AVAILABILITY OF INSTRUCTIONAL RESOURCES AND THEIR EFFECTS ON EFFECTIVE TEACHING AND LEARNING OF HOME ECONOMICS IN JUNIOR SECONDARY SCHOOLS (JSS 3)

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ABSTRACT

The study examined the availability of instructional resources and their effects on effective teaching and learning of home economics in junior secondary schools (JSS 3). The study used ex-post facto research design. Two hypotheses were designed for the study. The study consist of 420 JSS 3 students from Calabar educational zone. The instrument for data collection were a well structured questionnaire. Population t-test analysis was used for the analysis. The findings revealed that the facilities of learning in home economics are significantly effective. The result in Table 1 shows that calculated t-value of 37.09 was found greater than the critical t-value of 1.98 at .05 levels of significance at 387 degree of freedom. While the result in Table 2 gave a significant t-value of 9.91. This value at .05 alpha level of significant and with 378 degree of freedom was found to be greater than the critical t-value of 1.98. With regards to the second hypothesis, it was found that teacher's level of usage of instructional materials significantly influences teacher's effectiveness.

KEYWORDS: *availability, instructional resources, effective teaching and learning, home economics, junior secondary schools.*

INTRODUCTION

Quality of education can only be achieved through quality of learning facilities within a given environment. Students often found studying in a conducive environment perform excellently well in their academics than students studying in lapidated environmental structures. However, an achievement of academic standard is easily attained through adequate provision of reading materials particularly for the pupils and secondary. But in a situation where there are discrepancies in pupil reading materials, the pupils suffer academic deficiency in majoring up with their equals in other schools.

Adeboyeje (2005), remarked that shortage of school and material resources as well as funds for the maintenance and operations in schools was one of the causes of industrial action embarked upon in 1982 by the Nigerian Union of Teachers. Rwanda Parliament, the Senate (2011), argued that, the major challenges that Rwandan system of education has to put up with at all levels include insufficiency of infrastructure, equipments and lack of didactic materials. Bizimana and Orodho (2014), states that, people including the Ministry of Education and teachers stress the scarcity of resources in education. He also point out that teachers on the other side link ineffective teaching and learning, ineffective classroom management and content delivery to this scarcity of resources.

The challenges of availability and adequacy of learning resources negatively affect teacher effectiveness in the use of teaching methods, high level of attention students, discipline and good academic outcome (Orodho, Waweru, Ndichu and Nthinguri, 2013). Woodford, Jackson, Gillard, Harley, Cranz, and Glennon (2003), considered resource as a useful or valuable possession or quality of a country, organization or person.

Coleman and Anderson (2001), viewed educational resources in two categories: (i). Resources that provide support services such as the running costs of the buildings, administration and management and, (ii). Resources that are used for operational purposes such as teaching and learning resources. NCERT (2005), postulate that teaching and learning resource are valued in three categories: objects and phenomena as materials, rock, raw materials; material on production stage and finished products, and plant and animal specimens. Among these resources are substance and tools for manufacturing organic and inorganic materials for experimentation during laboratory studies; looks at the experimental models, castings and globes; talks about the graphs, photographs, charts, maps, pictures diagrams and drawing. NCERT believe that when a school is well equipped with all the necessary materials there is every tendency that students' academic performances will improve. Due to availability of resource materials, the teachers often find it easy in teaching or impacting knowledge. But in a situation where all these items are lacking in a school both facilitator and the leaner suffers academic setback.

While, Sood (2000), argued more that minimum level, schooling would require a building; seats for children, adequate drinking water, and sanitation facilities, teaching material; teachers and provision for upgrading skills of teachers. He further states that any lack of these materials would jeopardize the schooling experience by making it ineffective. Adesina (2008) also observed that inadequate provision of educational facilities has contributed to poor performance of students.

Adeogun (1989) studied the relevance of instructional materials utilization and improvisation by teachers in secondary schools. The sample comprised 300 secondary school teachers randomly selected from 10 schools in Enugu educational zone. The questions to guide the study included:

1. How often do teachers improvise instructional materials?
2. How often do teachers utilize instructional materials?
3. To what extent do male and female teachers improvise instructional materials? (p. 89).

The instruments used for the study were two checklists containing 22 and 24 items respectively and it was administered directly to the respondents. The data analysis was done using chi-square and percentages statistical techniques. The result showed that 98% of the teachers do not improve nor utilize instructional material when teaching. It also showed that 94.33% teachers do not know how to use instructional materials like friezes, dioramas, roll graphs, electric boards and magnetic boards. It also found that more female teachers (76%) than male teachers (28.62%) tend to partially improvise and utilize instructional materials during teaching. 88% of the teachers claimed that most schools do not provide funds to teachers for production of materials while 63% claimed that teachers lack of skill accounted for non-utilization of instructional material. He concluded that non-improvisation and utilization of instructional material by teachers reduces teaching effectiveness and makes students to perform poorly in academics.

Eso (2003) studied school factors responsible for poor teacher effectiveness and academic achievement of students. His sample was drawn from seven secondary schools in Calabar Municipality. From the analysis of data, he identified the predisposing factors responsible for low academic achievement to include:

1. Lack of qualified and competent teachers.
2. Non-availability of teaching aids in most subject areas including Home Economics.
3. Poor motivation of both teachers and students (p. 125). He concluded that the level of adequacy of instructional material in schools influence teaching effectiveness and students academic achievement.

Gibson (2002) appraised the relevance of resource materials in schools. The sample comprised 300 students from five schools in Scotland who were categorized in five groups. He found that students who were taught with a variety of resource materials significantly performed academically better than those who were taught without resource material. He concluded that teaching-learning resources enable experiences, promotes learning and so increases teaching effectiveness.

Okafor (2007) evaluated the competence of social studies teachers in schools. He found that usage of teaching-learning material stimulates students' interest in learning, especially if the teacher uses different kinds of resources. He concluded that effective teaching and learning cannot be meaningful without adequate and appropriate use of resources materials.

Okpalla (2001) in an her study found that lack of modern and good learning facilities affect students' attitude towards learning and consequently his performance. He concluded that adequate teaching and learning aids are very essential in making deeper impressions on pupils.

From the review in this section, it is noted that the availability, adequate and appropriate usage of instructional resources affects teaching effectiveness and students learning. This assertion denotes its relevance in the teaching of Home Economics in secondary schools.

RESEARCH DESIGN AND METHODOLOGY

The study used ex-post facto research design. The design was appropriate since the independent variables under study, course content and behavioural outcomes have already existed in the individuals concerned.

In order to make for adequate and fair representation / representativeness of the target population by the sample, stratified random sampling technique was employed in selecting the subjects. To do this Calabar zone was stratified into three (3) administrative sub-zones, namely Calabar Municipality, Akpabuyo and Odukpani Local Government Areas. A total of six (6) schools were randomly selected out of 25 schools in Calabar Educational Zone through hat and draw (ballot) method. Thus in Calabar Municipality, the names of 18 secondary schools were written and folded in pieces of paper from where 4 schools were randomly picked. In Odukpani local government, the same 4 schools were written on pieces of paper from where one (1) was picked and the names of 3 schools in Akpabuyo were written on pieces of paper from where one (1) school was selected.

The sample used for the study was made up of 420 junior secondary class 3 students were selected from 6 out of the twenty-five secondary schools in the zone. This made it possible to select 35 boys and 35 girls from each school, thus fifty students from each school were selected and used for the study.

The instrument used for the study was questionnaire. A four-point Likert-type scale was specifically developed for this study. The questionnaire had two sections, A and B. Section A, was concerned with demographic information about the respondents' sex, age, class level and teachers educational qualification. Section B elicited information on adequacy of teaching facilities of mathematics. The combinations of these factors were deemed to represent students' evaluation on how effective the mathematics teacher was. The scale of preference for section B was a four-point Likert scale graduated from "Strongly Agree" to "Strongly Disagree" in which the respondent indicates his level of agreement about the statement.

The questionnaire was validated by submitting the items measuring the different variables to the supervisor as well as experts in Measurement and Evaluation in the University of Calabar for vetting. After series of modifications, a final approval was given for the retention of the instrument as adequately measuring the variables in this study. By so doing, the content and face validity of the questionnaire were assured.

To determine the reliability of the instrument, the researcher used a trial-test. In the trial-test, a total of thirty junior secondary class three students who were not part of the study sample were randomly selected and administered the questionnaire by the researcher. After three weeks, the instrument was re-administered to the same thirty students who had responded earlier to the questionnaire. The data collected from the first and second administration were compared with the use of Pearson Product Moment Correlation Coefficient technique to determine the test-retest reliability estimate of the instrument. The result of the analysis indicated close association of the items of the questionnaire with the variable involved in the evaluation.

The test-retest correlation coefficient (rrt) value obtained ranged between 0.59 to 0.89. These values were recognized as high and adequate for studies in social and behavioural sciences due to the complexity in human behaviour. However, the instrument was accepted as appropriate and suitable since it is consistent over time.

DATA ANALYSIS

Hypothesis 1: This null hypothesis speculated that the facilities of home economics in Cross River State are not significantly effective. To test this hypothesis, the population t-test analysis for single mean was used. The result showed a significant positive t-value for the effectiveness of facilities used in mathematics.

Table 1: Population t-test Analysis of level to which facilities of Home Economics are Effective

Variables	No of items	Expected Mean μ	Observed Mean x̄	SD	T
Facilities effectiveness of Home Economics	9	22.50	30.66	4.21	37.09*

*p< .05; df = 378; critical t = 1.98

A thorough examination of Table 1 reveals that the observed mean value of 30.66 was greater than the expected mean value of 22.50.

This result shows that the facilities of learning in home economics are significantly effective. The calculated t-value of 37.09 was found greater than the critical t-value of 1.98 at .05 levels of significance at 387 degree of freedom. The hypothesis was therefore rejected.

Hypothesis 2: The null hypothesis proposed that the teaching of home economics is not significantly effective given the availability and use of teaching facilities by teachers.

A population t-test was done to test this hypothesis. The variable ' involved here is the evaluations of the availability and use of teaching facilities. The expected (M) and observed mean (X) and standard deviations (SD) of the effectiveness of availability and use of teaching facilities were computed. The result of the analysis is presented in Table 2.

Table 2: Population t-test Analysis of Teaching Effectiveness of Home Economics in Terms of Availability and Use of Teaching Facilities (n = 380)

	No of items	Expected Mean μ	Observed Mean x̄	SD	T
Variables					
Teaching Effectiveness of home economics in terms availability and use of teaching facilities	9	22.50	24.78	4.54	9.91*

*P < .05; df = 378; critical t = 1.98

The result of the analysis gave a significant t-value of 9.91. This value at .05 alpha level of significant and with 378 degree of freedom was found to be greater than the critical t-value of 1.98. The null hypothesis was thus regarded. It was also observed in Table 2 that the mean value of 24.78 was greater than the expected mean value of 22.50. This result shows that teaching of home economics is significantly effective given availability and use of teaching facilities.

DISCUSSION OF RESULT

With regards to the second hypothesis, it was found that teacher's level of usage of instructional facilities significantly influences teacher's effectiveness. It showed that teachers' of home economics in Cross River State were perceived to teach home economics more effectively with the use of adequate instructional facilities.

This finding is supportive of earlier study by Adeogun (1989) on the relevance of instructional facilities utilization and improvisation by teachers. He found that non-utilization and improvisation of teaching facilities by teachers reduces teaching effectiveness and negatively affects students' academic achievement. In the same vein, Again Eso (2003) study found that the level of adequacy of instructional facilities in schools significantly influenced teaching effectiveness and student outcomes. Similarly Okafor (2007) study concluded that effective teaching and learning couldn't be meaningful without adequate and appropriate use of instructional resources. The plausible reason for the finding could be that when the teaching process is complemented with adequate instructional facilities, such as audio and visual aids, these will reinforce learning. Thus the teacher will capture interest and concentration since learning will be interesting and devoid of boredom through multifaceted presentation of facts. In the process, attitude of students to the subject will be positive while his academic achievement will be high. He will also view the teacher positively and see him as effective.

SUMMARY AND CONCUSION

Adequacy of instructional material also makes the work of the teacher easier. His concern will only be to use the facilities appropriately as a reinforcer of learning. It will go a long way to hide even teachers' deficiencies since the facilities convey most of the messages to the students. Consequently, little effort is expected of the teacher in order to be effective.

On the other hand, when the instructional facilities are inadequate, the teacher is constrained to paint pictures, with words as explanation of the concept for the students. It is obvious that stability in such lecturing or explanation will fluctuate according to the teacher's ability in making learners to variously perceive the explained concept differently. It is true that such explanation may tend to confuse instead of enlighten some of the students. The lack of audio and visual reinforces may make learning more tedious than necessary since learners are expected to exercise their imaginative potentials to associate concepts being explained by the teacher. It is obvious that learning becomes very cumbersome and tedious. This may result in anxiety, frustration, and loss of interest and poor perception of teacher effectiveness, which leads eventually to low academic achievement by student. In the same vein, inadequate instructional facilities affects the teacher also, since it makes the teaching job very difficult especially as teacher's word-power is called to question especially in situations where facilities usage would have been most appropriately used. The result is that he becomes less effective, despite his efforts to improve his teaching.

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