Availability of Activities and Appropriateness of Graphical Illustrations in Recommended Economics Textbooks for Senior Secondary School Students

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Abstract: The study examined the availability of specified activities for teachers and students in the recommended Economics textbooks and also examined the level of appropriateness of graphical illustrations in the recommended Economics textbooks. The study adopted a descriptive survey research design. The population for the study comprised the 14 recommended Economics textbooks by the Ministry of Education in Ogun State senior secondary schools. Four Economics textbooks among those recommended were selected for the study using simple random sampling technique. One research instrument titled Economics “Textbook Assessment Checklist (ETAC)” was used to elicit information on the availability of activities and appropriateness of graphical illustrations in Economics textbooks. The data were analyzed using frequency count and percentages. The result showed that among the recommended textbooks, only Textbook B (New Approach Economics) had the specified activities for teachers and students. The result further showed the level of appropriateness of Textbook D (78%), Textbook B (67%), Textbook C (64%) to be high while Textbook A (42%) was moderate. The study concluded that the specified learning activities were not available in all the textbooks and that the appropriateness of the graphical illustrations in the textbooks was between high and moderate level.

Keywords: Activities, Appropriateness, Graphical illustrations, Recommended economics textbooks

Introduction

It is not a gainsaying that acquisition of knowledge by means of summaries and explanations by the teacher will not suffice to develop learners' skills and new behavioral attitudes until learners are fully involved in classroom activities. Therefore, learners must carry out learning activities to strengthen the effectiveness of instruction; this is considered an important component of learning. Teaching and learning activities are guided by the teacher who finds pointers about the activities both in the teacher's guide, and from his/her own professional experience. However, these pointers can be aided by the available activities in the textbooks which are to be carried out for effective teaching and learning processes.

Textbooks are widely used in classrooms and are considered as a necessary instrument for teaching and learning process because they define what, how and when to learn. Equally, textbooks enhance greater acquisition of knowledge of facts to ensure longer retention of information gained. Consequently, textbooks should propose activities for learners to be carried out, either under the guidance of the teacher, or on their own. The activities should be presented in the form of practical applications, either of knowledge or theoretical concepts, or of rules to be learned or even in the form of problems to be solved. It is through these activities that abilities are developed. To enable constructive learning, textbooks must provide opportunities for activities that encourage cognitive, psychomotor and affective engagement and create the conditions for conceptual change to occur.

Koutsoyiannis (2003) admitted that extensive use of diagrams, which are used to illustrate the verbal exposition, aid, mathematical proofs and make Economics textbooks adequate for use and particularly in developing countries. Textbooks are the primary conduits for delivering content knowledge to the students and teachers base their lesson plans on the materials given in the textbooks. Yusuf (2004) opined that to ascertain that graphical illustration is adequate in textbooks; it must be relevant, related and applicable to exposition and concept. Looking at the importance of activities and graphical illustrations in Economics textbooks, this study...
tends to ascertain whether the activities and graphical illustrations in recommended economics textbook for senior secondary school students are available and appropriate for teaching and learning purposes.

The Status of Economics

Economics is one of the elective subjects to be studied at the secondary school level as prescribed by the National Policy on Education (NPE) (FGN, 2013). According to Adeyemi (2010), Economics is one of the elective subjects studied in senior secondary schools and a basic entry requirement for admission into Management and Social Science courses in Nigerian universities and colleges of education. As such, it is regarded as one of the most offered subjects by students in senior secondary schools in Nigeria (Yusuf, 2012). Economics was accepted as a subject that can be taught in secondary schools from the mid-sixties. According to Szreter (1975), cited by Adu (2004) it was felt that a secondary school graduate could not be said to have been adequately prepared for life in the modern society if he/she could not appreciate Economics topics such as Inflation, National Income, Population and Banking, to mention but a few. It became generally accepted that it was necessary for every citizen to have some knowledge of Economics and how it works. This was necessary in order to enable everyone to be able to follow discussions of the numerous economic problems of the country.

Economics as a subject was first introduced into the Nigerian secondary school curriculum in 1966 but was later developed in 1985 by the Comparative Education Study and Adaptation Council (CESAC) and was reviewed in 2008 by the Nigeria Educational Research and Development Council (NERDC). The objectives of secondary school Economics curriculum as highlighted in the NERDC are to enable students to:

i. understand basic economic principles and concepts as well as the tools for sound economic analysis;
ii. contribute intelligently to discourse on economic reforms and development as they affect or would affect the generality of Nigerians,
iii. understand the structure and functioning of economic institutions
iv. appreciate the role of public policies on national economy;
v. develop the skills and also appreciate the basis for rational economic decisions;
vi. become sensitized to participate actively in national economic advancement through entrepreneurship,
vii. understand the role and status of Nigeria and other African countries in international economic relationships; and
viii. appreciate the problems encountered by developing countries in their effort towards economic advancement.

The Economics curriculum is designed and structured in spiral form to spread from senior secondary school class one to three (SSSI-III) in a simple to complex pattern. The guiding principle of the Economics curriculum is the need to equip graduates of the senior secondary school with the basic knowledge and skills that will enable them to better appreciate the nature of economic problems in any society. The underlying philosophy was therefore to present Economics as a subject that has relevance to everyday life. Thus, an attempt has been made to integrate the theoretical foundations of the subject with their practical applications.

Importance and Roles of Textbooks in Teaching and Learning of Economics

The role of textbooks in the process of teaching and learning cannot be over emphasized. They are valuable tools which provide teachers and students with a clear path to follow in the teaching-learning process. Textbooks in many contexts provide key supplementary material, including information, text, bibliography and study guide which permit students to go beyond the minimal curriculum. It constitutes the bases of knowledge, particularly in the third world countries where there is a shortage of qualified teachers, and online educational services (Naiz, 2001). The importance of textbooks can be summarized as follows:

1. They enhance greater acquisition of knowledge and facts to ensure longer retention of information gained.
2. They add to learner’s involvement and interest in the instruction and thereby facilitates expected change in attitude and behaviour.
3. They provide effective substitutes
4. Being a multi-sensory approach, they help in retaining learners’ attention apart from developing their communication skills.
5. They allow students to proceed on their own, by providing the basic facts, concepts and generalization for further studies.
6. They afford students the means of reviewing and reorganizing their knowledge.

The teaching of Economics effectively to senior secondary school students requires that the subject be made real to them, hence the need for textbooks.

Statement of Research Problem

Textbooks have been observed to be a major resource used in the senior secondary school for the teaching and learning of Economics. Further observation has shown that students’ performance in Economics examinations conducted by West African Examinations Council in recent years has been fluctuating and recorded a low average. A lot of factors have been identified as the causes of this fluctuating and low trend in students’ performance by the WAEC Chief Examiners in Economics at the end of the marking exercise in each year. They include: inadequate knowledge of the subject matter of Economics displayed by the students, poor presentation of relevant materials by the teachers, illegible handwriting, scanty explanation of points, poor knowledge of drawing graphs and simple calculations and inadequate preparation for the examinations by the students. It was observed that the issue of poor drawing of graphs persisted over the years. There is therefore the need to assess the availability of activities and appropriateness of graphical illustrations in the Economics textbooks; hence this study.

Research Objectives

The objectives of this study are to:
1. examine the availability of specified activities for teachers and students in the recommended Economics textbooks; and
2. examine the level of appropriateness of graphical illustrations in the recommended Economics textbooks.

Research Questions

To achieve the objectives of the study, the following research questions were asked and answered;
1. To what extent are the specified activities for teachers and students available in the recommended Economics textbooks?
2. How appropriate are the graphical illustrations in the recommended Economics textbooks?

Methodology

The study adopted a descriptive survey research design. The population for the study comprised the 14 recommended Economics textbooks by the Ministry of Education in Ogun State senior secondary schools. Four Economics textbooks among those recommended were selected for the study using simple random sampling technique. One research instrument titled Economics “Textbook Assessment Checklist (ETAC)” was used to elicit information on the availability of activities and appropriateness of graphical illustrations in Economics textbooks. The ETAC was divided into two sections. The items in Section A were adopted from Economics curriculum, while those in Section B were developed by the researcher. Section A which consists of 48 items was used to elicit information about the availability of specified activities for teachers and students while Section B consists of 12 items and was used to elicit information on the appropriateness of graphical illustrations in the Economics textbooks. Each item in Section A and B in the checklist was measured in degree ranging from “a great extent” to “not at all” on a scale equally ranging from 3-0. Data collected were analyzed using frequency counts and percentages.

The textbooks assessed were represented with letters of the alphabets as shown below:
A Comprehensive Certificate Economics for SSS
B New Approach Economics
C New System Economics
D Easy to understand Economics mark book 1-3
Results and Discussion

Research Question 1: To what extent are the specified activities for teachers and students available in the recommended Economics textbooks?

To answer this research question, the activities available in the national Economics curriculum and the activities available in the recommended Economics textbooks were compared and analyzed using frequency count and percentage as presented in Tables 1 and 2.

Table 1. Availability of Economics Curriculum – Specified Teachers’ Activities in Economics Textbooks

| S/N | Textbooks | SS 1 Freq. (%) | SS 2 Freq. (%) | SS 3 Freq. (%) | TOTAL |
|-----|-----------|----------------|----------------|----------------|-------|
| 1.  | A         | 0              | 0              | 0              | 0     |
| 2.  | B         | 27 (60)        | 33 (61)        | 12 (27)        | 72 (50%) |
| 3.  | C         | 0              | 0              | 0              | 0     |
| 4.  | D         | 0              | 0              | 0              | 0     |

Source: Field Survey, 2018

The result from Table 1 showed that among the recommended textbooks, only Textbook B (New Approach Economics) had the specified activities for teachers. Textbook A, C and D did not have the activities specified for students to carry out.

Table 2. Availability of Economics Curriculum – Specified Students’ Activities in Economics Textbooks

| S/N | Textbooks | SS 1 Freq. (%) | SS 2 Freq. (%) | SS 3 Freq. (%) | TOTAL |
|-----|-----------|----------------|----------------|----------------|-------|
| 1.  | A         | 0              | 0              | 0              | 0     |
| 2.  | B         | 27 (60%)       | 31 (57%)       | 12 (27%)       | 70 (49%) |
| 3.  | C         | 0              | 0              | 0              | 0     |
| 4.  | D         | 0              | 0              | 0              | 0     |

Source: Field Survey, 2018

The result from table 2 showed that among the recommended textbooks, only Textbook B (New Approach Economics) had the specified activities for students. Textbook A, C and D did not have the activities specified for students to carry out.

Research Question 2: How appropriate are the graphical illustrations in the recommended Economics textbooks?

To answer this research question, data were collected through a checklist and analysed using frequency counts and percentage. The levels were ranked thus: 0%-20% = Very Low, 21%-40% = Low, 41%-60% = Moderate, and 61%-80% = High, 81%-100% = Very High. The results are presented in Table 3.

Table 3. Level of Appropriateness of Graphical Illustrations

| S/N | Textbooks | Frequency (f) | Percentage (%) |
|-----|-----------|---------------|----------------|
| 1.  | A         | 19            | 42             |
| 2.  | B         | 30            | 67             |
| 3.  | C         | 29            | 64             |
| 4.  | D         | 35            | 78             |

Source: Field Survey, 2018

Findings of the study from Table 3 showed that Textbook D had the highest level of appropriateness of graphical illustrations followed by textbook B, C and A. The textbooks were ranked from the one with the highest level of appropriateness to lowest level of appropriateness. The graphic illustration of Textbook D (78%), Textbook B (67%), Textbook C (64%) and Textbook A (42%) was considered to have high level of appropriateness while Textbook A had a moderate level of appropriateness. The result corroborated with the findings of Olofinmiyi, Owombo and Koledoye (2012) that the graphical illustrations in the Economics textbooks assessed were adequate.
Conclusion

Based on the findings of this study, it was concluded that the specified learning activities were not available in all the textbooks except for one textbook, this can also affect students’ performance in external examination because the activities are expected to foster interaction between the teacher and the students in the classroom so as to make learning more effective. The appropriateness of the graphical illustrations in the textbooks were not very high.

Recommendations

Based on the findings from the study, the following recommendations were made:

1. Economics textbooks should be made to contain the learning activities specified in the curriculum for teachers and students to carry out. This is because learning activities facilitates effective teaching and learning. These activities in form of questions should be made to include past questions on West African Senior School Certificate Examination (WASSCE) because it makes the students to be familiar with the nature and standard of WASSCE questions.

2. Graphical illustrations in the textbooks should be more appropriate in terms of appropriateness of the title of the graph, labelling of X and Y axis on the graph, legibility of the graph, colour combination or attractiveness of the graph, accuracy of points of co-ordinates on the graph, explanation of complementary remarks on the graph, labelling of the curves on the graph, tally of plotted graph with tables/schedules, indication of scale, drawing of graphs to the scale and plotting of graphs on graph sheet.

References

Adu, E. O. (2004). An introduction to Economics Education: A basic text for tertiary institutions Students. Ibadan: University Press.

Federal Republic of Nigeria (2013). National Policy on Education, (6th edition). Abuja: NERDC press.

Koutsoyiannis, A. (2003). Theory of Econometrics. New York: Palgrave Publishers LTD.

Niaz, M. (2001). Conceptual understanding of Chemistry. International Journal of Science Education. 23, 203-218.

Olofinniyi, O. E., Owombo, P. T. & Koledoye, G. F. (2012). Relevance and adequacy of graphical illustrations in recommended Economics textbooks for senior secondary schools in Ekiti State, Nigeria. International Journal of Multidisciplinary Educational Research. 1, 284-294.

Szreter, R. (1975). Economics education in schools. Heinemann Educational Books

Yusuf O. (2000): Effects of Instructional Materials on Classroom Teaching. Lagos. TK Publishers LTD.

Yusuf, K. (2012). Effective teaching of Economics in senior secondary school. West African Journal of Education, 1(1), 9-13.