School Facilities and the Teaching of Home Economics in Secondary Schools in Uyo Local Government Area

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Abstract
The study was on “school facilities and the teaching of home economics in secondary schools in Uyo Local Government Area, Akwa Ibom State. The design of the study was ex-post facto research design. The area designated for the study was the public secondary schools in Uyo Local Government Area, Akwa Ibom State. The population of the study was 451 participants, consisting of 35 Home Economics Teachers and 416 Home Economics Students in 14 public secondary schools in Uyo Local Government Area. A total of 232 participants, made up of 35 teachers and 197 students were sample for the study. Cluster and simple random sampling were used. Uyo was clustered into four (4) Clans vis-à-vis Uyo, Etoi, Ikono and Offot. Thirty five (35) teachers were purposively sampled for the study, while 197 home economics students were sample using simple random sampling technique. The instrument used for data collection was a structured questionnaire designed by the researcher. The instrument was titled: School Facilities and the Teaching of Home Economics Questionnaire (SFTHEQ). The instrument was made up of two sections. Section one has three clusters (A-C). Cluster ‘A’ contains questionnaire items concerning classroom facilities, cluster ‘B’ contains item statements concerning laboratory facilities and Cluster ‘C’ contains questionnaire items concerning instructional facilities. Section two has 10 items relating to the dependent variable. The options were structured on a four-point rating scale of Strongly Agree (SA), Agree (A), Disagree and Strongly Disagree (SD). The instrument was validated by three experts in the Department of Vocational Education. The reliability of instrument was tested using Cronbach’s Alpha reliability test. The reliability coefficients were classroom facilities .81, laboratory facilities .78 and instructional facilities .84. The overall coefficient was .82. The null hypotheses were tested using simple linear regression at .05 level of significance. The findings revealed that classroom facilities, laboratory facilities and instructional facilities relate with the effective teaching of home economics in Uyo Local Government Area. It was recommended among others that the Ministry of Education should provide standard facilities for effective teaching of Home Economics in secondary schools in Akwa Ibom State.

Keywords: classroom facilities, laboratory facilities, instructional facilities, Home Economics, Teaching.

Introduction
Home Economics is a subject as well as a group of related disciplines that addresses the everyday world of individuals and families by focusing on the provision of food, shelter and clothing within the domestic economy. The mission of home economics is the promotion of individual and family wellbeing. The family is the main focus. There are five main core areas that are commonly known as the main components of home economics. These are: food and nutrition, clothing and textiles, human development, family studies, and housing and environment. The definition for home economics adopted during the fourth Lake Placid conference in 1902 cited in Henry (2005) was: "Home
economics is the study of the laws, conditions, principles and ideas concerned with man's immediate physical environment and his nature as a social being. The content of home economics is non-static and multi-dimensional in order to provide for adequate knowledge to cope with changes in the family as well as the environment at large. Home economics is a unique area of study because it requires the integration of knowledge drawn from the arts, the pure sciences as well as from the social sciences in order to be able to solve the various issues facing the family. In view of this, Henry (2005) defined home economics as "a multi-faceted, interdisciplinary, integrated field of study drawing from a multitude of disciplines including sociology, psychology, anthropology, chemistry, physics, architecture and the arts." There are a number of issues which have been identified as affecting the teaching of home economics in schools today. Some of the issues include but not limited to classroom management, laboratory, instructional facilities, public perception, teacher’s pedagogy, etc.

Classrooms are very important infrastructure in an educational system (Awodi 2005). But one of the problems Home Economics programme is facing in some of the present tertiary institutions in Nigeria today is lack of adequate classroom blocks. Despite the demands of National Commission for Colleges of Education (N.C.C.E) to meet accreditation requirement of standard floating classroom blocks, for every functional Home Economics programme in tertiary institutions, the reverse is still the case. Most tertiary institutions combine the laboratory and classroom together for both teaching and practical. It is difficult to differentiate a classroom from laboratory in an institution these days. One could notice is just the name Home Economics labeled on the block of the building to show that Home Economics also exists in that school. The block cannot be identified to be neither classroom nor a laboratory. This affects effective teaching and learning of this course—Home Economics.

Physical classroom environment refers to the physical room in which teacher and learners are the main element including its spatial elements i.e., floor, windows, walls as well as other classroom equipment i.e., desks, chairs, rugs, chalkboards, tack boards, easels, counters and computer equipment but not limited to these things (Fisher, 2008). Physical environment can affect students’ comfort and also their ability to learn to some extent. Students who are comfortable are likely to get much information as compared to those who are uncomfortable. Besides, the physical atmosphere can also affect the morale of the learners. Unfavorable classroom environment can discourage the learners and they become less willing to learn Taylor and Vlastos (2009).

Physical environment plays a central role in any activity and makes it more conducive, successful and achievable. According to Oni (2002), physical facilities compose a strategic factor in the operation and functioning of an organization as they determine the excellent performance of any social organization or system including education. Physical facilities are one of the stimulating factors that play a fundamental role in improving academic achievement in the school system. These include; school buildings, accommodation, classrooms, libraries, furniture, laboratories, recreational equipments, apparatus and other instructional materials. Furthermore, their availability, relevancy and sufficiency affect academic achievement positively. On the other hand, poor school buildings and overcrowded classrooms affect academic achievement negatively. Taylor and Vlastos (2009) found the relationship between environment and design within the classroom from a theoretical perspective. They found that physical environment of the classroom acts as “Silent curriculum”. It means that classroom environmental design can facilitate and improve the learning process like the overt curriculum.

The Laboratory is seen as the focal point for science oriented course as Home Economics education. According to Awodi (2005), the realities of school laboratories in Nigeria have been that there is either no laboratories or the few available are ill-equipped. This problem is also applicable to Home Economics education. Most tertiary institutions in Nigeria, particularly Akwa Ibom State that offers Home Economics seems to have shortage of laboratory. Researchers such as Soyibo (2006), Ezike
(2006) and Olayiwola (2009), confirmed there is shortage of laboratories in Nigerian secondary school. In some tertiary institutions, there is no Home Economics laboratory to encourage practical skills acquisition. This hinders the effective teaching and learning of Home Economics education in Nigeria.

There is no specific laboratory assigned for Clothing and Textiles, Food and Nutrition, Home Management and Child Development (Awodi, 2005). Due to this inadequacy of lack of laboratories, majority of these institutions have problem of inadequate equipment and instructional materials. This is because, if an institution lacks a laboratory for such a vocational course as Home Economics, how then would such challenge to equip the department, how and where would such equipment be installed for use and safety? The present Nigerian educational system calls for adequate provision and utilization of instructional materials, especially science and vocational subjects such as Home Economics education. Instructional materials have astonishing power of attracting and holding students attention. Colley (2002) supported this fact when he said 'students' interest can be captured and learning is facilitated when appropriate facilities are used in conjunction with the teachers' presentation'.

Writing on the importance of instructional materials in teaching, Colley (2002) stated that instructional materials can help the students grasp relationships, pick out similarities and differences so that they are led to generalize, discriminate and organize their knowledge. According to Colley (2002), the teacher who makes a balance appeal to the sense by using verbal, visual and practical methods is accommodating students' individual differences. Etim (2006) asserted that the production, adequate and effective use of instructional media would bring about expected improvement in quality of education. For the teaching and learning processes to be successful in the school system, teachers cannot do without production and utilization of instructional materials for motivational purposes. Etim (2006) further opined that teachers should be able present their lessons using appropriate instructional media. Akpan (2005) posited that instructional materials should match the learners’ characteristics content, behavioural objectives, instructional approach and evaluation techniques.

Statement of the Problem
The Home Economics programme is designed to help youths and adults to develop competencies and apply the knowledge on the community to improve the quality of family living and enhances self-reliance. Therefore, the need for standard facilities to enable effective teaching and learning of this course is paramount. There are myriad of problems confronting functional implementation of Home Economics programmes such as infrastructural facilities, shortage of qualified teachers, inadequate funding and public apathy towards Home Economics education. With all these factors brought to focus, this paper seeks to investigate school facilities and the teaching of Home Economics in secondary schools in Uyo Local Government Area.

Purpose of the Study
The main objective of this study is to determine the relationship between school facilities and the teaching of Home Economics in secondary schools in Uyo Local Government Area. The specific objectives of this study are to determine the relationship between:
1. classroom facilities and the teaching of Home Economics in secondary schools.
2. laboratory facilities and the teaching of Home Economics in secondary schools.
3. instructional facilities and the teaching of Home Economics in secondary schools.

Research Questions
This paper answers the following research questions.
1. What is the relationship between classroom facilities and the teaching of Home Economics in secondary schools?
2. What is the relationship between laboratory facilities and the teaching of Home Economics in secondary schools?
3. What is the relationship between instructional material and the teaching of Home Economics in secondary schools?

Research Hypotheses
The following null hypotheses were formulated to guide the study and tested at 0.05 level of significance.

$H_0_1$: There is no significant relationship between classroom facilities and the teaching of Home Economics in secondary schools.

$H_0_2$: There is no significant relationship between laboratory facilities and the teaching of Home Economics in secondary schools.

$H_0_3$: There is no significant relationship between instructional facilities and the teaching of Home Economics in secondary schools.

Methodology
The design of the study was ex-post facto research. The area designated for the study was the public secondary schools in Uyo Local Government Area, Akwa Ibom State. The population of the study was 451 participants, consisting of 35 home economics teachers and 416 home economics students in 14 public secondary schools in Uyo Local Government Area. A total 232 respondents were sample for the study using Taro Yamane Formula. Cluster sampling was used. Uyo is clustered into four (4) Clans vis-à-vis Uyo, Etoi, Ikono and Offot. Thirty five (35) Home Economics Teachers were purposively sampled for the study, while 197 Home Economics Students were sampled using simple random sampling technique. The instrument used for data collection was a structured questionnaire designed by the researcher. The instrument was titled: School Facilities and the Teaching of Home Economics Questionnaire (SFTHEQ). The instrument was made up of two sections. The instrument was made up fifteen (15) items on school facilities variables, namely: classroom facilities, laboratory facilities and instructional facilities. The questionnaire has two parts. Part one has three clusters (A-C). Cluster ‘A’ contains questionnaire items concerning classroom facilities, cluster ‘B’ contains item statements concerning laboratory facilities and Cluster ‘C’ contains questionnaire items concerning instructional facilities. Part two has 15 items relating to the dependent variable (J). The options were structured on a four-point rating scale of Strongly Agree (SA), Agree (A), Disagree and Strongly Disagree (SD). The instrument was validated by two experts in the Department of Vocational Education. The reliability of instrument was tested using Cronbach Alpha reliability test. The reliability coefficients were classroom facilities .81, laboratory facilities .78 and instructional facilities .84. The overall coefficient was .82. The statistical tool employed to test the null hypotheses at 0.05 level of significance was simple linear regression. The decision concerning the hypotheses is whenever the calculated F-value was greater than the critical F-value, the null hypotheses was rejected and also whenever the calculated F-value was lesser than the critical F-value, the null hypotheses was accepted.

Results
Research Question 1: What is the relationship between classroom facilities and the teaching of Home Economics in secondary schools?

Table 1: R and $R^2$ of the relationship between classroom facilities and the teaching of Home Economics in secondary schools

<table>
<thead>
<tr>
<th>Variables</th>
<th>R</th>
<th>R-</th>
<th>Adj. R-square</th>
<th>Std. Error</th>
</tr>
</thead>
</table>


The result presented in Table 1 reveals that the R-value of .760 is the strength of the relationship between classroom facilities and the teaching of Home Economics in secondary schools, while the R² – value of .577 indicates that classroom facilities influences teaching of Home Economics in secondary schools by 57.7%.

**Research Question 2:** What is the relationship between laboratory facilities and the teaching of Home Economics in secondary schools?

**Table 2:** R and R² of the relationship between laboratory facilities and the teaching of Home Economics in secondary schools

<table>
<thead>
<tr>
<th>Variables</th>
<th>R</th>
<th>R-square</th>
<th>Adj. R-square</th>
<th>Std. Error</th>
</tr>
</thead>
<tbody>
<tr>
<td>Laboratory Facilities</td>
<td>.556</td>
<td>.309</td>
<td>.306</td>
<td>3.096</td>
</tr>
</tbody>
</table>

The result presented in Table 2 reveals that the R-value of .556 is the strength of the relationship between laboratory facilities and the teaching of Home Economics in secondary schools while the R² – value of .309 indicates that laboratory facilities influenced the teaching of Home Economics in secondary schools by 30.9%.

**Research Question 3:** What is the relationship between instructional material and the teaching of Home Economics in secondary schools?

**Table 3:** R and R² of the relationship between instructional material and the teaching of Home Economics in secondary schools

<table>
<thead>
<tr>
<th>Variables</th>
<th>R</th>
<th>R-square</th>
<th>Adj. R-square</th>
<th>Std. Error</th>
</tr>
</thead>
<tbody>
<tr>
<td>Instructional Material</td>
<td>.551</td>
<td>.304</td>
<td>.301</td>
<td>3.107</td>
</tr>
</tbody>
</table>

The result presented in Table 3 reveals that the R-value of .551 is the strength of the relationship between instructional material and the teaching of Home Economics in secondary schools, while the R² – value of .304 indicates that instructional material influenced the teaching of Home Economics in secondary schools by 30.4%.

**Testing of Null Hypotheses**

**Research Hypothesis 1:** There is no significant relationship between classroom facilities and the teaching of Home Economics in secondary schools.

**Table 4:** Simple linear regression analysis of the Relationship between Classroom facilities and the teaching of Home Economics. *n=232*

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
</table>

**Table 4:** Simple linear regression analysis of the Relationship between Classroom facilities and the teaching of Home Economics. *n=232*
The result in Table 4 shows that the calculated F-value of 313.719 is greater than the critical F-value of 3.84 at .05 level of significance with 1 and 230 degrees of freedom. The result is significant; therefore the null hypothesis that there is no significant relationship between classroom facilities and the teaching of Home Economics in secondary schools was rejected. This result implies that there is a significant relationship between classroom facilities and the teaching of Home Economics in secondary schools in Uyo.

**Research Hypothesis 2:** There is no significant relationship between laboratory facilities and the teaching of Home Economics in secondary schools

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>986.784</td>
<td>1</td>
<td>986.784</td>
<td>102.978</td>
<td>.000^b</td>
</tr>
<tr>
<td>Residual</td>
<td>2203.971</td>
<td>230</td>
<td>9.582</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>3190.754</td>
<td>231</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The result in Table 5 shows that the calculated F-value of 102.978 is greater than the critical F-value of 3.84 at .05 level of significance with 1 and 230 degrees of freedom. The result is significant; therefore the null hypothesis that there is no significant relationship between laboratory facilities and the teaching of Home Economics in secondary schools was rejected. This result implies that there is a significant relationship between laboratory facilities and the teaching of Home Economics in secondary schools in Uyo.

**Research Hypothesis 3:** There is no significant relationship between instructional facilities and the teaching of Home Economics in secondary schools.

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>969.761</td>
<td>1</td>
<td>969.761</td>
<td>100.426</td>
<td>.000^b</td>
</tr>
<tr>
<td>Residual</td>
<td>2220.993</td>
<td>230</td>
<td>9.656</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>3190.754</td>
<td>231</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The result in Table 6 shows that the calculated F-value of 100.426 is greater than the critical F-value of 3.84 at .05 level of significance with 1 and 230 degrees of freedom. The result is significant; therefore the null hypothesis that there is no significant relationship between instructional facilities and the teaching of Home Economics in secondary schools was rejected. This result implies that there is a significant relationship between instructional facilities and the teaching of Home Economics in secondary schools in Uyo.
Summary of Findings
The following were the findings of this study.
1. There is a significant relationship between classroom facilities and the teaching of Home Economics in secondary schools.
2. There is a significant relationship between Laboratory facilities and the teaching of Home Economics in secondary schools.
3. There is a significant relationship between instructional facilities and the teaching of Home Economics in secondary schools.

Discussion of Findings
The result of hypothesis one revealed that there is a significant relationship between classroom and the teaching of Home Economics in secondary schools. This is in line with the assertion of (Awodi, 2005) who posited that classrooms are very important infrastructure in an educational system. Taylor and Vlastos (2009) observed that unfavorable classroom environment can discourage the learners and they become less willing to learn.

The finding of hypothesis two revealed that there is a significant relationship between laboratory facilities and the teaching of Home Economics in secondary schools. Soyibo (2006), Ezike (2006) and Olayiwola (2009), confirmed there is shortage of laboratories in Nigerian secondary school. This is a pointer to ministry of education to ensure adequate provision of home economics laboratory for the students.

The result in hypothesis three revealed that there is a significant relationship between instructional facilities and the teaching of Home Economics in secondary schools. Colley (2002) supported this fact when he said 'students' interest can be captured and learning is facilitated when appropriate facilities are used in conjunction with the teachers' presentation Etim (2006) asserted that the production, adequate and effective use of instructional media would bring about expected improvement in quality of education.

Conclusion
Based on the findings it was concluded that school facilities are prerequisite in the effective teaching and learning in secondary schools. When adequate and contemporary facilities are provided in school, the teachers will teach effectively and the students would learn skills that make them self reliance.

Recommendations
Based on the foregoing, the following, recommendations are proffered:
1. Ministry of Education should provide good facilities for the teaching of Home Economics in Akwa Ibom State.
2. Ministry of Education and corporate organisations should make home economics laboratory attractive and standard, so as to develop entrepreneurial skills in the students.
3. Ministry of Education should recruit skillful and competent teachers in Home Economics.
4. Teachers of Home Economics should make improvisation of instructional materials to make learning interesting and attractive.

References

the 3rd annual national conference of the school of sciences, college of education, Oju
27-29th April.


Publications Co.

Ezike, E. G. (2006). The student under-achievement in science, who is to blame? *JSTAN 14*, (2)
137-142

Fisher, E. S. (2008). The Effect of the Physical Classroom Environment on Literacy Outcomes:
How 3rd Class Teachers use the Physical Classroom to Implement a Balanced Literacy
Curriculum. A Thesis presented to the Faculty of the Graduate School University of
Missouri

*JSTAN 34*. (1&2), 166-169

Oni, J.O. (2002). Resource and Resource Utilization as Correlates of School Academic

science. *JSTAN 34*. (1)80-87

learning Environments*. Albuquerque: University of New Mexico Press.