



Effects of Individualistic Instructional Strategies on Students Performances in Home Economics in Uyo Education Zone

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Abstract

This study was to investigate the effect of individualistic instructional strategy on Students' performance in Home Economics in secondary School in Uyo Local Education Committee. To guide the study, two specific objectives, two research questions and two null hypotheses were formulated. Pre-test pro-test non-randomized controlled group design was adopted for the study. The study covered Uyo Educational Committee of State Secondary School Board. The population for the study comprised 1889 Home Economics Students. The sample size for the study was 164 students using Criterion Sampling techniques at intact classes. Two researcher developed instruments named Home Economics Performance Test (HEPT) and Home Economics Ability Test (HEAT) were used to generate data for the study. The research instruments were validated by 3 experts and had reliability co-efficient of .81 and .76 respectively using test-retest Strategy and Kudar Richardson formular 21. Mean, t-test and Analysis of co-variance (ANCOVA) were used to analyze the data obtained. The findings of the study revealed that there was no significant difference in Academic Performance of Home Economics Students in urban and Rural Schools exposed to Individualistic Instructional Strategy. However, there was a significant difference in Academic Performance of Home Economic student with high, medium and low ability levels exposed to Individualistic Instructional Strategy and that Individualistic Instructional Strategy enhanced academic performance of low ability students. It was therefore recommended from the study that Home Economic teachers should be retrained on effective use of Individualistic Instructional Strategy by State Secondary Education Board, Individualistic Strategy should be used by teachers in Urban and Rural Schools to enhance the academic performance of low ability students.

Keywords: Individualistic Instructional Strategies, Students Performance, Home Economics,

Introduction

Home Economics is very important to individuals and families. It raises the level of living and improves the quality of lives. It also contributes to economic stability and national development. It is in recognition of this that the Nigerian system of education is geared towards producing individuals who will not only possess the capability to solve their problems but also contribute to the development of the society.



It is in the light of this that Ogwa (2002), posited that teaching strategies are vehicles that carry the objective of a lesson in such a way that it could make the learner acquire the needed knowledge and skills at the end of the lesson. Inability to use appropriate instructional strategies in the classroom may have negative effects on the performance of out of school students. A teacher that is conversant with the use of appropriate instructional strategies such as collaborative and individualistic strategies and their applications would facilitate effective teaching and learning of Home Economics (Ikutal, 2005).

Mc Connel (2009), observed that, high student's performances are better achieved if the learners are involved in problem-solving. Basse (2010) maintained that, to stimulate and revive students' interest in the various school subjects, for higher performances, the right type of instructional strategies must be used in such a way that, it stimulates students ability, skills development and improve their performances. Individualistic Instruction assumes that, learners work in isolation. It is based on the fact that learning is impersonal and that individuals can learn on their own.

When an instructional process results in the learning or achievements of one student, separate and independent of the achievement and learning of other students in the class, it is referred to as individualistic instructional strategy. According to Salome and Perkins (2001), cognitive skills cannot be transferred to the learner under this strategy. The students' work in isolation and are not expected to be interrupted by peers. However, learning resources are organized in such a way that each student can have immediate access to the appropriate resource materials needed (Nwokocha, 2006).

The individualistic strategy is called "Solo" that is, it is only beneficial to the individual in that sense. Here, an individual is independent in his study and has self confidence devoid of others. Thus, resulting in the increase of one's ego and improvement of self-esteem. Students working independently in classroom promotes individualistic instructional approach, and the achievement of others is irrelevant to their success. It exists when a student or individual sits, work and has individual study or individual drill. Individualized teaching also refers to a situation where the student gets primary control over what he studies (Salome and Perkins, 2001).

Individualistic instruction can be based on the following: Individually Prescribed Instruction (IPI), Self Directed Learning (SDL), Personalized Instruction (PI) and Independent Study (IS). The fundamental principle of individualistic or programmed instruction is that the learner's progress can be consistently guided through evidence of his performance. This strategy emphasized the need to care for individual variations. Mang and Mankitink (2001), opined that until an individualized performance is established, one never realize how futile it is to be teaching a group of students' the same material merely because they are of the same age. Mckeachie (2006), emphasized that students' acquisition of critical thinking skill and meta cognitive learning are less prevalent here.



Statement of the Problem

The researcher had observed that, some teaching strategies adopted by teachers seem to make the learners passive listeners without active involvement in their own learning. This sometimes encourages the student to develop negative attitude and split interest towards Home Economics learning. The negative attitude may subsequently affect students' academic performances. These trend seem to drive away many students from studying Home Economics in our schools.

The researcher had also observed that, one of the criteria used in qualifying a school as being good is the performance of the students in external examinations. It is observed that the secondary school curriculum emphasizes the provision of adequate orientation for the integration of Home Economics with productive work at school and for the future. Unfortunately, these objectives which are to help students prepare themselves for home and family living and provision of experience for Home Economics employment still remain unrealized.

It is generally observed that prominent factors contributing to persistence students' dwindling performances in Home Economics includes lack of infrastructures, poor teaching materials, lack of professionally qualified teachers, and lack of appropriate instructional strategies for problem solving. The use of inappropriate teaching learning strategies in Home Economics and lack of involvement of students in the learning activities encourages memorization and regurgitation of facts only during examinations. The study therefore is to investigate the effects of individualistic instructional strategies on students' performance in Home Economics in Uyo Educational Zone.

Purpose of the Study

The purpose of this study is to find out the effect of individualistic instructional strategies on students' academic performance in Home Economics. Specially, the study sought to:

1. Determine the effect of individualistic instructional strategies on students' academic performances in Home Economics based on schools location.
2. Determine the effects of individualistic instructional strategies on students' academic performances in Home Economics based on students' ability levels.

Research Questions

The studies sought answers to the following research questions:

1. What are the effects of Individualistic instructional strategies on students' academic performances based on rural and urban locations?
2. What are the effects of individualistic instructional strategies on students' academic performances in Home Economics based on high, medium and low ability levels?

Research Hypotheses

The following null hypothesis were formulated and tested at $P < .05$ level of significance.



- Ho₁ There is no significant difference in the performance of Home Economics students in rural and urban schools exposed to individualistic instructional strategy.
- Ho₂ There is no significant difference in the academic performance of Home Economics students with high, medium and low ability levels when exposed to individualistic instructional strategy.

Methodology

The study adopted the pre-test, post-test, non randomized control group design. The area of the study was Uyo Education Zone which comprised 13 public secondary schools. One single sex School and 12 co-educational schools. Nine schools in the urban and four schools in the rural areas.

The population of the study comprised all the 1,889 JSS2 Home Economics Students (784 males and 1,105 females) in Uyo Education Zone (Planning, Research and Statistics Department State Secondary education Board, 2013).

One hundred and sixty-four (164) JS II Home Economics students constitute the sample size. In fact class method was used to select the sample size. Two instruments were used to generate data to the study. Home Economics Performance Test (HEPT) and Home Economics Ability Test (HEAT. The Home Economics Performance Test was developed on food nutrients and had 20 multiple choice items developed using A to D options. The students were to choose the letters that bear the correct answers. The Home Economics Ability Test was 20 multiple choice test items constructed on knowledge of subject matter to determine the ability of the learners. Forty minutes was allowed for each test in each case. Each item had four options A-D with only one correct answer.

The teaching package was developed using the systematic principles. The package was titled Food and their Nutrients and taught to students for 4 weeks. Teachers were to convey the concepts in effective and efficient classroom communication. The instruments were faced and content validated by three experts in the University of Uyo, Uyo.

Test-retest strategy was adopted. The lesson instruments were tested on 50 JSS 2 students drawn from a school that did not take part in the study. After two weeks, the test items were re-administered to the same students. Scores from the two tests were coded and treated with Kudar Richardson formular 21 (KR-21). This yielded the reliability co-efficient of .81 for “HEPT” and .76 for “HEAT” respectively. The instruments were thus considered reliable for data collection.

Mean and standard deviation were used in answering all the research questions, while t-test and Analysis of Covariance (ANCOVA) were used in testing all the null hypothesis at.5 level of significance.

Ability Level	Grade
High Ability	70-100
Medium Ability	50-69



Low Ability

0-49

Answer to Research Question 1: What are the effects of Individualistic instructional strategies on students' academic performances based on rural and urban locations?

Table 1: Mean of Post-test difference of effects of Individualistic Instructional Strategy Students' Academic Performance in Home Economics based on urban and rural school Location

Individualistic Strategy	N	Pre-test \bar{x}	Post-test \bar{x}	Mean gain \bar{x}	Mean Difference
Urban School	82	13.86	21.82	7.96	1.12
Rural School	82	12.63	20.74	7.94	

Table 1 reveals that the mean gain score of students from urban school (7.96) is equal to the mean gain score of student from rural schools (7.94). The Post-test mean score of students from urban schools (21.82) is similar to those from rural schools (20.72) with a difference of 0.02. The result indicates that individualistic instructional strategy has similar effects on Home Economics students from urban and rural schools.

Testing Hypothesis 1: There is no significant difference in the performance of Home Economics students in rural and urban schools exposed to individualistic instructional strategy

Table 2: t-test Analysis of Difference in Academic Performance of Home Economic Students in Rural and Urban Schools exposed to Individualistic Instructional Strategy

Variable	N	\bar{X}	SD	df.	t-ccal.	t-crif.	Decision
Urban	82	21.82	10.40	162	0.55	1.98	NS
Rural	82	21.74	10.10				

NS = Not Significant at .05 alpha level

Table 2 Indicates that the calculated t value of .55 is less than the critical t value of 1.96 at df of 162 and .05 level of significance. Therefore, the null hypothesis stating that there is no significant difference in academic performances of Home Economics students in urban and rural schools exposed to individualistic instructional strategy in Home Economics is retained. Therefore, it is established that there is no significant difference in academic performance of students in urban and rural schools exposed to individualistic instructional strategy.

Answer to Research Question 2: Determine the effects of individualistic instructional strategies on students' academic performances in Home Economics based on students' ability levels.

Table 3: Mean of post-test difference of effects of Individualistic Instructional Strategy on Home Economics Students based on ability levels

Individualistic Strategy	N	Pre-test	Post-test	Mean gain	Mean Difference
		\bar{x}	\bar{x}	\bar{x}	\bar{x}
High Ability	55	12.59	16.63	4.59	6.20
Medium Ability	54	13.40	20.14	6.74	
Low Ability	55	14.54	22.36	7.82	

Table 3 shows that the mean gain score of students with low ability (7.82) is greater than the mean gain score of students with medium ability (6.74) and those with high ability (4.59). Moreover, the post-test mean score of students with low ability (22.36) is greater than those with medium ability (20.14) and those with high ability (16.63) with a difference of (6.20). The result indicates that individualistic instructional strategy has more effect on students with low ability level in Home Economics.

Testing Hypothesis 2: What are the effects of individualistic instructional strategies on students' academic performances in Home Economics based on high, medium and low ability levels?

Table 4: One-way Analysis of Covariance (ANCOVA) of Post-test scores of Home Economic Students with High, Medium and Low Abilities Exposed to Individualistic Instructional Strategy

Source of variation	SS	df	MS	F-ca.	F.cri
Pre-test (covariates)	265.850	1	265.850	12.83*	4.03
Teaching method	285.643	1	285.643	12.982*	
Between groups	551.492	2	275.746	12.532*	
Within groups	1144.144	160	22.003		

*= significant at 0.05 alpha level

Table 4 reveals that the calculated F value of (12.982) is greater than the critical F value of (4.03) at df of 2 and 160 and .05 level of significance. Therefore, the null hypothesis stating that there is no significant difference in the academic performances of Home Economics students with High, medium, and Low ability exposed to individualistic Instructional strategy is rejected.

Hence there is a significant difference in the academic performances of Home Economics students with high, medium, and low ability levels exposed to individualistic instructional strategy. Students with low ability level benefited most when taught with individualistic instructional strategy than the medium, and high ability levels.

**Table 5:** Results of Scheff's Post Hoc Test for Multiple Comparison of Ability Levels on Students' Performances in Home Economics exposed to Individualistic Instructional Strategy

Dependent Variable: Post Scores						
Instructional Strategy (I) (I-J)	Ability Levels (J)	Mean Different	Standard Error	Significant	95% Confidence Interval	
					Lower Bound	Upper Bound
High Ability	Medium Ability	.55	127	.000	-1.02	-.36
	Low Ability	.80	127	.021	.68	-.04
Medium Ability	High Ability	.65	127	.000	.38	1.02
	Low Ability	.80	127	.31	.02	.66
Low Ability	High Ability	.65	127	.021	.04	.68
	Medium Ability	.55	127	.031	.66	.02

**the mean difference is significant at the 0.5 level*

Table 5 therefore presents the level of effectiveness of students' ability level under investigation on their academic performances in Home Economics. The summary of the Scheffe's post hoc analysis of ability levels on urban and rural students' academic performances in Home Economics exposed to individualistic instructional strategy is presented below.

Table 6: Summary of Scheff's Post hoc Analysis of Individualistic Instructional Strategy on Students' ability levels in Home Economics

Measure	Comparison of	Mean Difference	Decision at 0.05 alpha level
Individualistic Strategy	LA V _S HA	.80	.80 > .55
Urban Students	LA V _S MA	.65	.80 > .65
Rural Students	MA V _S HA	.55	.55 > .65
	LA V _S MA V _S HA		.80 > .65 > .55

Where: LA = Low Ability (.80) MA = Medium Ability (.65) HA = High Ability (.55)

Table 6 indicates that, the mean difference between students with low ability and high ability was .80; between students with low ability and medium ability was .65 and between students with high ability and medium ability was .55. This implies that individualistic instructional strategy is the most effective in facilitating student academic



performances with low ability in Home Economics seconded by students with medium ability and the least effects observed in students with high ability.

Findings of the Study

1. Individualistic instructional strategy has similar effects on academic performance of Home Economics students from urban and rural schools.
2. Individualistic instructional strategy has greater effects on Home Economics students with low ability level.
3. There is significant difference in academic performances of Home Economics students in urban and rural schools exposed to Individualistic instructional strategy.
4. There is significant difference in academic performances of Home Economics students with high, medium and low ability levels exposed to Individualistic instructional strategy.

Discussion of Findings

Individualistic strategy and academic performance of Urban and Rural Students in Home Economics

The finding shows that, there is significant difference in academic performance of Home Economics students from urban and rural schools exposed to Individualistic instructional strategy. Individualistic instructional strategy was therefore very responsive and useful to academic performance of students from both urban and rural schools. This is because greater attention is paid to individual students with strict monitoring to yield greater effect irrespective of school location. The findings of the study is in conformity with the findings of Brown and Campione (2006) who observed that school in urban and rural areas can learn efficiently if a good instructional strategy is adopted.

Individualistic Instructional Strategy and Students' Academic Performances in Home Economics based on the Ability Level

Result of the findings indicates that there is significance difference in academic performances of Home Economics students with high, medium and low ability levels exposed to Individualistic instructional strategy. The reason for this result is that students are attended to in their individual capacities and brought up to learn at their own space. This instructional strategy was more beneficial to students with low ability level. The findings of the study are supported by the work of Ikutal (2005) who find out that individualistic instructional strategy is very useful to all students especially those with low ability levels.

Abu and Flower, (2007) explained that individualistic instructional strategy takes place when an instructional process results in the learning or achievement of a student separate and independent of the achievement and learning of other students in the class. Here, students work alone and are not interrupted by other students. In this regard, students



may be seated separately and as far as possible from each other as space permits. Learning resources and materials are usually considered and are to be organized so that each student can have a close access to the appropriate materials that are needed (Nwakocha, 2006).

Recommendations

In the light of the findings of this study, the following recommendations are made.

1. Home Economics teachers should be retained on effective use of individualistic instructional strategies by State Secondary Education Board to enhance student academic performances.
2. Individualistic instructional strategy should be used by teachers in urban and rural schools as they enhance academic performance of students in Home Economics.
3. Individualistic instructional strategies should be used by teachers in teaching Home Economics since they enhance academic performance of students' with low ability level.
4. Home Economics should be taught with innovative teaching strategies to inculcate in the learners the rudimentary knowledge and skills required by the students.

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