



Brief Research Report

Level of Knowledge of the Objectives of Teaching Patchwork and Quilting Craft in Colleges of Education in South-East Nigeria

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Abstract: The study sought to investigate the level of the knowledge possessed by Home Economics lecturers and students on the objectives of Patchwork and Quilting Craft. The design of the study was a descriptive survey. The study was carried out in Colleges of Education in South-East zone of Nigeria. The population of the study comprised of all the Home Economics lecturers and final year students in Colleges of Education. A census sampling approach was used in selecting all the lecturers and students for the study. A researcher-developed questionnaire titled, “Level of knowledge on the Objectives of Patchwork and Quilting Craft Questionnaire” was used for data collection. The instrument was validated by experts in Home Economics and Measurement and Evaluation in Universities and Colleges of Education. The reliability of the instrument was determined using Cronbach’s alpha procedure and an index of 0.84 was obtained. The instrument was administered and collected back by five research assistants. Mean and standard deviation were used for data analysis. Findings show that twenty-four possible specific objectives of teaching patchwork and quilting craft in colleges of education were identified. There was a significant difference at $p < 0.05$ between the mean ratings of Home Economics lecturers and students on the objectives of teaching patchwork and quilting craft. Based on the findings, it was recommended that lecturers and students of Home Economics should be adequately retrained to gain more knowledge of the objectives of patchwork and quilting craft in colleges of Education.

Keywords: Clothing and Textile, Colleges of Education, Lecturers, Patchwork, Quilting Craft

1. Introduction

One important aspect of Home Economic taught at the colleges of Education is Clothing and Textiles. Clothing and Textiles help to prepare students for employment opportunities in occupations related to Clothing and Textiles. In clothing and Textiles patchwork and quilting craft are taught-among other skills (Ombugadu, 2017). Patchwork is a form of needle work that involves sewing together pieces of fabrics into a larger design (Page, 2003). The Larger design is usually based on repeated patterns built up with different fabric shapes which can be different colours. These shapes are carefully measured and cut into basic geometric shapes making them easy to piece together. Some textile artists work with patchwork, often combining it with embroidery and other forms of stitchery. Patchwork can be used to produce quilt (page, 2003).

Quilt is a multi-layered textile composed of the three layers of fibres, a woven cloth top, a layer of bathing or wadding and a woven back combined using a technique known as quilting (Cella, 2003). To keep the bathing from shifting, the quilt is often quilted by hand or machine using stitches in order to outline the individual shapes that make up the piece top, or the quilting stitches. Also, the quilting stitches may be random highly ordered overall patterns that contrast with the quilt composition. Historically, quilts were used as bedcovers, jackets, blouses, gowns, bags, throw pillow among others, but now, quilts are increasingly treated as visual arts.

Patchwork and quilting craft are two distinct crafts but are often combined. Patchwork involves the cutting of shapes from different fabrics and sewing them together into a geometric design. Quilting, on the other land is the process of securing together the patchwork with a filler (called wadding) and backing the fabric with simple running stitch (Cella, 2003). The beautiful designs in patchwork can be combined in quilts to produce bedcovers, cushion cover, among others. Patchwork and quilted fabrics are becoming increasingly popular in the international market due to their virtues like appealing styles, optimum comfort, and trendy look (Saward, 2007). They come in both traditional as well as contemporary designs accommodating the shopper's preferences. Indeed, patchwork and quilting craft are now emerging as a profitable business for small and medium scale industries. It is in consideration of the entrepreneurial importance of patchwork and quilting craft that the theme was built into the curriculum of Home Economics in Colleges of Education as well as other tertiary institutions in Nigeria. Patchwork and quilting craft are therefore taught at the Colleges of Education in the third year of studies (Ugwu, 2018).

The likely deficiencies in practical skills acquisition can however, be remedied if the students, lecturers and the master craftsmen involved in the teaching and learning of patchwork and quilting craft possess adequate knowledge of the specific objectives of teaching patchwork and quilting craft in colleges of education. In other words, the level of knowledge possessed by those involved in teaching and leaving of patchwork and quilting craft may help to enhance self-directed learning so as to overcome the deficiencies inherent in inadequate teaching of practical skills. Unfortunately, there seems to be no study that have sought to find out the extent those involved in teaching and learning patchwork and quilting craft in colleges of Education possess the required knowledge about the specific objectives for teaching patchwork and quilting craft. There is therefore, the need to

investigate the level of knowledge possessed by Home Economics Lecturers, students and Master Craftsmen on the objectives of teaching patchwork and quilting craft in Colleges of Education.

1.1. Statement of Problem

Patchwork and quilting craft are often given to students as projects to be submitted at the end of the course. In other words, patchwork and quilting craft is not being properly taught in the colleges of Education as it tends to be covered in theory only. There is usually not enough time to teach the practical aspects of the course. This is in line with Olaitan (2003) who observed that the curriculum operated in colleges of Education for skilled jobs may be adequate theoretically, but inadequate in teaching practical skills. In like manner, patchwork and quilting craft which is a practical course may end up being taught as a theory course. This leads unavoidable to deficiencies in the acquisition of practical skills by students in patchwork and quilting craft.

1.2. Purpose of the Study

The main purpose of the study was to investigate the level of knowledge possessed by Home Economics lecturers, students and Master craft men on the objectives of teaching patchwork and quilting craft in college of Education. Specific purpose is to:

- (a) The level of knowledge possessed by Home Economics lecturers on the objectives of teaching patchwork and quilting craft as indicated by their mean rating score.
- (b) The level of knowledge possessed by Home Economics students on the objectives of teaching patchwork and quilting craft as indicated by their mean rating score.

1.3. Research Questions

The following research questions guided the research project:

- (a) What is the level of knowledge possessed by Home Economics lecturers on the objectives of teaching patchwork and quilting craft as indicated by their mean rating score?
- (b) What is the level of knowledge possessed by Home Economics students on the objectives of teaching patchwork and quilting craft as shown by their mean rating score?

1.4. Hypothesis

H₀₁: There is no significant difference between the level of knowledge possessed by Home Economics lecturers and students on the objectives of teaching patchwork and quilting craft as indicated by their mean responses at 0.05 level of significance.

2. Materials and Methods

2.1. Design for the Study

The design of the study was descriptive survey. According to Ovute and Ugwuanyi (2010), descriptive research design attempts to describe and explain conditions of the present by using subjects and questionnaire to fully describe a phenomenon. This study therefore meets the requirement for a descriptive survey study because it describes and explains the level of knowledge possessed by both Home Economics lecturers and students on the objectives of teaching patchwork and quilting craft in Colleges of Education in South-East Nigeria.

2.1.1. Ethics Statement

The Department of Home Economics Federal College of Education, Eha-Amufu, Enugu State, Nigeria issued ethical approval for the research. The respondents' informed consent was received to enable them fill out the questionnaire.

2.2. Area of the Study

The study was carried out in South-East Zone of Nigeria. The zone comprised of five (5) states- Abia, Ebonyi, Enugu, Imo and Anambra States. There are three Federal and three state Colleges of Education that offered Home Economics as a course of study.

2.3. Population and Sample

The Population for the study was all the Home Economics lecturers and final year students in Federal and state Colleges of Education in South East zone of Nigeria where Home Economics was being offered. Census technique was used to select the lecturers and final year students that participated in the study. A total of 373 respondents comprising of 69 Home Economics lecturers from both Federal and State Colleges of Education and 304 final year students from both Federal and State Colleges of Education in South East zone of Nigeria (2022 Staff and Students Nominal Roll of Home Economics Departments in the six colleges of Education).

2.4. Instrument for Data Collection

A researcher-developed instrument titled "Level of knowledge on the Objectives of Patchwork and Quilting Craft Questionnaire (LKOTPQCQ)" was used for data collection. The questionnaire consisted of 24 items statement on the specific objectives of teaching patchwork and quilting craft in colleges of education. The response options was a four Likert type scale ranging from strongly agree (4 points), agree (3 points), disagree (2 points) to strongly disagree (1 point) respectively. The instrument was validated by three experts, two from the Department of Home Economics at Federal Colleges of Education and one expert in Measurement and Evaluation from Michael Okpara University of Agriculture, Umudike. The reliability of the instrument was determined using Cronbach's Alpha technique. A reliability coefficient of 0.84 was obtained.

2.5. Data Collection Technique

Three hundred and seventy-three copies of the questionnaire were administered to the respondents by five research assistants only 370 copies of the questionnaire were returned and used for data analysis.

2.6. Data Analysis Technique

Mean and Standard Deviation were used in answering the research questions while t-test was used to test the null hypothesis at 0.05 level of significance. The decision null for answering the research questions was based on real limit of numbers as followers:

1.00 - 1.49 poor knowledge

1.50 – 2.49 fair knowledge

2.50 – 3.49 Good knowledge

3.50 – 4.00 very good knowledge

3. Results and Discussion

Table 1: What is the level of knowledge possessed by Home Economics lecturers on the objectives of teaching patchwork and quilting craft in Colleges of Education?

Table 1: Mean Response of Home Economics Lecturers on the specific objectives of Teaching Patchwork and Quilting Craft in Colleges of Education

S/N	Objectives of teaching patchwork and quilting craft: At the end of the course the student should be able to:	\bar{x}	SD	Remarks
1.	Explain the concept of patchwork and quilting craft.	3.61	0.61	Very good
2.	State the uses of patchwork and quilting	3.62	0.51	Very good
3.	Explain step-by-step, the procedure for making patchwork and quilting	3.56	0.53	Very good
4.	Identify various shapes	3.59	0.64	Very good
5.	Measure lines and distances on paper	3.47	0.62	good
6.	Sketch designs on patchwork	3.37	0.69	good
7.	List the tools and equipment used in making patchwork and quilting	3.46	0.59	good
8.	List skills involved in cutting out fabrics for patchwork and quilting	3.48	0.65	good
9.	Obtain the necessary materials for learning patchwork and quilting	3.36	0.61	Good
10.	Explain the elements of designs in relation to patchwork and quilting	3.41	0.62	Good
11.	Develop a students work ethics necessary for careers in patchwork and quilting	3.46	0.59	Good
12.	Develop adequate students' positive attitude and proper working habits for sustainable employment	3.18	0.81	Good
13.	Develop adequate skills necessary for smooth transition from school to workplace	3.10	0.75	Good
14.	Have adequate knowledge of advertising and public relations	2.80	0.88	Good
15.	Determine suitable system of product price fixing	2.87	0.91	Good
16.	Determine depreciation rate of equipment	2.88	0.87	Good
17.	Exercise proper book keeping and accounting	2.84	0.88	Good
18.	Service business machines and equipment regularly	2.87	0.81	Good
19.	Identify sources of financing the business enterprise	2.85	0.93	Good
20.	Select suitable assistants and personnel	2.82	0.87	Good
21.	Be aware of technological requirements of the patchwork and quilting business	3.03	0.74	Good
22.	Enhance individualized development of skills and knowledge in	3.08	0.68	Good

patchwork and quilting			
23. Enhance students' opportunity to progress in patchwork and quilting business	3.07	0.86	Good
24. Improve students' interest in patchwork and quilting.	3.33	0.73	Good
Summary	3.21	0.73	Good

Key: \bar{x} = Lecturers mean response, S.D = Home Economics Lecturers standard deviation.

Table 1 presents the mean ratings of items 1 to 24 on specific objectives of Patchwork and Quilting by Home Economics Lecturers. The table revealed that items 1 to 24 had mean values that ranged from 2.80 to 3.62 which are above 2.50. This implies that the Home Economics Lecturers agreed that the following are the objectives of patchwork and quilting: Explain the concept of patchwork and quilting (\bar{x} =3.61); state the uses of patchwork and quilting, (\bar{x} =3.62), explain step-by-step, the procedures for making patchwork and quilting (\bar{x} =3.56); identify various shapes (\bar{x} =3.59); measures lines and distances on paper (\bar{x} =3.47); sketch designs of patchwork (\bar{x} =3.37); list the tools and equipment used in making patchwork and quilting (\bar{x} =3.46); list skills involved in cutting fabrics for patchwork and quilting (\bar{x} =3.48); obtain necessary materials for learning patchwork and quilting (\bar{x} =3.36); explain the elements of design in relation to patchwork and quilting (\bar{x} =3.41); develop in students, work ethics necessary for successful career in patchwork and quilting (\bar{x} =3.46); develop adequate student's positive attitudes and proper working habits for sustainable employment (\bar{x} =3.18); develop adequate skills for smooth transition from school to work place (\bar{x} =3.10); have adequate knowledge of advertising and public relations (\bar{x} =2.80); determine suitable system of price fixing (\bar{x} =2.87); determine depreciation rate of equipment (\bar{x} =2.88); exercise proper book keeping and accounting (\bar{x} =2.84); service business machines and equipment regularly (\bar{x} =2.87); identify sources of financing the business enterprise (\bar{x} =2.85); select suitable assistants and personnel(\bar{x} =2.82); be aware of technological requirements for patchwork and quilting business (\bar{x} =3.03); enhance individualized development of skills and knowledge in patchwork and quilting (\bar{x} =3.08); enhance student's opportunity to progress patchwork and quilting business (\bar{x} =3.07); improve student's interest in patchwork and quilting (\bar{x} =3.33). From table 1, it was observed that Home Economics lecturers in Collage of Education had very good knowledge of the objectives of patchwork and quilting as indicated by mean ratings on the following objectives: explain the concept of patchwork and quilting (\bar{x} =3.61); state the uses of patchwork and quilting (\bar{x} =3.62); explain step-by-step procedure for making patchwork and quilting (\bar{x} =3.56); and identify various shapes (\bar{x} =3.59). Also, the Home economics lecturers had a good knowledge on other objectives of teaching patchwork and quilting as indicated by their mean ratings ranging from 2.82 to 3.48. The summary of mean responses on the objectives of teaching patchwork and quilting by Home Economics lectures (\bar{x} =3.21) indicates that the lecturers had a good knowledge of the objectives of teaching patchwork and quilting. The summary of standard deviation score (SD=0.73) show that the Home Economics Lecturers did not differ much in their knowledge of the objectives of patchwork and quilting.

Table 2: What is the level of knowledge possessed by Home Economics students on the objectives of patchwork and quilting? Data on the research question is presented in Table 2.

Table 2: Mean Response of Home Economics students on the objectives of Teaching patchwork and quilting.

S/N	Objectives of teaching patchwork and quilting craft: At the end of the course the student should be able to:	\bar{x}	SD	Remarks	Page 400
1.	Explain the concept of patchwork and quilting craft.	3.59	0.52	Very good	
2.	State the uses of patchwork and quilting	3.53	0.55	Very good	
3.	Explain step-by-step, the procedure for making patchwork and quilting	3.43	0.60	Good	
4.	Identify various shapes	3.37	0.66	Good	
5.	Measure lines and distances on paper	3.32	0.73	Good	
6.	Sketch designs on patchwork	3.45	0.73	Good	
7.	List the tools and equipment used in making patchwork and quilting	3.49	0.62	Good	
8.	List skills involved in cutting out fabrics for patchwork and quilting	3.39	0.66	Good	
9.	Obtain the necessary materials for learning patchwork and quilting	3.09	0.67	Good	
10.	Explain the elements of designs in relation to patchwork and quilting	3.07	0.72	Good	
11.	Develop a students work ethics necessary for careers in patchwork and quilting	2.33	0.68	Poor	
12.	Develop adequate students positive attitude and proper working habits for sustainable employment	2.29	0.69	Poor	
13.	Develop adequate skills necessary for smooth transition from school to workplace	2.20	0.76	Poor	
14.	Have adequate knowledge of advertising and public relations	2.10	0.80	Poor	
15.	Determine suitable system of product price fixing	2.98	0.82	Fair	
16.	Determine depreciation rate of equipment	2.50	0.83	Fair	
17.	Exercise proper book keeping and accounting	2.57	0.88	Fair	
18.	Service business machines and equipment regularly	2.02	0.87	Poor	
19.	Identify sources of financing the business enterprise	2.37	0.88	Poor	
20.	Select suitable assistants and personnel	2.02	0.92	Poor	
21.	Be aware of technological requirements of the patchwork and quilting business	2.11	0.78	Poor	
22.	Enhance individualized development of skills and knowledge in patchwork and quilting	2.21	0.77	Poor	

23. Enhance students' opportunity to progress in patchwork and quilting business	2.17	0.81	Poor
24. Improve students' interest in patchwork and quilting.	3.04	0.73	Good
Summary	2.78	0.74	Good

Key: \bar{x} = Mean ratings of students; SD = Standard deviation of student's ratings.

Table 2 presents the mean ratings of items 1 to 24 on specific objectives of patchwork and quilting by Home Economics final year students in Colleges of Education. The table revealed that items 1 to 24 had mean scores that ranged from 2.02 to 3.59, indicating that some mean rating are above while some scores are below the 2.5 cut off score. The students agreed that the following items are the objectives of patchwork and quilting: explain the concept of patchwork and quilting ($\bar{x}=3.59$); state the uses of patchwork and quilting ($\bar{x}=3.53$); explain step-by-step procedure for making patchwork and quilting ($\bar{x}=3.43$); identify various shapes ($\bar{x}=3.37$); measure lines and distances on paper ($\bar{x} =3.32$); sketch designs on patchwork ($\bar{x}=3.45$); list the tools and equipment used in making patchwork and quilting ($\bar{x}=3.49$); list skills involved in cutting out fabrics ($\bar{x}=3.39$); obtain necessary materials for learning patchwork and quilting ($\bar{x}=3.09$); explain the elements of designs in relation to patchwork and quilting ($\bar{x}=3.07$); and improve students interested in patchwork and quilting ($\bar{x}=3.04$). On the other hand, the Home Economics students had poor knowledge on the following objectives of patchwork and quilting: develop students' work ethics necessary for careers in patchwork and quilting ($\bar{x}=2.33$); develop adequate students positive attitude and proper working habits for sustainable employment ($\bar{x}=2.29$); among others as indicated in Table 2. The summary of mean rating ($\bar{x}=2.78$) indicate that the Home Economics students had good knowledge of the objectives of patchwork and quilting. Also, the standard deviation value (SD=0.74) indicate that the students mean will not differ much from one another in their responses.

Hypothesis: There is no significant difference between the level of knowledge possessed by Home Economics lecturers and students on the objectives of patchwork and quilting as indicated by their mean response at 0.05 level of significance. The data on the hypothesis is presented in Table 3.

Table 3: t-test analysis of the difference between Home Economics lecturers and students mean rating on objectives of patchwork and quilting.

Respondents	N	\bar{x}	SD	t_{cal}	sig.
Home Economics lecturers	69	3.21	0.73		
Home Economics students	304=	2.78	0.74	4.41	

The data presented in Table 3 show the t-calculated for mean scores of Home Economics lecturers and students on the objectives of patchwork and quilting. The t-calculated is 4.41 which is greater than 0.05, implying that the null hypothesis was rejected. Thus, indicating that there is a significant difference between the level of knowledge possessed by Home Economics lecturers and students on the objectives of patchwork and quilting in favour of the Home Economics lecturers.

The study identified 24 specific objectives of patchwork and quilting craft in Colleges of Education. The extent to which Home Economics lecturers and students in Colleges of Education possessed knowledge of the identified specific objectives were sought as recorded in tables 1 and 2. The study showed that Home Economics lecturers in Colleges of Education had a good knowledge of objectives of patchwork and quilting craft. The study revealed that the lecturers had mean values that ranged from 2.80 to 3.62. This indicates that the Home Economics lecturers possessed adequate knowledge of the objectives of patchwork and quilting craft. This is in agreement with Okoro (2006) who stipulated that objectives give direction to teaching and help the teacher in instructional planning and lesson delivery. Every educational programme or course must have its goals and objectives. Awotua-ebebo (2002) stated that since educational objectives are statements of anticipated outcomes, they should be stated precisely. Objectives are crucial in designing effective lesson plan for practical courses like patchwork and quilting craft. The possession of adequate knowledge on the objectives of patchwork and quilting craft would enable Home Economics lecturers, particularly those in clothing and textiles to effectively teach patchwork and quilting craft. The knowledge, if possessed, will enable the lecturers to explain the concept; state the uses; explain step-by-step procedure; identify various shapes, sketch designs of patchwork and quilting craft among other lesson delivery practices.

Another finding of the study was that Home Economics students had a fair knowledge of objectives of patchwork and quilting craft. The results indicate that students' mean rating on the objectives of patchwork and quilting craft ranged from 2.02 to 3.59. However, most of the items had poor or fair ratings. The objectives of the patchwork and quilting craft that would help to develop the entrepreneurial skills were rated poorly or fairly by the students. According to Anyakoha (2006), Home Economics is a field of study that offers numerous occupations for individuals. One of the fields in Home Economics is clothing and textile where patchwork and quilting craft is taught. Also, Nwankwo (2004) noted that as a skill-oriented course, patchwork possess the capability for equipping individuals with salable skills that make for self-employment, self-reliance and wealth creation. Therefore the students of Home Economics are required to possess adequate knowledge of the objectives of patchwork and quilting craft to enhance the development of entrepreneurial skills for self-employment and wealth creation in patchwork and quilting craft.

4. Conclusion

Patchwork and quilting craft is a skill-oriented course. The skills inherent in patchwork and quilting craft can be acquired by the students if both the lecturers and students possess the required knowledge of the objectives of patchwork and quilting craft. The findings of the study show that Home Economics lecturers possess adequate knowledge of the objectives of patchwork and quilting craft. It is therefore expected that lecturers in Home Economics can teach patchwork and quilting craft effectively. On the other hand, the finding of the study indicates that the students had a fair knowledge of the objectives of patchwork and quilting craft. The objectives that would enhance the entrepreneurial skills acquisitions were poorly/fairly rated by the students. It is therefore concluded

that Home Economics students do not possess adequate knowledge of the objectives of patchwork and quilting craft in the area of skills needed for self-employment and wealth creation. Both Home Economics lecturers and students should be given adequate Education on the objectives of patchwork and quilting craft through seminars, workshops and conferences. Patchwork and quilting craft in colleges of Education should be taught as a practical course, where the entrepreneurial skills specified in the objectives are taught.

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Conflict of interest

The authors declare that there is no conflict of interest.

Author Contributions

ENU, CAC and EIU conceived and designed the study. ENU, CAC, and EIU developed the research design and were all involved in data analysis, writing and revision of the manuscript.

Data Availability Statement

The original contributions presented in the study are included in the article. Further enquiries can be directed to the corresponding author.

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