therefore the findings in Table 1 indicate that out of the 311 respondents a majority 204(65.6%) scored between 75% and 100% as per the teacher assessment form indicating that they were very effective, 94 (30.2%) scored between 50 to 74 indicating that they were effective while a paltry 13 (4.2%) scored below 50% indicating that they were not effective.

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Attitude of teachers towards instructional resources

Attitude towards instructional resources were viewed under seven categories. This is shown in Table 2.

Table 2 : Attitude of teachers towards instructional resources

	SD	D	N	A	SA		
	F	F	F	F	F	μ	SD
Instructional resources are geared towards achieving communication and collaboration competency	21	40	10	129	111	3.86	1.224
Instructional resources geared towards achieving self efficacy	18	77	20	106	90	3.56	1.294
Instructional resources are geared towards achieving critical thinking and problem solving competency	17	48	80	117	49	3.43	1.096
Instructional resources are geared towards achieving creativity and imagination	41	67	29	144	30	3.18	1.251
Instructional resources are geared towards achieving citizenship values	61	41	28	117	64	3.26	1.433
Instructional resources geared towards achieving digital literacy competency	70	91	46	60	44	2.76	1.374
Instructional resources are geared towards achieving learning to learn	45	101	20	81	64	3.06	1.411
						3.301	1.298

KEY: SD= strongly Disagree, D=Disagree, N= Neutral, A= Agree, SA= Strongly Agree

The result obtained in Table 2 shows that teachers were in agreement that instructional resources geared towards achieving communication and collaboration competencies with a mean of 3.86, self efficacy had a mean of 3.56 whereas they indicated neutrality with regard to instructional resources geared towards critical thinking and problem solving with a mean of 3.43, citizenship values with a mean of 3.26, creativity and imagination with a mean of 3.18, learning to learn competencies with a mean of 3.06 and finally those geared towards achieving digital literacy competencies with a mean of 2.76.

From the 6th column of table 2, it is noted that the individual mean response (μ) for each listed item measuring attitude towards instructional resources was above 2.76. For majority, it was above 3.00 and the mean score for all stood at 3.301. On a scale of 1 to 5 from 'strongly disagree' to 'strongly agree', this means that the ratings in both cases were 'neutral' or 'not sure' implying that the respondents were 'neutral' when it came to how their attitude towards instructional resources in the early years education centers. According to standard deviation (SD) as shown in column 4, the responses to attitude towards instructional resources geared towards achieving citizenship values were most polarized (SD=1.433) while the responses to attitude towards instructional resources geared towards achieving critical thinking and problem solving competencies least polarized (SD=1.096) this implies that even though the means for all the items indicate they were rated neutral ($2.76 \leq \mu \leq 3.86$) with a mean response of only one item falling below 3.00, the spread of the responses from the mean of each item is varied. Never the less, given the scale, there was wide spread of responses as all the items were more than 1.0 point away from the mean. This implies that attitude towards instructional resources in the centers were neutral.

Influence of Teacher Attitude towards Instructional Resources on Teacher Effectiveness

From Table 1 respondents gave their responses regarding the level of availability of the 18 items listed as instructional resources, the study went further to carry out a correlation between availability of instructional resources and teacher

effectiveness.. A model of regression of the dependent variable (teacher effectiveness) on the independent variable (influence of teacher attitude towards instructional resources) was used as shown below.

$$TE = \beta_0 + \beta_1 T_1 + \varepsilon$$

TE= Teacher effectiveness, β_0 = Costant, β = Regression coefficient, T= Attitude towards Instructional resources, ε = residuals/error.

β_0 , β_1 , are the coefficients for constant, attitude towards instructional resources respectively.

Table 3: Influence of attitude towards instructional resources on teacher effectiveness

Correlations			
		TEA	TAIR
TEA	Pearson Correlation	1	.215
	Sig.(2-tailed)		.005
	N	311	311
TAIR	Pearson Correlation	.215	1
	Sig.(2-tailed)	.005	
	N	311	311
*. Correlation is significant at 0.05 level (2-tailed).			

Key: TEA= Teacher Effectiveness Assessment; TAIR= Teacher Attitude towards Instructional Resources.

The Pearson Product-Moment correlation result indicates a positive correlation between Attitude towards the Instructional Resources and teacher effectiveness. However, the analysis also revealed that this relationship is highly significant ($r=0.215$, $p\text{-value}=0.005 < 0.05$).

DISCUSSION

Eggen and Kauchak(2001) assertion that positive attitudes of teachers is fundamental to effective teaching. Kangori (2016) agrees with Eggen and Kauchak that attitude influences learners. Clark(2006) also agrees with the two authors that positive attitude towards new subject and content and teaching strategies can influence student attitude.

However, Kalhotra (2014) differs with the findings and concurs with the current study that there is no difference in attitude when it comes to teacher performance.

Teachers' attentiveness to the intellectual, social, emotional, and physical environments creates a classroom climate conducive to children engagement with the content and kills of the discipline (Ashman & Gillies, 2013). In terms of intellectual environment, teachers provide curriculum content in an organized and engaging manner and give children motivating and challenging practice so that they are able to do authentic tasks in the discipline. From the emotional aspect of classroom climate, teachers create an encouraging atmosphere where children feel safe taking risks, receive support when events intrude on learning, and believe they can succeed if they put forth effort. And teachers foster approachable and supportive social interactions with children and among children so that learning is a collaborative and not competitive endeavor.

The findings concur with those of Moyo, Wadesango and Kurebwa(2012) who established that early years education teachers had a positive attitude towards the early childhood education programme. This may be due to the fact that the former study looked at the whole programe in general while the current one was targeting the instructional resources and if it has any influence on their effectiveness. The findings also differ from that of Gikunda (2016) who found that teachers had negative attitude towards teaching geography, however the current study found that the relationship was highly significant when it comes to teacher effectiveness. It also differs from that of Trivedi (2012) who established that the primary school teachers attitude towards the teaching profession was high while those of secondary school teachers was very stable.

While Moyo et.al. (2012), Trivedi (2012) and Gikunda (2016) established positive and negative attitudes respectively with regard to teachers, the current study established that teachers' attitude is neutral towards instructional resources. Moyo et al studied early childhood the current study looked at an aspect of instructional resources in early years education. While Moyo et al, Trivedi and Gikunda only dealt with attitude of teachers the current study went a step further to establish if there existed any relationship between the attitude and teacher effectiveness of which it established that there was a positive correlation between attitude of teachers

towards instructional resources and teacher effectiveness and a highly significant relationship between the two. This implies that attitude towards instructional resources has a role to play with regard to teacher effectiveness.

The study went further to carry out multiple regression analysis with the following: availability of instructional resources , relevancy of instructional resources , adequacy of instructional resources , frequency on use of instructional resources , attitude towards the instructional resources.

CONCLUSIONS

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

- (i) Majority of teachers in Siaya County were very effective.
- (ii) Teachers in Siaya County held neutral attitudes towards instructional resources in the early years education center.
- (iii) There is a weak positive correlation between teacher attitude towards instructional resources and teacher effectiveness.
- (iv) The relationship between attitude of teachers towards instructional resources and teacher effectiveness is highly significant at ($r=0.215$, $p\text{-value}=0.005>0.05$)

RECOMMENDATIONS

Based on the findings the study has the following recommendations;

- i) There is need to sensitize the teachers on the need to have favorable attit/ude towards instructional resources and their use in the classrooms.
- ii) The need to provide a conducive environment and provide the required instructional resources for teachers to improve on their performance.
- iii) The need to encourage them by creating a favorable environment for creativity and innovativeness so as to improvise their own instructional resources.

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