



RELATIONSHIP BETWEEN RELEVANCE OF INSTRUCTIONAL RESOURCES AND EFFECTIVENESS OF TEACHERS OF LITERATURE IN SECONDARY SCHOOLS IN NYAKACH, KISUMU COUNTY, KENYA

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ABSTRACT

One of quality education predictors is teacher effectiveness. This occurs when teachers utilize relevant instructional resources. Studies have established that relevance of instructional resources makes environment conducive for learning and therefore contributes immensely to the effectiveness of the teachers in the learning process. In Nyakach Sub-County, concerns have been raised on the effectiveness of teachers with regard to the relevance of instructional resources in use during the learning process. This article therefore, purposed to establish the relationship between the relevance of instructional resources on teacher effectiveness during the teaching of Literature lessons. The study is conceptualized on the effect of the interaction between Independent Variable (Instructional resources-relevance of instructional resources) and Dependent Variable (Teacher effectiveness). Correlational and descriptive survey designs were adopted; target population was 140 high school teachers teaching Literature and 52 High school principals while the sample was 42 teachers of Literature and 17 principals. Systematic random sampling and purposive sampling techniques was used to select Teachers and principals. Data collection instruments were Classroom Observation Guide (COG), Teacher Questionnaire (TQ) and Head of Institution interview schedule (HOIS). Reliability was established by piloting 10% of the population using test-retest method. Chronbach's alpha was used to determine instruments' reliability with COG and TQ coefficients being 0.833 and 0.797 respectively thus considered reliable. Face and content validity were ascertained by experts. Analysis was done through descriptive and inferential statistics. These were by means, standard deviation and multiple regression. Findings indicated that level of relevance towards instructional resources has significant relationship at, ($r=0.215$, $p\text{-value}=0.0005<0.05$) with regard to teacher effectiveness. The study concludes that instructional resources were irrelevant and level of relevance has statistically significant relationship with teacher effectiveness. This means that provision of instructional resources should focus more on level of relevance. These findings may be useful to principals, teachers and curriculum developers in making informed decision with regard to the provision of relevant instructional resources in secondary schools.

KEYWORDS: Relationship, Relevance, Instructional Resources, Effectiveness, Teachers of Literature

INTRODUCTION

The quality of teaching is often defined in terms of what happens to learners after a learning experience. It is what learners are able to do after being taught that provides a valid measure of the quality of teaching and therefore teacher effectiveness.

Cheng' and Tsui (1999) explain that a new conception of teacher effectiveness research is based on 7 models: (a) goal and task-emphasizes teachers personal achievement goals and tasks and school goals; (b) resource utilization-requires teachers effective use and procurement of school resources to achieve goals; (c) process-stresses teachers' contribution to effective teaching and school process; (d) school constituencies satisfaction- expects teachers to meet the needs of their students, parents, school, and community; (e) accountability-focuses on teachers' accountability and professional reputation; (f) absence of problems-requires teachers to identify and avoid potential problems, weakness, dysfunction, and crises; and (g) continuous learning

emphasizing teachers' awareness of environmental changes and continuous improvement and development. Teaching and learning process. This means that the teacher has to interact with the teaching aids or resources for learning to take place.

Dodge (2002) asserts that developmentally appropriate instructional resources, materials and equipment entail that teachers use age appropriateness as the baseline for selection, supplying, furnishing and improvising equipment, while also keeping in mind the unique needs of individual children. Instructional resources that are age appropriate also have less potential for causing harm. The safety and relevancy of instructional resources is particularly relevant for learners at all levels.

Ajoke (2017) evaluated the importance or relevance of instructional materials in teaching English language as a second language among secondary school students. The performance of students taught with instructional materials and gender influence in the use of teaching aids in English



classroom were evaluated. Findings reveal that the performance of the secondary school students not taught with the use of instructional materials was very poor. Findings also reveal that there was no significant difference in the performance of students in English language or on the basis of gender or school type.

Muthima and Mutinda (2015) assessed the quality of teaching and learning resources provided to public primary schools by the tuition funds allocated by the Free Primary Education (FPE) programme in Kenya. Five of the items supplied by the programme (relevant textbooks, blackboards, chalk, duster and stationary for students) were found to be significant $P < 0.05$ adequate and high quality or very relevant, while the remaining four (reference books, adequate class books, resource center and equipment found in resource centers were found to be of low quality or irrelevant.

Waseka (2017) indicates that it is important to use appropriate physical facilities and equipment as well as qualified teaching staff. She goes further to suggest that there is need to develop relevant teaching and learning resources.

Purpose of the Study

The purpose of this study was to assess the relationship between the relevance of instructional resources and effectiveness of teachers of Literature in selected secondary schools Nyakach Sub-County, Kisumu County, Kenya.

Research Hypothesis

There is no relationship between relevance of instructional resources and effectiveness of teachers of Literature in secondary schools in Nyakach Sub-county, Kisumu County, Kenya.

METHODOLOGY

Research Design

Therefore this study used correlational and descriptive survey research designs. Descriptive Survey is a research design 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. While correlation was used to establish the relationship or association between two or more variables. In this case the relationship between Instructional resources and effectiveness of teachers of Literature.

Population and Sample Size

The study population included teachers, school principals in charge of secondary school in Nyakach Sub-County of Kisumu County. There were 140 teachers and 52 secondary school principals. About teachers' sample, 30% of the 140 teachers using Memon et. al (2019) formula yielded a total of 42 teachers derived from the 17 selected schools. Based on this, the researcher purposively selected two teachers of literature in English taking form 3 and 4 classes. Altogether, a total of 18 schools and 42 teachers of literature were involved in the study.

Data Collection

The study used three instruments for data collection namely: Classroom Observation Guide (COG), Teacher Questionnaire (TQ), HOI (Head of Institution) Interview Schedule (HOIIS) The (COG) had 4 sections; Section 1-Introduction (maximum 21 marks), section 2 - Presentation (maximum 56 marks), section 3- conclusion (maximum 21 marks) and section 4- Classroom Organization & Management (maximum 2 marks). The tool was modified to accommodate more instructional resources aspects during the instruction, presentation and conclusion of the lesson. Therefore the awarding of scores per section was also modified. The tool was meant to be used during lesson observation to obtain information on the following: Ability to select resources, timing during use, competency in use, ability to determine durability and safety, attractiveness and visibility. Teachers Questionnaire (TQ) The questionnaire for teachers was used to collect data on their gender, experience, academic qualifications and frequency of use of instructional resources. The instrument had a total of five (5) items. The first four items 1-4, dealt with demographic information of the respondents while item 5 was developed into rating scales where responses were elicited on 5-point Likert scale with the following options: 1- Very Irrelevant, 2- Irrelevant, 3- Somewhat Relevant, 4- Relevant, 5- Very Relevant. Head of Institution Interview Schedule (HOIIS) was used together with other two instruments namely the COG and TQ. The questions were generated from the instruments. It had 8 open-ended questions. It was used to collect data regarding instructional resources and general teaching effectiveness.

INSTRUMENTATION

Validity of the Instruments

For the purpose of this study, both the face and content validity of the instruments were ensured. To ensure validity of the instruments, the initial drafts of the instruments were scrutinized by experts in questionnaire and observation guide construction who were required to check for all non-technical flaws in the instruments. Such inputs enhanced a thorough validation in order to ensure that the instruments actually measured what they were intended to measure in relation to the research hypothesis. Based on the suggestions and comments of these experts, the necessary corrections were made before the final version of the instruments were trial tested on a sample of 14 teachers who were not included in the actual study sample, in Nyakach sub-county Kisumu County, Kenya.

Reliability of the Instruments

The reliability consistencies of the Teacher Questionnaire (TQ) and Classroom Observation Guide (COG) were verified through examination of internal consistency of the measures. This was achieved by computing Cronbach's alpha (α) coefficients using the Statistical Package for Social Scientists (SPSS) version 24. The decision on instrument reliability was based on Frankel and Wallen's (2000) advice that reliability should be at least 0.70 and above. The classroom observation guide (COG) was at 0.797 while the teachers' questionnaire



(TQ) was at 0.833. The construct, content and criterion related validities were found to be adequate.

Data Collection and Analysis Procedure

The necessary data for this study were obtained from teachers and principals of the selected schools in the sub-county. After collection of data, questionnaire responses without corresponding responses to the classroom observation guide (COG) were discarded. The questionnaires were then collected for safe custody awaiting analysis. The researcher also requested for the opportunity to observe lessons to be taught by the respondents. Each teacher was to be observed in at least three different Literature lessons. The observation and data collection lasted for 1 school term. Data were analyzed using multiple regression at .05 level of significance.

RESULT AND FINDINGS

As per the Classroom Observation Guide (COG) scores, the teachers were awarded from the observations carried out in class. The tally for the six components observed under introduction, lesson presentation and conclusion were: ability to select resources, timing during use, competency in use, ability to determine durability and safety, attractiveness, visibility and improvisation skills 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 classroom observation guide had sections which were scored and the tallies given to understand the level of teacher effectiveness during the teaching of Literature lesson. 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

	Frequency	Percent	Valid Percent	Cumulative Percent
Below 50%=Ineffective	2	3.9	4.2	4.2
50 %- 74%=Effective	13	28.5	30.2	34.4
75%-100%= Very effective	27	61.8	65.6	100.0
Total	42	94.2	100.0	

Therefore the findings in Table 1 indicate that out of the 42 respondents majority 27 (65.6%) scored between 75% and 100% as per the Classroom Observation Guide (COG) indicating that they were very effective, 13 (30.2%) scored between 50 and 74 indicating that they were effective while a paltry 2 (4.2%) scored below 50% indicating that they were not effective.

The study also sought to establish the relevance of the instructional resources. The respondents were asked to indicate extent of relevance of the instructional resources they use during their teaching. They were given options for each of the items listed. The rating was from 1 to 5. The options were; very irrelevant, irrelevant, somewhat relevant, relevant and very relevant. The findings are shown in Table 2 below.

Table 2: Relevance of Instructional Resources

Instructional Resources	VR F(%)	R F(%)	SR F(%)	I F(%)	VI F(%)	VI F(%)	
						Mean	SD
Charts	00(00)	03(7.7)	13(31.2)	16(37.9)	10(23.2)	2.23	.894
Work cards	00(00)	00(00)	15(34.7)	17(40.5)	10(24.8)	2.10	.766
Manuals	00(00)	01(3.5)	13(30.1)	20(47.3)	08(18.6)	2.19	.774
Guidelines	00(0)	00(00)	14(33.1)	16(37.0)	12(29.9)	2.03	.794
Syllabi	00(00)	03(7.3)	11(25.5)	19(44.4)	10(22.5)	2.18	.805
Material dev. manual	00(00)	02(5.5)	10(23.2)	17(41.2)	13(30.2)	2.04	.868
Films	00(00)	00(00)	10(23.5)	23(55.6)	09(20.9)	2.03	.667
Video cassettes	00(1.9)	08(18.9)	08(18.0)	21(49.2)	05(13.8)	2.44	.991
Photographs	00(00)	00(00)	16(38.6)	15(35.0)	11(26.4)	2.12	.798
Cassette recorder	00(00)	03(5.5)	06(15.1)	26(62.1)	07(17.4)	2.09	.733
Computer	00(00)	06(13.2)	12(29.6)	14(33.1)	10(24.1)	2.34	1.025
Computer software	00(00)	00(00)	07(16.7)	24(57.9)	11(25.4)	1.93	.683
Valid N (list wise)						2.14	.8056

KEY: VR= Very Relevant=5, R= Relevant=4, SR= Somewhat Relevant=3, I=Irrelevant=2, VI= Very Irrelevant=1.



The results obtained in Table 2 show that teachers indicated the instructional resources were irrelevant at a mean of 2.14 while the individual mean is as follows; video cassettes (2.44), computer (2.34), charts (2.23), manuals (2.19), syllabi (2.18), photographs (2.12), work cards (2.10) cassette recorder (2.09), material development manual (2.04), films and guidelines (2.03) each, computer software (1.93). The highest mean being 2.44 which as an indicator of irrelevancy and the lowest mean being 1.93 which is also an indicator for irrelevancy.

From the 7th column in Table 2, it is noted that the individual mean response score (μ) for each of the items measuring level of relevance was above 1.93. For majority, it was above 2.00 and the mean score for all stood at 2.14. On a scale of 1 to 5 scored from 'very irrelevant' to 'very relevant', this means that the ratings in both cases the items were 'irrelevant' implying that respondents agreed that level of relevance of instructional resources is irrelevant in schools. According to standard deviation (SD) shown in column 4, the responses on computer were most polarized (SD=1.025) while those on films least polarized (SD=0.667) this implies that even though the means for all items indicate they were rated irrelevant ($1.49 \leq \mu \leq 2.44$) with mean response of 4 items falling below 2.00, the spread of the responses from the mean of each item were varied. Nevertheless, given the scale there was minimal spread of responses as only one item was more than 1.0 point away from the mean. This implies that the listed items were irrelevant more or less the same way in schools.

The above findings are corroborated by the school principals who revealed that education is so dynamic to the extent that changes in instructional resources have always got them off-guard. This is because of lack of ready cash to change with the times. One of the Principals P11 had this to say: *“Technological change is moving at a terrific speed and it is always difficult to be ahead due to the meager resources we have.”*

They also indicated that in reality their schools only get the so called 'relevant materials' after time has elapsed for them to be called relevant. Principal P6 quipped: *“The relevant resources only get to us later after a very long time.”*

However, on the positive note when asked to indicate how they ensured that relevant materials were availed to their teachers, they

had this to say. Principal P2 had this to say *“I always consult with our teachers on the kind of instructional resources they would wish to have in their classes.”*

The Principals indicated that they consult widely before availing the instructional resources. About 10 (55%) indicated that they consult with their teachers or staff, 03(20%) consult with the parents, 01(10%) indicated that they consult with experts and 15%(10) said they don't consult when it comes to availing relevant materials for their centers. This is a good indicator that majority of the center managers do consult when it comes to issues of instructional materials relevance.

The findings of this study concur with Muthima and Mutinda (2015) who established that instructional materials are irrelevant or rather the materials are of low quality. The current study also concurs with Seven and Engin (2020) who reported that the materials for use were irrelevant for use. This study also supports Ajoke (2017) who established that instructional resources were irrelevant however he goes further to add that irrelevant instructional resources affects the performance of students when teaching mathematics.

In this study, the joint venture of the listed items is more likely to impact in a practical situation than a single element in isolation. The level of relevance of the listed items revealed in the current study is envisaged to provoke stakeholders on the level of relevance of the instructional resources in our learning institutions.

The study went further to establish if there was a relationship between relevance of instructional resources and teacher effectiveness by using Pearson correlation coefficient. The results are shown in Table 3.

Regression model for the Relevance of Instructional resources and teacher effectiveness.

$$TE = \beta_0 + \beta_1 R_1 + \epsilon$$

Where:

TE = Teacher effectiveness

R_1 is Relevance of instructional resources β_0, β_1 , are the coefficients for constant and relevance of instructional resources respectively, ϵ = residuals/error.

Table 3: Correlation between Relevance of Instructional Resources and teacher effectiveness

Correlations

		Teacher effectiveness	Relevancy of the Instructional assessment Resources
Teacher effectiveness assessment	Pearson Correlation	1	.215**
	Sig. (2-tailed)		.000
	N	42	42
Relevancy of the Instructional Resources	Pearson Correlation	.215**	1
	Sig. (2-tailed)	.000	
	N	42	42

** . Correlation is significant at the 0.01 level (2-tailed).



The Pearson Product-Moment correlation result indicates a weak positive correlation between Relevance of the Instructional Resources and teacher effectiveness. In addition, the analysis also revealed that this relationship is highly significant ($r=-0.215$, $p\text{-value}=0.0005<0.05$). According the findings majority over 65% of the respondents indicated either the instructional resources being not relevant or they do not know about their relevancy. Less than 30% of the respondents were of the opinion that the instructional resources available were least relevant. Very few of the respondents less than 10% indicated that the instructional resources were either very relevant or relevant to their teaching.

DISCUSSION

The results in Table 1 reveals that most of the teachers are qualified and therefore effective are able to select resources, do proper timing during use, have competency in use, have ability to determine durability and safety, attractiveness, visibility and also possess improvisation skills. This findings are in tandem with Manduku (2019) who established that teachers were well qualified but were not using the resources in their teaching. Meaning that they were effective. This study also supports Popoola and Haliso (2009) who noted that teacher effectiveness is the ability of a teacher to instill knowledge and skills in students, as well as positively influencing the learners' behavior for a better living. On their part, Adeoye and Popoola (2011) link teacher effectiveness to the teacher's knowledge of subject matter, expertise and resourcefulness that enhance students' academic performance.

This study concurs with Momoh (2010) that relevant instructional resources have a significant effect in the teaching and learning, however he states that it impacts on the learners performance, this is the point of diversion with the current study which established that level of relevance of instructional resources has statistical significant with teacher effectiveness. Ajoke (2017) holds the same view that learners taught with irrelevant materials perform poorly.

Even though these studies Okobia (2011) Ouko (2004) Muthima and Mutinda (2015) and Seven and Engin (2020) investigated relevance of instructional resources they did not investigate the relationship between level of relevance of instructional resources and teacher effectiveness. This study also concurs with Okwara, Shiundu and Indoshi (2009) who asserted that instructional resources have an impact on pedagogy which directly touches on the teacher. On the other hand, Ajoke (2017) established that instructional resources were irrelevant, however it touched on the students and not the teachers as targeted by the current study.

The current study examined the level of relevance of instructional resources and its relationship to teacher effectiveness. On the same note, the current study also went a step further to establish if there was relationship between the level of relevance of instructional resources and teacher effectiveness of which it has established that there is a weak negative correlation while the relationship is highly significant. This implies that the relevance

of the level of instructional resources has an impact on teacher effectiveness.

Therefore, the contribution that this study makes to existing literature is by providing results on how combined or listed instructional resources would explain the relationship between level of relevance and teacher effectiveness. The joint listed items level of relevance within a learning institution is more likely to impact on teaching and learning when used than a single item in isolation. The level of relevance which is below the expected standards of instructional resources revealed in the current study is envisaged to awaken the stakeholders to be proactive keeping abreast with the dynamic nature of education and changing trends of instructional resources for teachers to improve on their efficiency.

Summary of Findings

The major findings are summarized below:

- i) Inferential statistics show that out of the 12 listed items, 4 items had a mean below 2.00 indicating generally these materials were irrelevant.
- ii) It was established that the level of relevance of instructional resources has a weak positive correlation with teacher effectiveness.
- iii) There is statistically significant relationship between relevancy of instructional resources and teacher effectiveness.

This gives the implication that the level of relevance of instructional resources positively impacts on teacher effectiveness. The positive correlation was contributed by the fact that the teachers attempted to improvise on what was available and considered irrelevant to be relevant for their lessons.

Recommendation

From the findings of this study, the following recommendations were reached:

- i) Given that the present study is limited to senior secondary schools in Nyakach Sub-County, similar studies could be carried out in other parts of the country to affirm or refute the conclusions reached.
- ii) Encourage consultations among stakeholders with regard to provision of relevant instructional resources for teachers in these centers.
- iii) The teachers be involved in the production and acquisition of the instructional resources to be used in these centers.

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